2023

BIMFORUM®

LOD SPECIFICATION

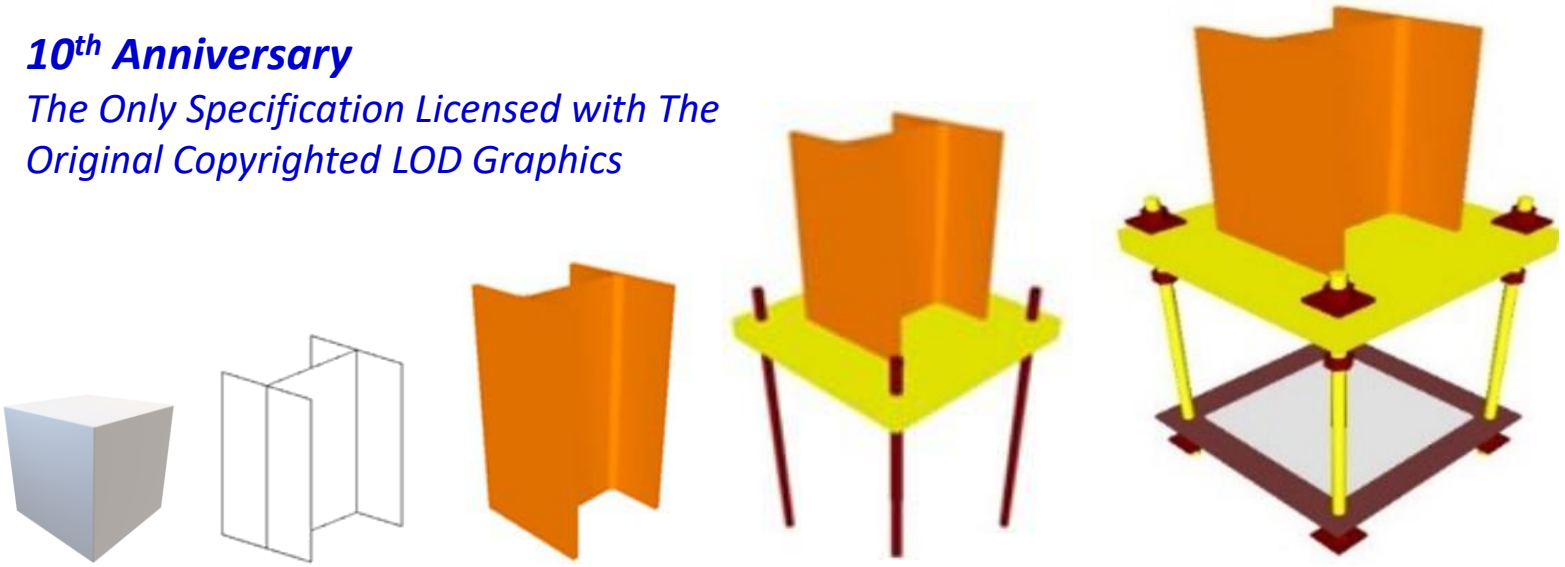
For Building Information Models and Data

Version 23, January 2024
LOD Taskforce

Will F. Ikerd II, P.E., PhD, David Merrifield, Principal Investigators

10th Anniversary

The Only Specification Licensed with The Original Copyrighted LOD Graphics



100	200	300	350	400

Building Systems	Model Elements	Project Milestons / Phases / Deliverables												
			SD	DD		50% CD		100% CD	Trade Cord.			Fab.	Operations	
Structure														
Enclosures														
Interiors														
MEP Systems														
Civil / Site														

Schmantic Design (SD) | Design Development (DD) | Construction Documents (CD) | Trade Coordination (Trade Cord.) | Shop & Fabrication (Shop)

PARTICIPATING ORGANIZATIONS

MBMA METAL BUILDING MANUFACTURERS ASSOCIATION® Research • Leadership • Education

VDCFORUM

ASCEND BUILDING KNOWLEDGE FOUNDATION

BIMFORUM GLOBAL

NISD NATIONAL INSTITUTE OF STEEL DETAILING

BIM FORUM

BIM Forum Ecuador

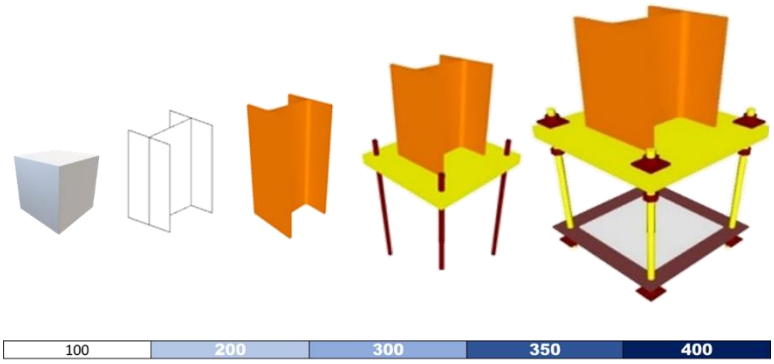
2023

LOD Specification

For Building Information Models

December 2023 – 10th Anniversary of Original LOD Graphics

The only LOD specification with licensed permission from the graphics creators to use the original AGC BIMForum 2013 LOD Graphics.



Nothing contained in this work shall be considered the rendering of legal advice. Readers are responsible for obtaining such advice from their own legal counsel. This work and any forms herein are intended solely for educational and informational purposes.

All images are used with permission from Ascend Building Knowledge Foundation (Ascend), a 501c3 non-profit AECO research and education foundation, unless noted otherwise. If graphics are from other sources, the graphic creator will be recognized with the image. The graphics and detailed definition pages are intended to show typical building conditions in compliance with common building codes. The images do not take into account site specific conditions, regional building codes and other important information that may require project-specific changes. These illustrations are intended solely for educational and informational purposes and are not suitable for design intent for any specific project or code design compliance application.

The BIMForum.Global (BFG) 2023 LOD Specification is made available to the public free of charge. To maintain the integrity and usefulness of these documents as a reference standard, certain restrictions apply to their use.

Licensing questions should be directed to: info@BIMForum.Global

Please Click here to provide feedback to this Version 2023:

TABLE OF CONTENTS

Please Click here to provide feedback to this Version 2023:

BIMForum Global LOD Specification Section Table

Please Click here to provide feedback to this Version 2023:

EXECUTIVE SUMMARY

The ***BIMForum Global 2023 LOD Specification*** (LOD Specification) is a reference tool that aids in improving the quality of communication among Project Owners and their teams using Building Information Models (BIMs) on their projects. It achieves this by clarifying the 5 key characteristics of defining Model Elements (MEs).

The specification is intended to be compatible for teams working with Level of Detail and Level of Development definitions. The confusion of these two terms with the same acronyms should be clarified in each Project BIM Execution Plan. The English version of this document is formed to be compatible with the most common US-based LOD definitions as well as those of other countries. The specification is also formed to allow project teams to adjust their use of the BIMForum Global Specification by stating any amendments to the LOD definitions that teams may have in the BIM section of their Project Execution Plan and General Notes of their Construction Documents that are developed from BIM. This also permits those teams to utilize Level of Detail definitions if that is what is prescribed in their BIM PEP.

BIM presents information developed by an Owner's stakeholder for that Owner's project in the form of three-dimensional graphical MEs (e.g., doors, beams, etc.). The ME can be further associated with information about other characteristics of those elements. It is possible for an ME to appear very precise in a model even though it is not accurate. For example, a specific, highly detailed ME of building system equipment may be placed in the wrong location and thus only be approximate in the ME maturity and reliability for decision making. Successful LOD Schemas will develop a systematic way of conveying the extent of reliance that may be placed on an ME. This specification expands from simple narrative definitions of LOD to provide specific graphic examples of many of the MEs that are found in common projects.

Discussions among many of the section authors and graphics creators of previous national LOD Specifications concurred with Ascend in need to form BIMForum Global (BFG) to gather the input from various BIMForum groups and similarly aligned BIM organization and committees. The mission of BIMForum Global is to create a multi-disciplinary task force that includes input from multiple BIMForums and similar BIM groups to develop and expand the LOD Specification among other projects. This inclusive BIMForum Global approach recognizes and builds on the previous LOD section authors and graphic creators in a historically graphic rich approach to parametric model progression. This input and background distinguish this LOD project from any other. The principal investigators on this LOD specification bring over a decade of knowledge working with the graphics they developed over the various sections of the specification. They, along with BIMForum Global, would like for this work to remain free and available for all to use and download to allow for continual development and expanded use of the LOD Specification. The LOD Specification is an organized collection of detailed illustrative examples of the application of LOD definitions. This is achieved by providing graphical examples of the different ME levels of maturity in a broad variety of building element classes.

Please Click here to provide feedback to this Version 2023:

LOD Specification Is a Dictionary, Not 'The Story'

BIMForum Global *LOD Specification* does not prescribe the necessary levels of model element definition for all the different steps in design, estimating, scheduling, fabrication, manufacturing, construction and/or operation processes, i.e. "The Story" of a given project. This level of model progression granularity is left to the Project Owner's teams of what ME are at a given LOD at a given phase. However, this LOD specification does provide a more precise framework of LOD definitions for a given Element object, i.e. The LOD Specification are the 'dictionary' for a team to write their 'story'.

The analogy in this case is that the LOD Specification is a dictionary that defines Model Element's LODs. The BIM section of the given Project Execution Plan is where the project authors use those LOD definitions to write their own BIM process (stories) for their project. Just as a dictionary does not tell you how to write your story, neither does the LOD Specification tell you how to write your BIM process in your BIM PEP. However, also just as dictionaries are invaluable tools in defining common terms for more precise writing, so is the BIMForum Global LOD Specification a tool in defining common Model Element terms to write more precise BIM PEP and BIM contractual scopes.

This LOD Specification will reduce the risks of miscommunication among the Project Owner's stakeholder teams as it relates to model handoffs between team members. These model handoffs between teams should be clearly defined in the BIM section of the Project Execution Plan (PEP). The BIM PEP is where expectations for different stages in the design and construction process are established. ***This LOD Specification aids the Project Owner's team by clearly identifying the level of Model Element (ME) maturity that is expected to be delivered*** and provides greater predictability of the level of effort that is required to create each member's deliverables. ***The LOD Specification does not define who the Model Element Author (MEA) is.*** This is to be defined in the Project Owner's contracts among their teams and the BIM PEP attached to those contracts.

The LOD Specification is organized by logical sections that align with the way it is used in practice. The Principal Investigators (PI) and BIMForum Global taskforce spent active time interviewing users of previous LOD Specifications. There was some critique on the use of Uniformat for organization while most acknowledged the need to have the cross references. Additionally, some users commented on the way some MEs spanned 2 to 3 pages and they would rather have a single element per page for referencing and attaching exhibits to their scopes of work. For example, when users are addressing LOD of a masonry wall, they want to have a single page that they could show to address the complete topic of the element with a Project Owner and their team. The result from listening to end users of the LOD Specification is that the BIMForum Global 2022 version of the LOD Specification pioneered a completely new and fresh approach to the LOD specification. Continuing this format, the new 2023 LOD Specification does still cross reference the following:

1. CSI Uniformat 2010.
2. Omniclass, with the subclasses expanded to Level 4 (and in a few cases to Level 5) to provide detail and clarity to the element definitions.
3. Uniclass 2015 indices per a UK initiative that is gaining international acceptance.
4. CSI MasterFormat references.

It is noted that a model in practice seldom ever has all Model Elements (MEs) at the same LOD. As such, LOD definitions should refer to the ME and not the overall BIM.

Please Click here to provide feedback to this Version 2023:

Also, because LOD 500 in many definition sets typically refers to As-Built conditions without any additional geometric change of the elements, this LOD Specification does not show any additional graphics beyond LOD 400.

All Project Owner's teams members, which include, but are not limited to, designers, manufactures, fabricators, builders, and facility operators, should become very familiar with the LOD definitions that control their projects. They should also pay close attention to how these LOD definitions are used to define their scope, schedule, fee, and contractual risk if they fail to meet their BIM responsibilities.

ACKNOWLEDGEMENTS

Mr. David Merrifield and Dr. Will Ikerd are the two Principal Investigators of this specification and have worked in LOD research and application of LOD definitions since 2008 and authored sections of national LOD Specifications since 2013. They developed the proposal for the LOD 350 definition that they presented to the Associated General Contractors (AGC) BIMForum in 2012 and that was later ratified in the first national 2013 LOD Specification. Additionally, Dr. Ikerd attended meetings with one of the United States leading institutes for architects, assisting with their contract documents committees work on their LOD definitions. In 2022, Dr. Ikerd presented justification for including the LOD 350 definition in their national LOD definitions which previously had not been included since their original 2008 and 2013 LOD Definitions. Following these meetings, this leading US architectural organization adopted LOD 350 in their national LOD definitions for its contract language. It is with this background that Mr. Merrifield and Dr. Ikerd have the honor of leading the team developing the 2023 version of the BIMForum Global LOD Specification.

Background on BIMForum Global's New LOD Specification

Ascend Building Knowledge Foundation (Ascend) was formed in 2017 and was recognized as a 501c3 non-profit organization the following year. The Associated General Contractors of America (AGC) published some of the earlier United States (US) based BIMForum LOD Specifications (AGC BIMForum) that the principal investigators of this document had collaborated with and chaired sections of its LOD specification from 2012 till AGC ended financial support and divested AGC from the original AGC BIMForum in 2019. In the fall of that same year, Ascend assisted with the formation of a newly incorporated Philadelphia, PA based BIMForum (BIMForum- Philadelphia) by providing graphics support and staffing of booths at conferences such as the Design Build Institute of America (DBIA) conferences in 2019 and online events following the Covid-19 pandemic. Ascend also assisted in some of the graphics in the BIMForum-Philadelphia LOD Specifications of 2020 and 2021. During this time frame, Ascend and its board members assisted other BIMForums and similarly aligned BIM groups in Latin America in Spanish as well.

Furthermore, in 2022, the American Concrete Institute (ACI) published a ACI PRC-131.3-22, TechNote "***BIM Level of Development for CIP Concrete—TechNote***" (ACI BIM LOD 22). This document referenced the US Architectural LOD 2013 definitions, while also including LOD 350 from the AGC BIMForum 2013 definitions created by the PIs of this specification. The ACI 2022 LOD definitions also added some new language and interpretation of LOD for concrete that are not fully synchronized with any of the US Architectural, AGC BIMForum or BIMForum-Philadelphia 2020 or 2021 LOD definitions. The new 2022 US Architectural LOD definitions came out within months of the ACI BIM LOD 22 TechNote being published, and while the ACI TechNote LOD Definitions differ, it does have some useful information for teams to consider, particularly the seven sub-categories of concrete discussed in a later section of this introduction.

The board of Ascend recognized from assisting these previous BIMForums, that there was a need for a unified approach to the LOD Specification that also considers and recognized development such as ACI's 2022 LOD Definitions. This approach would also simplify the use of the document. This led to the formation of BIMForum Global whose goal in LOD is to expand the work of the original creators of the various sections of the national 2013 LOD Specification while recognizing industry organization's work such as ACI's 2022 LOD contributions. Additionally, BIMForum Global's goals include engaging all who are willing to participate from other BIMForums in the US and

Please Click here to provide feedback to this Version 2023:

globally, as well as other similarly aligned BIM organizations and committees. All contributors who participate in the BIMFourm Global LOD Specification with their own content creators and authors will be cited and recognized for their contributions.

The graphics creators and section authors of many of the sections of previous national LOD Specifications from 2013-2021 have granted permission of the work they owned to be used in the development of this new BIMForum Global 2023 version.

Because neither BIMForum-Philadelphia nor AGC provided a platform in 2022 for the contributors, graphic creators and/or authors of the prior LOD Specification sections to publish and recognize their content, BIMForum Global published the Version 2023 with the commenting period extended into 2024. Since the Spring of 2023, Ascend has been gathering content from LOD section authors who are developing and expanding LOD work in areas such as, but not limited to, fundamental geometric elements, civil, site, landscape, roofing, and the documentation of all these systems with reality capture. Content from these and other sections will be gathered for comments during the public review period for consideration of incorporation into the BIMForum Global LOD Specification. These updates have been incorporated in this 2023 LOD Specification.

GRAPHICS CREATION

Graphics are the property and copyright of the creator and used with permission for this edition of this document unless noted otherwise. The owner, creator and copyright holder of graphics are as follows in this text: Ascend Building Knowledge Foundation, LLC noted as ‘From AscendBKF.org,’ and BIMxD Solutions, LLC noted as ‘From BIMxD.com,’ IKERD Consulting, LLC noted as ‘From Ikerd.com.’ No derivatives of the graphics may be made without the creator’s express written permission. All inquiries about graphics should be sent to: info@BIMForum.global.

Please Click here to provide feedback to this Version 2023:

BIMForum Global's Ten (Recommended) 'Rules' of LOD

Regardless of the LOD definitions used in a project's BIM section of its Project Execution Plan (PEP), the BIMForum Global (BFG) Principal Investigators (PIs) of this LOD Specification have developed the following ten (recommended) 'rules' that LOD definitions 'should' follow. These are the 'ten commandments' that the PIs use to moderate and consider the discussion of proposed updates among contributors of this LOD Specification.

1) **LOD IS NOT FOR A WHOLE MODEL; IT ONLY APPLIES TO ELEMENTS IN A MODEL.**
There is no LOD of a whole model. A model is a collection of Model Elements (MEs) at different LODs in a given phase of the project. The only exception to this rule could be considered with an LOD 100 mass model of a building, for example where distinct MEs for building components can only be referred to by inference. However, even in this example, there will typically be a mass model of the site (Civil), the overall building (architect), and perhaps general structural system (structural) at LOD 100 in a federated model. In such cases, LOD 100 would apply to each of the mass models consisting of a single Model Element (ME).

2) **LOD ≠ PROJECT PHASE**
LOD does not match any given project phase. There will always be MEs at higher and lower LODs than the majority of MEs at a given project phase. If all elements were ALWAYS at a specific LOD for a given project phase, there would be no reason for the term LOD. The reason LOD exists is because MEs are typically at varying levels for a given phase of the project (see 'BFG RULE #1' above).

3) **LOD 000 = NO MODELING IS SCOPED FOR A GIVEN CLASS OF ELEMENT.**
In the BIMForum Global LOD Specification, LOD 000 signifies that there is no Model Element (ME) requirement for the given class of element. It also signifies that there is not any scope for the element to be referenced by inference for the class of element from an overall LOD 100 mass model. *This level is important in contractual scoping of elements that are excluded from the Model Element Authors (MEAs) scope.*

4) **LOD 350 is for Detailed Coordination Between Model Element Systems**
After elements are developed to their specific LOD 300 geometry, detailed coordination typically must take place before the elements can be developed to full LOD 400 fabrication level. The principal investigators of this LOD Specification recognized early in the use of some of the 2008 LOD definitions that there was a critical step in the BIM process that warranted an intermediate LOD between 300 and 400. This work is documented in their publications and presentation leading up to their 2012 proposal for the LOD 350 definition to be adopted for the first time in a national LOD specification. The original steel column example is provided in the following section to further explain the role of LOD 350.

5) **A HIGHER LOD # IS NOT ALWAYS BETTER**
The best LOD for an object is the LOD that meets the current project requirements and usage. There is no value in modeling elements to a higher LOD if this additional effort does not provide a clearly defined purpose at the given time.

Please Click here to provide feedback to this Version 2023:

For example, if a project is conducting typical trade coordination with Cold Formed Metal Framing (CFMF, metal studs) in walls, then LOD 350 Model Elements (MEs) that show the studs, but do not include the screw fasteners, is acceptable. In such a case, it could be considered a waste of time and money to model the system to LOD 400 full fabrication with screws for simply checking coordination around the framing, which was modeled at LOD 350. However, if the CFMF is a part of a 4D sequenced virtual mockup in an isolated area that is being used as part of a Building Enclosure Review Meeting, then LOD 400 may be the appropriate level for the metal studs. In these cases, the sequencing of when screws are being installed in relation to the water proofing membrane, for instance, can be critical. See Figure 1 below.

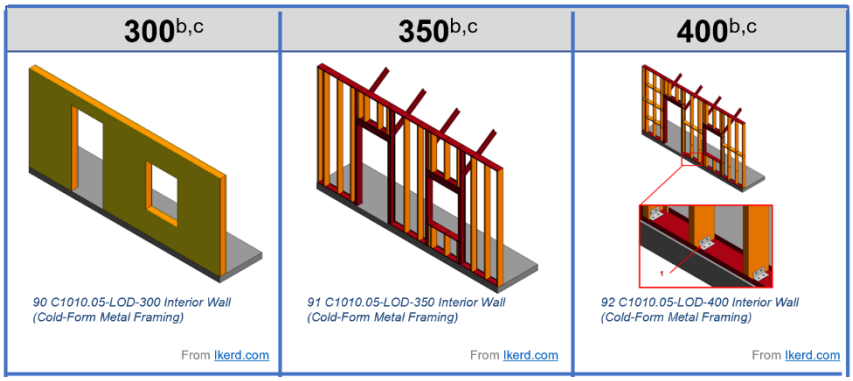


Figure 1: Sample images of Cold Formed Metal Framing (CFMF) from BIMForum Global specification. Note that at LOD 350 only studs are modeled, whereas connection fasteners are included at LOD 400.

6) **Model Element (ME) Information Requirements Must be Defined in the BIM PEP**
Associated Model Element Information is very specific for the given use case of a given BIM in a given project for a given Project Owner. Non-Graphic Information (NGI) may be associated with a Model Element (ME). If NGI has a different level of reliance than the ME LOD to which it is attached, then the Model Element Author (MEA) shall indicate the difference in the BIM section of the PEP.

7) **ME Must Meet 5 LOD-Distinguishing Geometric Characteristics for a Given LOD:**
Model Element Geometry is distinguished by 5 key characteristics, and if one of the 5 is less developed than the minimum requirement of a given LOD, the ME fails to meet that given LOD. For example, if a steel column is modeled 'specific' within the given tolerances for structural steel for size, shape, quantity, orientation, but is merely 'approximate' in its location, then that column does not meet the LOD 300 ('specific') criteria and is therefore considered to be at LOD 200 ('approximate'). For the steel column in this example to meet the requirement of LOD 300, it must be modeled 'specifically' within the project specified tolerances for all 5 LOD Distinguishing Geometric Characteristics:
    - **7.1. Quantity**
    - **7.2. Size**
    - **7.3. Shape**
    - **7.4. Location**
    - **7.5. Orientation**

8) **Tolerances of MEs are Defined by Reference of the Elements Material/Industry Standards**
All tolerances in LOD definitions should defer to industry standards that are incorporated by reference in a given projects specifications. The nature of 3D modeling is that all elements are precise even though they may not be accurate. Additionally, most modeling platforms in common use are static state modelers that do not account for real world dynamic conditions such as, but not limited to, deflection, camber, thermal expansion/contraction, thickness of fireproofing, thickness of insulation (in some cases), wind deflection, live loading, long term material creep, and material shrinkage. For example, such effects can be notable when considering the interface of systems such as glass and aluminum curtain wall on high-rise concrete buildings. Project Owners' teams should address such tolerance topics in the BIM section of the PEP.

9) **Measurement of ME Accurately Within Tolerance is Only for LOD 300~400.**
Because LOD 200 is approximate, only LOD 300 through LOD 400 can be measured directly from the model within the elements project specified tolerances. Unless noted otherwise, the tolerances for a given element are defined by that industries fabrication, manufacturing, erection, and installation tolerances. All such tolerances should be clearly defined by reference in the project specification for each element material and incorporated by reference in the BIM section of the PEP.

10) **LOD 500 Model Elements Are Based on LOD 100~400 Geometry**
The BIM section of the PEP should define if an LOD 500 element is documented with a reference by inference in LOD 100 overall mass model or defined with LOD 200, 300, 350 or 400 Geometry. This is why the ability of measuring MEs directly from a model at LOD 500 will vary depending on the geometric basis of the LOD 500 object.

    For example, consider an existing basement wall inside a building that is modeled from as-built reality capture laser scan data on the interior side of the wall without any destructive testing to know the core of the wall or wall thickness. The models may have some historic drawings that indicate the design thickness of the wall, and the Model Element Author (MEA) may use this information to assume an 'approximate' thickness of the wall. As such, a wall's geometry could only be defined as LOD 200 (reference BFG LOD Rule #7). In this case, such a wall would be an LOD 500 wall with geometry to LOD 200, and only the inside face that was laser scanned

could be measurable directly from the model.

Also, a Model Element at LOD 500 does not have any higher level of geometry than an element at LOD 400. For this reason, the BIMForum Global LOD Specification does not show any additional graphics beyond LOD 400 for a given element.

LOD 350 Example, The Steel Column 2009-2012

The Principal Investigators (PIs) of this Specification published several articles and national conference presentations on the topic of model progression where they defined the LOD 350 definition from 2009 through 2012. This work led to their submitting this LOD 350 concept in 2012 to the AGC to be adopted in the first US national graphical LOD Specification in 2013. Because the steel examples in the original LOD 350 proposal are some of the most frequently referenced in online searches for LOD graphic examples, they are provided for context and background to the formation of the LOD 350 definition. It is noted that this steel column graphic developed by the PIs of this LOD is the same column found in almost all US national graphical LOD Specification to date since 2013 that include LOD 350 as well as some LOD Specification used in other countries.

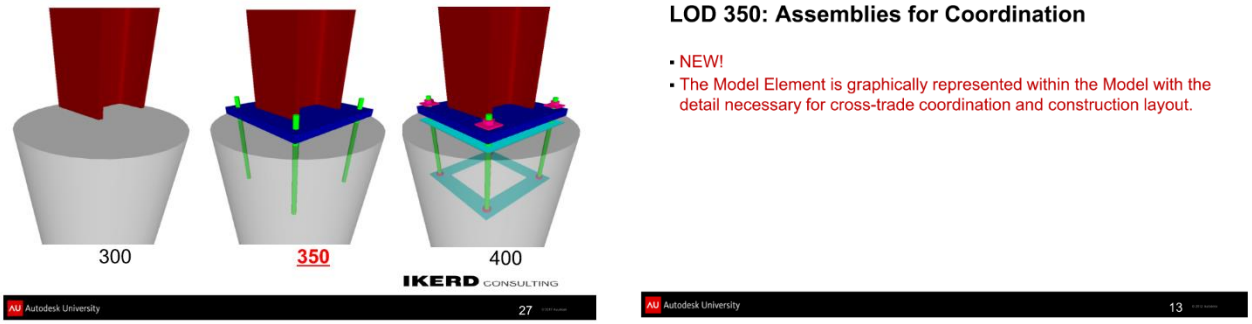


Figure 2: Published 2012 slides from national conference. This image was used to illustrate the author's concept of LOD 350 that was later presented to the AGC for adoption in the first US national graphical LOD specification.

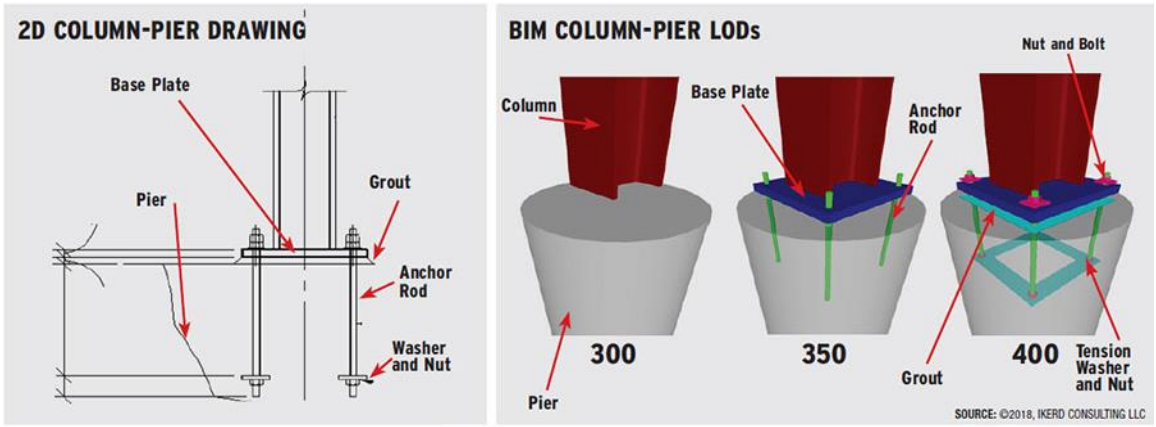


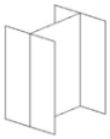
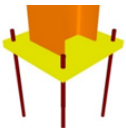
Figure 3: Image shown in ENR, Post, N, April 25, 2018 "At Structural Congress, a Call for Designers to Mitigate BIM-Project Risk." The image was used to delineate the distinction between LOD 300, 350, and 400 of a steel column, relative to the information shown in the example 2D typical detail that would be found in a project's Construction Documents (CD) issued for permit.

The sample LOD definitions shown on the follow pages use The BIMForum Global (BFG) Ten (Recommended) 'Rules' for LOD and The Steel Column example to illustrate the BIMForum Global LOD Definition.

Please Click here to provide feedback to this Version 2023:

BIMForum.Global LOD Definitions

The following are applications of the BIMForum Global Ten Fundamental LOD Rules using the original steel column example. Non-Graphical Information is addressed in BFG LOD Rule #6. Each project team should establish the LOD definitions used for a given project in the Contacts and BIM sections of its PEP. In the absence of such a definition, the following LOD definitions shall apply when this Specification is adopted by reference.

LOD	Summary Concept	Element Accurately Measured from Model at given LOD & LOD 500	Sample Definition	Sample Image
000	**NO BIM**	**N/A**	No distinct Model Elements (MEs) exist, ***AND*** No inference can be made from an overall mass for these elements at this LOD in this system.	
100	**CONCEPTUAL / INFERED**	**NO** (No Element Exists at this LOD)	No distinct model elements exist but inference about elements can be made from an overall mass at this LOD. The Model Element (ME) may be inferred or referenced in the model with a symbol or other generic representation, but the ME does not satisfy the requirements for LOD 200.	
200	**APPROXIMATE**	**NO** (ME only Approx.)	The Model Element (ME) is modeled **approximately** in terms of one or more of the following characteristics: quantity, size, shape, location, ***OR*** orientation.	
300	**SPECIFIC**	**YES** within ME Project / System Tolerances	The Model Element is modeled **specifically** within the project's tolerances for its system in terms of ***ALL*** of the following characteristics: quantity, size, shape, location, ***AND*** orientation.	
350	**DETAILED COORDINATION**	**YES** within ME Project / System Tolerances	The Model Element (ME) is modeled specifically per LOD 300 ***AND*** **includes interfacing features** with adjacent and/or dependent model elements to facilitate detailed coordination between systems.	
400	**FABRICATE**	**YES** within ME Project / System Tolerances	The Model Element (ME) is modeled with details required for fabrication, manufacturing, assembly and installation.	

LOD 500 Notes

LOD 500 should be thought of as a special condition of LOD's 100, 200, 300, 350 and 400. The AS-BUILT state of LOD 500 for a model element may be based on element geometry and detail any of the LOD's 100 through 400.

LOD	Summary Concept	Element Accurately Measured from Model at given LOD & LOD 500	Sample Definition	Sample Image
500	**AS-BUILT**	**VARIES** if geometry is LOD 100-200 vs 300~400	The Model Element (ME) is modeled in its as-built or existing state within the tolerances that are defined for the project. The ability to measure the object depends on which LOD its geometry is based on.	ME Geometry could be that of LOD 100, 200, 300, 350 OR 400

BIMForum.Global Level of Acceptance (LOA), Reality Capture, Addressing Scan-To-BIM & Digital Twins

The purpose of The BIMForum Global Level of Acceptance (LOA) Specification (The Specification) for Reality Capture and Simulation is to provide guidance for owners and their teams wishing to address reality capture of the built environment.

The BIMForum Global Reality Capture and Simulation Taskforce (ReCap/Sim Taskforce) was formed to address the emerging trend in the areas of reality capture and simulation. Reality capture includes laser scanning, among other forms of measurement, for as-built documentation. Common tools and equipment used for reality capture includes, but are not limited to laser scanners, robotic total station, and point layout tools. Additionally, simulation includes but is not limited to virtual reality, augmented reality, and other related forms of simulation. The related simulation of 4D and 5D are addressed by the ReCap/Sim Taskforce in collaboration with the BIMForum's Global Scheduling & Estimating Taskforce (4x5D Taskforce).

The ReCap/Sim Taskforce is dedicated to improving documentation of the built environment, which includes but is not limited to building, GIS, civil infrastructure, equipment, and industrial projects.

To learn more about the BIMForum's Global Reality Capture and Simulation Specification please visit our website at bimforum.global/reality/ or contact the Director of Research & Education at info@BIMForum.global.

Please Click here to provide feedback to this Version 2023:

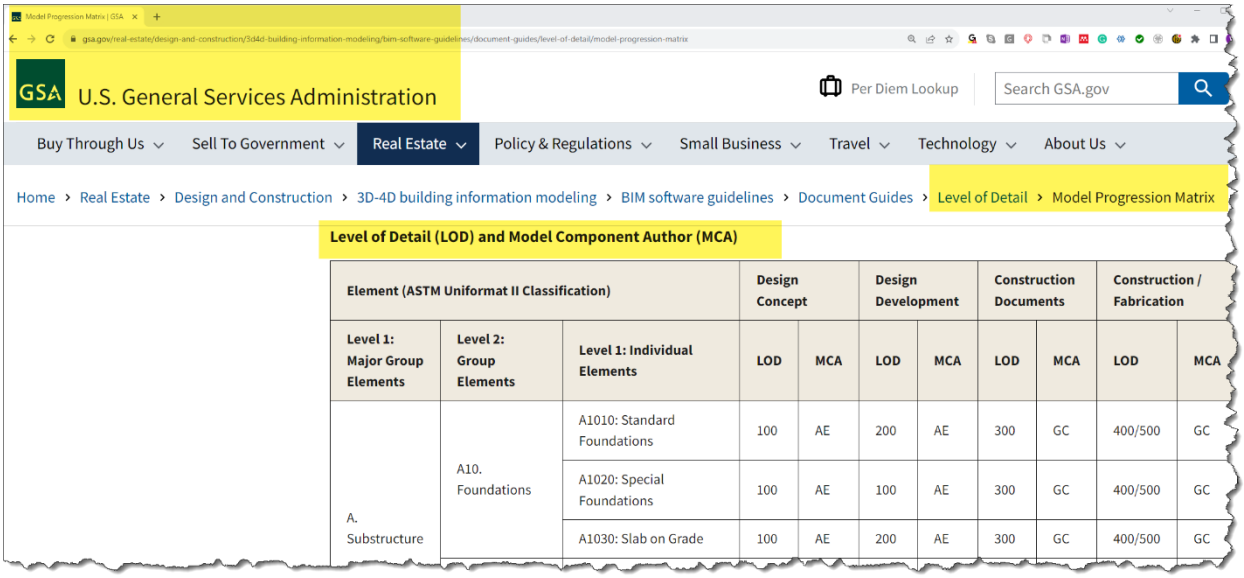
HISTORY OF LOD DEFINITIONS

There are more than one set of LOD definitions used in the industry, which is why it is critical that Project Owners and their teams define the controlling LOD definitions used in their contracts and BIM sections of their Project Execution Plans (PEP). While it is not possible to provide an exhaustive list of all LOD definitions in this introduction, some of the common ones are provided. The framework of this LOD Specification is designed to allow teams to tailor it to their particular Project Owner's needs in the BIM sections of the PEP.

Level of Detail (LOD) per US General Services Administration (GSA)

The US GSA uses the following definitions:

1. LOD: Level of Detail. These definitions use the LOD 100, 200, 300, 350, 400, 500 framework that this LOD Specification supports.
2. MPM: Model Progression Matrix &
   MCA: Model Component Author (See Figure 4 below).
   Note that some LOD frameworks may refer to MPM as a Model Element Table (MET), and may refer to MCA as Model Element Authors (MEA). This LOD Specification will use MET and MEA in most cases. It is left to the Project Owners teams to author their BIM sections of their projects PEP to properly clarify which terms they are using.
3. AUM: Approved Use Matrix. (Note this may be defined as the Model Use sections of some contracts and BIM sections of PEP.



Element (ASTM Uniformat II Classification)			Design Concept		Design Development		Construction Documents		Construction / Fabrication	
Level 1: Major Group Elements	Level 2: Group Elements	Level 1: Individual Elements	LOD	MCA	LOD	MCA	LOD	MCA	LOD	MCA
A. Substructure	A10. Foundations	A1010: Standard Foundations	100	AE	200	AE	300	GC	400/500	GC
		A1020: Special Foundations	100	AE	100	AE	300	GC	400/500	GC
		A1030: Slab on Grade	100	AE	200	AE	300	GC	400/500	GC

Figure 4: Image from GSA website showing Level Of Detail (LOD) and Model Component Author (MCA) matrix. Image is from GSA website, https://www.gsa.gov/real-estate/design-and-construction/3d4d-building-information-modeling/bim-software-guidelines/document-guides/level-of-detail/model-progression-matrix. Highlights added to note section of website for Level Of Detail.

Please Click here to provide feedback to this Version 2023:

Level of Development (LOD), US Architectural Definitions

There are popular Architectural contract definitions in the United States (US) for Level of Development (LOD) from 2008, 2013 and most recently 2022. There are still many projects and Project Owners' requirements that use the previous two sets of LOD definitions. This LOD specification is designed to be compatible with all the LOD definitions with some important caveats that need to be included in each project's BIM section of its PEP. However, it is strongly recommended that all new work moving forward utilizes the most recent LOD definitions and consider the BIMForum Global's Ten (Recommended) 'Rules' of LOD (see section with this title in this introduction).

US Architectural 2008 LOD Definitions (For Historic Context)

The original 2008 architecture LOD definitions that were popular at the time did not have the LOD 350 definition that was presented to the AGC BIMForum in 2012 for inclusion in the AGC BIMForum 2013 LOD specification. Additionally, this set of definitions used the term 'accurate' in the LOD 300 definition. BIMForum Global does not recommend the use of these older 2008 definitions; they are only referenced here for context. However, this LOD Specification can be used with these older 2008 definitions, as long as LOD 350 is recognized and addressed in the BIM section of the PEP.

US Architectural 2013 LOD Definitions, (For Historic Context)

The subsequent 2013 US architectural LOD definitions that replaced the previous 2008 definitions were published around the same timeframe as the formation of the first US based national LOD Specifications. As such, the US architectural LOD 2013 definitions did not have the LOD 350 definition. LOD 350 was presented to the AGC BIMForum in 2012 for inclusion in the first national graphical 2013 LOD Specification. These definitions may be referenced in that document. BIMForum Global does not recommend the use of these older 2013 definitions; they are only referenced here for context. However, this LOD Specification can be used with these older 2013 definitions, as long as LOD 350 is recognized and addressed in the BIM section of the PEP.

US Architectural 2022 LOD Definitions

The most recent 2022 architectural Level of Development (LOD) definitions now include a LOD 350 definition that is similar to what the PIs of this LOD originally proposed for inclusion in the AGC BIMForum 2013 LOD Specification.

American Concrete Institute (ACI) 2022 LOD Definitions

In 2022, the American Concrete Institute (ACI) published a ACI PRC-131.3-22, TechNote "BIM Level of Development for CIP Concrete—TechNote" (ACI BIM LOD 22). This document referenced the US Architectural LOD 2013 definitions, while also including LOD 350. The ACI 2022 LOD definitions also added some new language and interpretation of LOD for concrete that are not fully synchronized with any of the US Architectural, AGC BIMForum or BIMForum-Phil definitions. The new 2022 US Architectural LOD definitions came out within months of the ACI BIM LOD 22 TechNote being published, and while the ACI TechNote LOD Definitions differ, it does have some useful information for teams to consider, particularly the seven sub-categories of concrete discussed below.

The ACI BIM LOD 22 TechNote 7 categories of concrete content that provide a framework to organize concrete BIM topic in your contracts, general notes and specifications are: (1) Concrete, (2) Reinforcing bar, (3) Specialty reinforcements, (4) Prestressing, (5) Specialty systems, (6) Embedments, and (7) Formwork. This BIMForum Global Specification supports key elements of the ACI 2022 LOD Definition in the Cast-In-Place section of this LOD Specification.

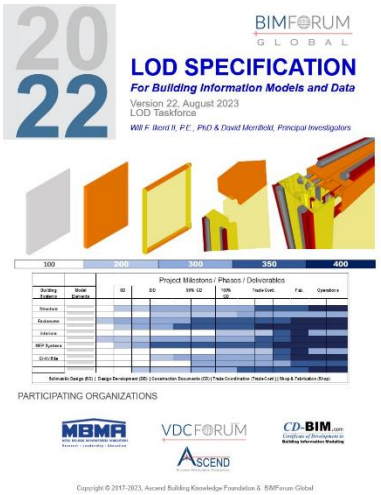
LOD Definition Summary

Authors of the BIM sections of PEP are encouraged to consider these more recent LOD definitions that include LOD 350 and are in line with the BIMForum Global's Ten (Recommended) 'Rules' of LOD.

PAST LOD SPECIFICATION VERSIONS – HISTORIC BACKGROUND

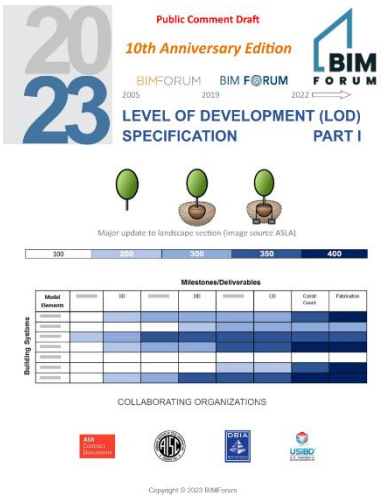
The following LOD Specification editions are developed by other separate organizations. Redistribution is provided by BIMForum Global under the Creative Commons License they were developed under that allows redistribution of the material in any medium or format. The original content creators in these documents below retained the copyrights to that content. Several of the content owners have licensed their content to Ascend Building Knowledge Foundation, a 501c3 research and education nonprofit foundation and its subforum BIMForum Global. The new BIMForum Global LOD Specification is a new format with a new structure and has notable new content added in this new version. Any similarities to BIMForum Global's LOD Specifications were not derived from any other organizations but come from the fact that some of the same content owners have licensed their content they own to BIMForum Global for the development of BIMForum Global' s new documents. The LOD Documents of other organizations are provided for reference order of their publication starting with the most recent dates originally published with proper citation to their relative organizations.

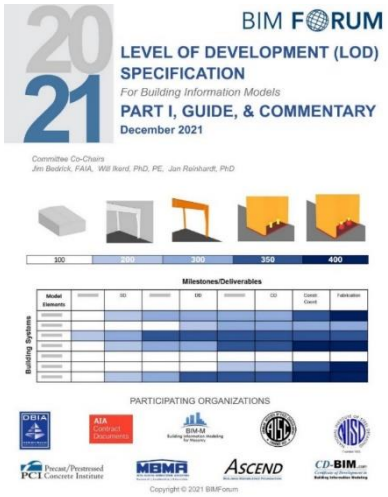
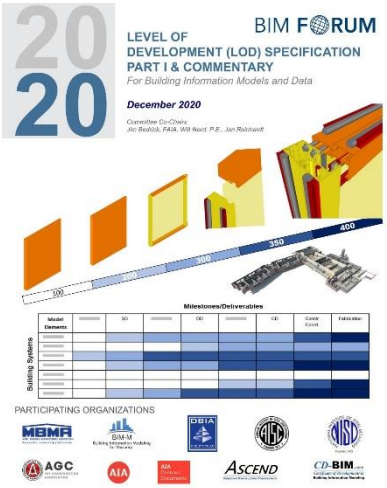
BIMForum Global / Ascend, Founded 2017
BIMForum.Global

	**2022 LOD Specification (BIMForum.Global/LOD)** The BIMForum Global 2022 LOD Specification (LOD Specification) is a reference tool that aids in improving the quality of communication among Project Owners and their teams using Building Information Models (BIMs) on their projects. It achieves this by clarifying the 5 key characteristics of defining Model Elements MEs). The specification is intended to be compatible for teams working with Level of Detail and Level of Development definitions. The confusion of these two terms with the same acronyms should be clarified in each Project BIM Execution Plan (PEP). The English version of this document is formed to be compatible with the most common US-based LOD definitions as well as those of other countries. The specification is also formed to allow project teams to adjust their use of the BIMForum Global Specification by stating any amendments to the LOD definitions that teams may have in the BIM section of their Project Execution Plan. This also permits those teams to utilize Level of Detail definitions if that is what is prescribed in their BIM PEP.
	**2022 Especificación LOD [Español/Spanish] (BIMForum.Global/LOD)** La Especificación LOD del BIMForum Global 2022 (Especificación LOD) es una herramienta de referencia que ayuda a mejorar la calidad de la comunicación entre los Propietarios de Proyectos y sus equipos que utilizan Modelos de Información de Construcción (BIM) en sus proyectos. Lo consigue aclarando las 5 características clave de la definición de los Elementos del Modelo MEs). La especificación pretende ser compatible para los equipos que trabajan con definiciones de Nivel de Detalle y Nivel de Desarrollo. La confusión de estos dos términos con las mismas siglas debe aclararse en cada Plan de Ejecución BIM del Proyecto (PEP). La versión inglesa de este documento se ha elaborado para que sea compatible con las definiciones de LOD más comunes en EE.UU. y en otros países. La especificación también está pensada para permitir a los equipos de proyecto ajustar su uso de la Especificación Global BIMForum indicando cualquier enmienda a las definiciones de LOD que los equipos puedan tener en la sección BIM de su Plan de Ejecución del Proyecto. Esto también permite a esos equipos utilizar definiciones de Nivel de Detalle si eso es lo que se prescribe en su PEP BIM.

Please Click here to provide feedback to this Version 2023:

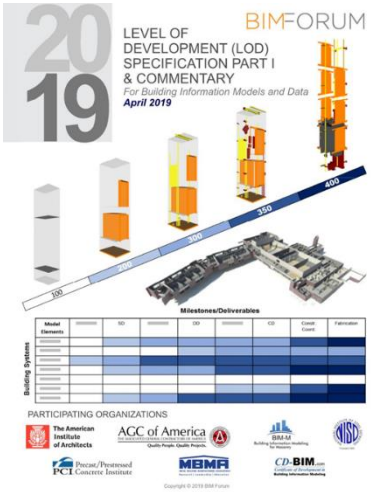
BIMForum, Pennsylvania founded in 2019
2105 Parkview Drive, Haverford, Pennsylvania, 1904-2004 (Pennsylvania-BIMForum)

	**2023 LOD Specification, Public Draft Comment (Pennsylvania-BIMForum)** Published December 2023, by Pennsylvania-BIMForum. New Graphics were developed that are different from the copyrighted original LOD graphics that only BIMForum.Global is licensed to use. This publication added some landscape sections that are similar to the land scape content that was originally developed in the BIMForum Global 2022 LOD Specification.
	**2022 LOD Specification (Pennsylvania-BIMForum)** Published December 2022, by Pennsylvania-BIMForum. No graphics were provided in this supplement.

	**2021 LOD Specification (Pennsylvania-BIMForum)** Published December 28, 2021, by Pennsylvania-BIMForum. Pennsylvania-BIMForum_LOD-21_final_2021-12-28-1.pdf (Part 1 only) Notes: Ascend Building Knowledge Foundation owned some content in this publication which was developed in early 2017 and whose logo appears on the cover of the document. Other contributors also own content that appears throughout the document. The first paragraph of page 4 of this specification by the Pennsylvania-BIMForum clearly states the ownership of intellectual property and references Ascend Building Knowledge Foundation as well as other content creators who have since licensed their content to BIMForum Global for its use in developing new documents. From a text search of the Pennsylvania-BIMForum 2021 LOD specification, there are approximately 296 graphics in this 2021 LOD Specification, and approximately 270 of them are not owned by the Pennsylvania-BIMForum per their own publication (first paragraph on page 4 of this 2021 spec.). Ascend and BIMForum Global has obtained permission from the content owners to use this content in BIMForum Global future documents. No other groups have written permission currently from Ascend or BIMForum Global to use content from Ascend in future editions of their documents.
	**2020 LOD Specification (Pennsylvania-BIMForum)** Published December 31, 2020 (2020 LOD Spec.), by Pennsylvania-BIMForum. Pennsylvania-BIMForum_LOD-20_final_2020-12-31-1.pdf (Part 1 only) Notes: Ascend Building Knowledge Foundation (Ascend) owned some content in this publication and its logo is shown on the cover of the document. Other contributors also owned their respective content that is sited throughout the document (2020 LOD Spec.) who have since licensed this content to BIMForum Global for future documents. No other groups have written permission currently from Ascend or BIMForum Global to use content from Ascend I future editions.

Please Click here to provide feedback to this Version 2023:

AGC BIMForum, (AGC-BIMForum) formed around 2005-2006 to 2019
Associated General Contractors of America (AGC)

	**2019 LOD Specification (AGC-BIMForum)** Published April 2019, by AGC-BIMForum. AGC-BIMForum_LOD-19_final_2019-4.pdf (Part 1 only)
	**2018 LOD Specification (AGC-BIMForum)** Published September 2018 (2018 LOD Spec.), by AGC-BIMForum. AGC-BIMForum_LOD-21_final_2017-12.pdf (Part 1 only)

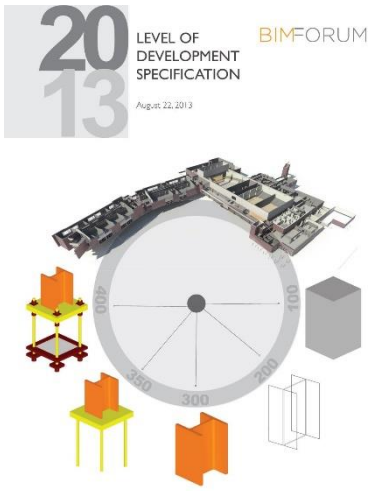
Please Click here to provide feedback to this Version 2023:

	**2017 LOD Specification (AGC-BIMForum)** Published November 2017 (2017 LOD Spec.), by AGC-BIMForum. AGC-BIMForum_LOD-17_final_2017-11.pdf (Part 1 only)
	**2016 LOD Specification (AGC-BIMForum)** Published October 2016 (2016 LOD Spec.), by AGC-BIMForum. AGC-BIMForum_LOD-16_final_2016-10.pdf (Part 1 only)

Please Click here to provide feedback to this Version 2023:

	**2015 LOD Specification (AGC-BIMForum)** Published October 2015 (2015 LOD Spec), by AGC-BIMForum. AGC-BIMForum_LOD-15_final_2015-10.pdf (Part 1 only)
	**2014 LOD Specification (AGC-BIMForum)** Published December 2014 (2014 LOD Spec), by AGC-BIMForum. AGC-BIMForum_LOD-14_final_2014-12.pdf

Please Click here to provide feedback to this Version 2023:

	2013 LOD Specification Published August 2013 (2013 LOD Spec), by AGC-BIMForum. AGC-BIMForum_LOD-13_final_2013-10.pdf

CHANGES FROM OTHER LOD VERSION PRIOR TO THE BIMFORUM GLOBAL 2022 VERSION.

There have been many LOD Specifications in prior years since 2008 for both Level of Detail and Level of Development. This BIMForum Global Specification provides a new framework from prior LOD Specification. This new approach typically has a single sheet for each Model Element organized in clear sections aligned with a give system, such as structural steel for example (see Figure 5 and Figure 6 below) Additionally, this is the first graphical LOD specification of its kind that is produced in multiple languages with input from international BIMForums outside the US and other similarly aligned BIM groups.

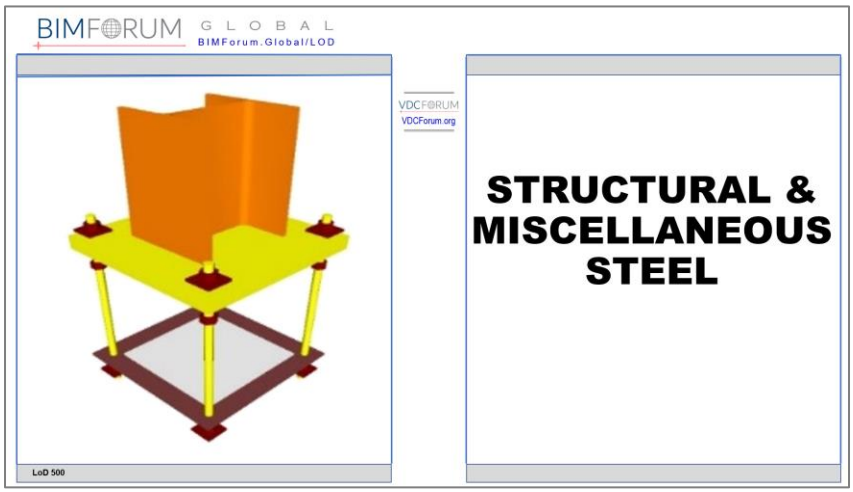


Figure 5: BIMForum Global LOD Specification's new approach for Model Elements to be organized in clear sections aligned with a give system, such as structural steel in the section heading above.

Please Click here to provide feedback to this Version 2023:

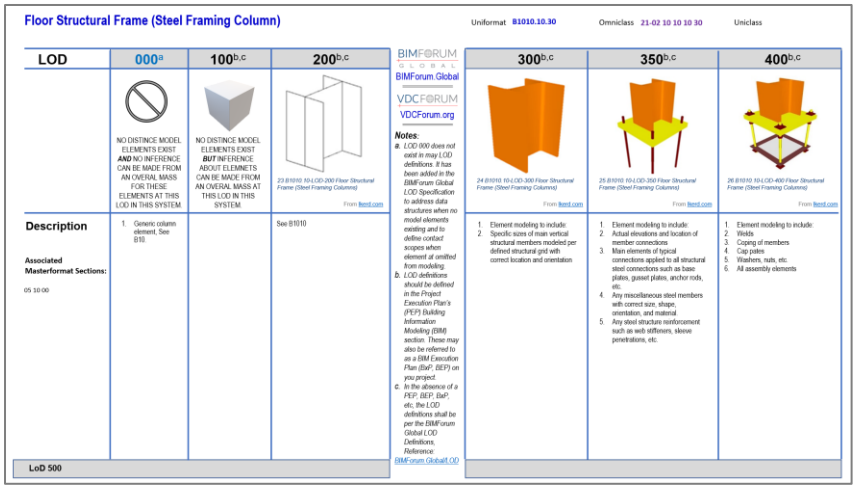


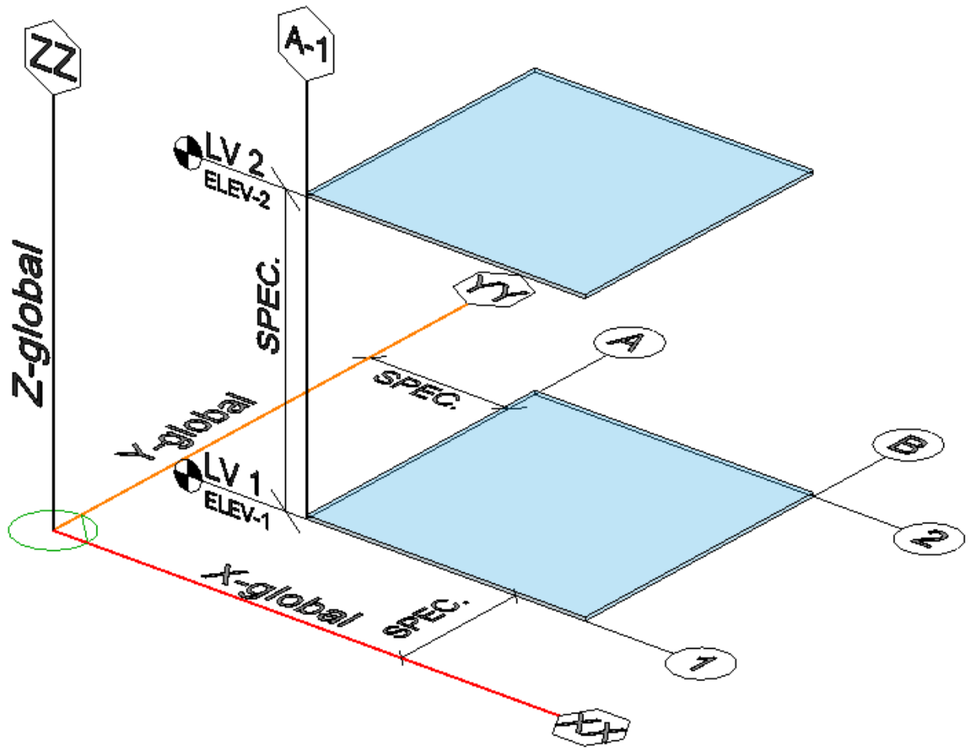
Figure 6: BIMForum Global LOD Specification's new approach for Model Elements to be defined on a Single Sheet Per Element Format.

Revision Process

Public Comment

Each new LOD Specifications version is typically first released as a draft for contributor comment. Public comments are also collected from the links at the bottom of the pages of the specification. Feedback is evaluated prior to the publishing of the official version.

Please Click here to provide feedback to this Version 2023:

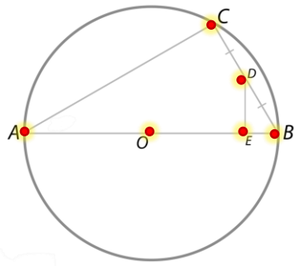
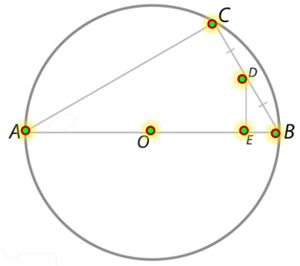


LoD 500

GENERAL & GENERIC ELEMENTS

Points

Uniformat **N/A** Omniclass **N/A** Uniclass **N/A**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD	THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD
Description **Associated Masterformat Sections:** **N/A**	NEW IN 2022 VERSION		Point object is at an approximate location relative to the Project Origin and the tolerance of the Model Elements it is used to define. Special classes of Point Model Elements would include but are not limited to Project Origins, Survey Points, Benchmarks and Property Boundary Points.	Point Model Element meets the requirements for LOD 200 and is further defined to a specific location relative to the Project Origin and the tolerances of the Model Elements it is used to define.	N/A	N/A
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

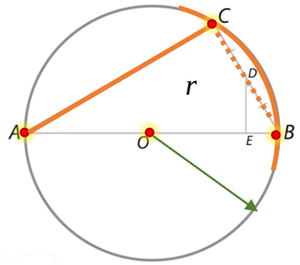
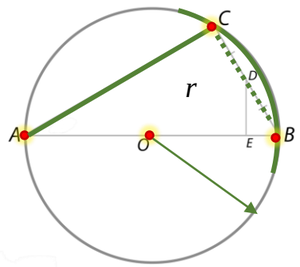
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Lines (Linear & Curved)

NEW IN 2022 VERSION

Uniformat -- Omniclass 36-51 73 Uniclass 11 13 11 19

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD	THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD
Description **Associated Masterformat Sections:** **N/A**	N/A	N/A	Line Model Element is at an approximate location relative to the Project Origin and the tolerance of the Model Elements it is used to define. Linear lines are defined by two points. Example Line AB is defined by points A & B in image above. Curves are constructed with two points and addition constraints such as cord length, radius of curvature, etc. Special classes of Line Model Elements would include but are not limited to Gridlines and Property Boundary.	Line Model Element meets the requirements for LOD 200 and is further defined to a specific location relative to the Project Origin and the tolerances of the Model Elements it is used to define.	Comply with the LOD 300 requirements. Volume of the space is accurately calculated to the nearest horizontal finish surface such as a ceiling or underside of slab above. Element modeling to include: 1. Vertical bounding elements to minimum LOD 300 2. Horizontal bounding elements such as ceilings or slabs 3. Space objects that automatically associate with vertical and horizontal bounding elements	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

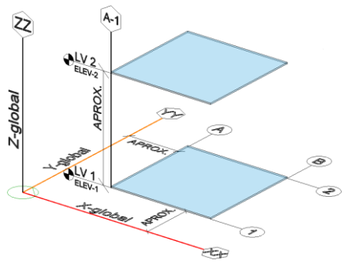
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Grides & Level Model Elements
(Special Class of Lines & Planes)

Uniformat -- Omniclass 36-51 73 11 13 17 13 Uniclass --

N/A

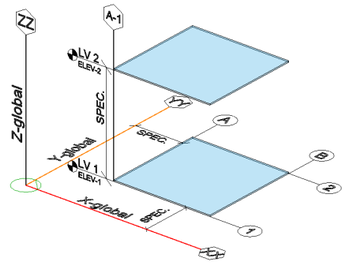
LOD	000[a]	100[b,c]	200[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD* 200 *Grids & Elevation* From AscendBKF.org
Description **Associated Masterformat Sections:**			Grids & Elevations Equipment, Building, Campus, Civil, and GIS is approximate in its relation to the content in the given model.
LoD 500			
LoA			

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

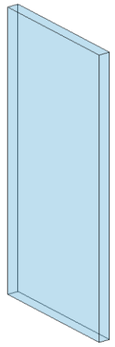
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

300[b,c]	350[b,c]	400[b,c]
 *LOD 300 Grids & Elevation* From AscendBKF.org	THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD	THIS CATEGORY OF OBJECT IS NOT DEFINED FOR THIS LOD
Grids & Elevations Equipment, Building, Campus, Civil, and GIS is specific in its relation to the content in the given model.		

Shell Superstructure

Uniformat **B10** Omniclass **21-02 10** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 13	Assumptions for structural framing are included in other modeled elements such as an architectural floor element that contains a layer for assumed structural framing depth or schematic structural elements that are not distinguishable by type or material. Assembly depth/thickness or component size and locations still flexible.		Elements are approximate.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

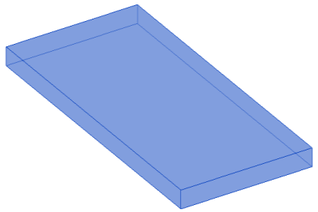
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Floor Construction

Uniformat **B1010** Omniclass **21-02 10 10** Uniclass **Ss 30 12**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 13	See B10		Model elements to include: 1. Floor with approximate dimensions 2. Approximate supporting framing members 3. Structural grids defined accurately			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

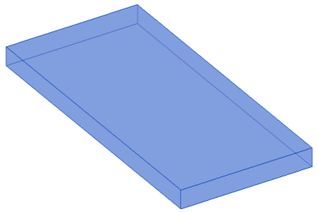
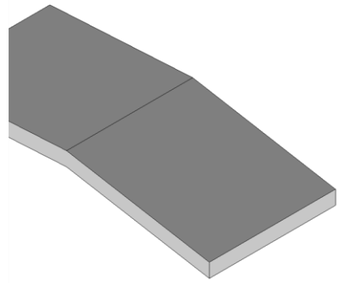
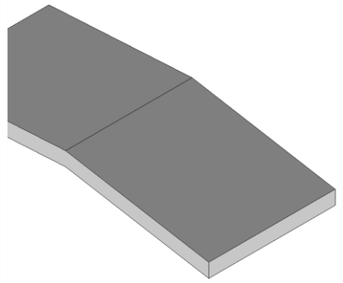
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Ramps

Uniformat **B1010.50** Omniclass **21-02 10 10 50** Uniclass **Ss 35 10 85**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				See Element Sections For Fabrication Level Information
Description **Associated Masterformat Sections:**	See fundamental definitions		Generic model element Nominal overall unit scope shall include: 1. Nominal plan dimensions (length, width) 2. Nominal vertical dimensions (levels, landings)	Major ramp support elements are modeled to disability access standards. Element is accurate as to: 1. Width 2. Grade 3. Landing geometry	Secondary ramp support elements are modeled (hangers, brackets, handrail, tactiles location, connection points etc.).	All ramp elements are modeled to support fabrication and installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

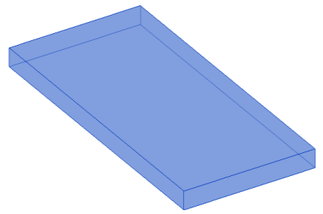
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Roof Deck, Slabs, and Sheathing

Uniformat **B1020.20** Omniclass **21-02 10 20 20** Uniclass **Ss 30 12 85**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 03 50 00 / 03 52 00 / 05 30 00 / 05 34 00 / 05 35 00 / 06 12 00 / 06 15 00 / 06 16 00 / 06 18 00 / 06 53 00 / 06 73 00	N/A		Generic roof objects separated by type of material. Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Penetrations are modeled to nominal dimensions for major roof openings such as skylights and large mechanical elements.	All penetrations are modeled at actual rough-opening dimensions. Framing members at openings are modeled.	Element modeling to include: 1. Studs and tracks 2. Individual masonry units 3. Reinforcing 4. Sheathing 5. Insulation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

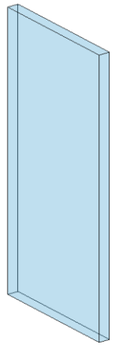
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Vertical Enclosures

Uniformat **B20** Omniclass **21-02 20** Uniclass **EF 25 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 16	Solid mass model representing overall building volume; or, schematic wall elements that are not distinguishable by type or material. Assembly depth/thickness and locations still flexible.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

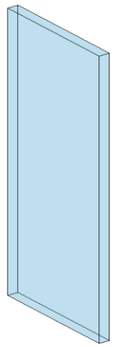
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Wall Construction

Uniformat **B2010.20** Omniclass **21-02 20 10 20** Uniclass **EF 25 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 04 20 00 / 05 41 00 / 06 11 00 / 06 12 00 / 06 16 00	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements.	Exterior wall construction modeled as a separate element. All penetrations are modeled at actual rough-opening dimensions. Headers and jamb framing are modeled.	Element modeling to include: 1. Studs and tracks 2. Individual masonry units 3. Reinforcing 4. Sheathing 5. Insulation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

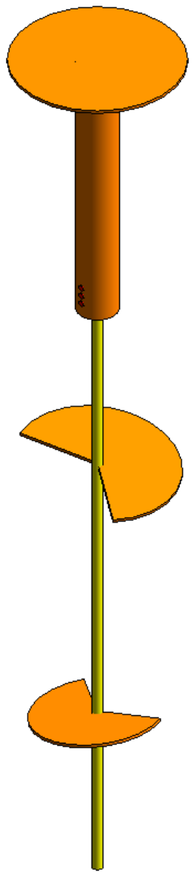
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



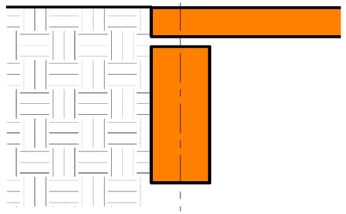
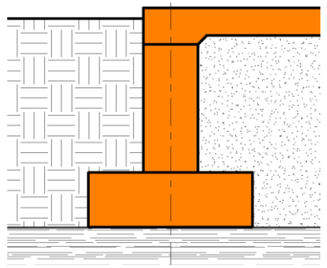
LoD 500

FOUNDATION, SPECIALTY (Other than CIP Concrete)

Page 38

Substructure Foundations

Uniformat **A10** Omniclass **21-01 10** Uniclass **Ss 20 05 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com	 *1 A1010.10-LOD-300 Wall Foundation* From Ikerd.com	See Element Sections For Additional Information	
Description **Associated Masterformat Sections:** **01 82 13**	N/A	Assumptions for foundations are included in other modeled elements such as an architectural floor element or volumetric mass that contains layer for assumed structural framing depth. Or, schematic elements that are not distinguishable by type or material. Assembly depth/thickness and locations still flexible.	Element modeling to include: 1. Approximate size and shape of foundation element. 2. Structural building grids for local project coordinate system are defined in model and approximately coordinated with civil coordinate.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

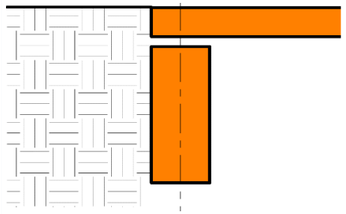
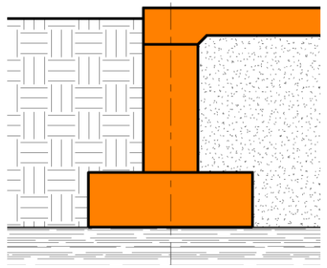
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Standard Foundations

Uniformat **A1010** Omniclass **21-01 10 10** Uniclass **Ss 20 05**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com	 *1 A1010.10-LOD-300 Wall Foundation* From Ikerd.com	See Element Sections For Additional Information	
Description	See A10		See A10	Elements are modeled to the design-specified size and shape of the foundation. Element modeling to include: 1. Overall size and geometry of the foundation element 2. Sloping surfaces or floor depressions 3. External dimensions of the members 4. Main openings such as elevators and other shafts		
Associated Masterformat Sections: **01 82 13**						
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Special Foundations

Uniformat **A1020** Omniclass **21-01 10 20** Uniclass **Ss 20 05**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	From AscendBKF.org	See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 31 60 00	See A10		See A10	See A1010 Elevator pit slabs are sloped correctly Sump pits are shown at correct locations and geometries	Element modeling to include: 1. Location and size of sleeve penetrations and MEP openings 2. Chamfer 3. Pour joints 4. Dowels 5. All elements needed for cross-trade collaboration are to be modeled 6. Actual location and shape of structural element 7. Exposed embeds or reinforcement such as lintels 8. Penetrations detailed and modeled 9. Expansion joints	Element modeling to include: 1. Rebar detailing including hooks and lap splices 2. Dowels 3. Moisture retarder 4. Coursing for unit masonry defined 5. Waterproofing
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

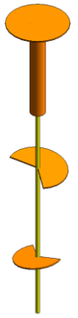
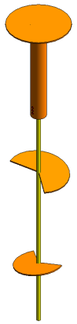
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Helical Piles, Helical Piers

Uniformat **A1020.10.10** Omniclass **21-01 10 20 10 10** Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	*A1020.10.10 LOD 200 Helical Pier* From AscendBKF.org	 *A1020.10.10 LOD 300 Helical Pier* From AscendBKF.org	 *A1020.10.10 LOD 350 Helical Pier*	 *A1020.10.10 LOD 400 Helical Pier* From AscendBKF.org
Description **Associated Masterformat Sections:** N/A	See A10		See A10	Element modeling to include: 1. Pile system type 2. Pile material 3. Coating 4. Influence area modeled or accommodated by model checking software	Element modeling to include: 1. Spacing 2. Plate Size 3. Bearing Strata	Element modeling to include: 1. Full fabrication connections
LoD 500 **LoA**						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

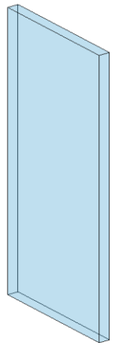
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Subgrade Enclosures

Uniformat **A20** Omniclass **21-01 20** Uniclass **Ss 20 05 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 82 16	Solid mass model representing overall building volume; or, schematic wall elements that are not distinguishable by type or material. Assembly depth/thickness and locations still flexible.		Element modeling to include: 1. Approximate size and shape of the subgrade enclosure element. 2. Structural building grids for local project coordinate system are defined in model and coordinated with global civil coordinate system (State Plane Coordinate System, etc). 3. Suggested Baseline Attributes 4. Member Type			
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

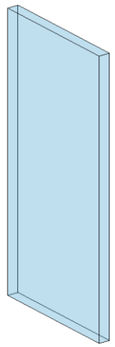
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Walls for Subgrade Enclosures

Uniformat **A2010** Omniclass **21-01 20 10** Uniclass **Ss 20 60**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 82 16	See A20		See A20	Element modeling to include: 1. Overall size and geometry of the subgrade element 2. Sloping surfaces 3. External dimensions of the element 4. Major openings such as large mechanical elements modeled to nominal dimensions.	Element modeling to include: 1. Chamfers 2. All penetrations modeled to rough opening dimensions. 3. Pour joints 4. Rebar and any embedded elements modeled at congested areas where specified by project BXP which is typically with in a set distance from the area of congestion. 5. Any permanent shoring or forming structures such as void boxes 6. Insulation 7. Expansion joints 8. Moisture retarder 9. Exposed embeds or reinforcement such as lintels 10. Penetrations detailed and modeled 11. Expansion joints	Element modeling to include: 1. Rebar including hooks and lap splices 2. Dowels 3. Coursing for unit masonry defined 4. Waterproofing
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

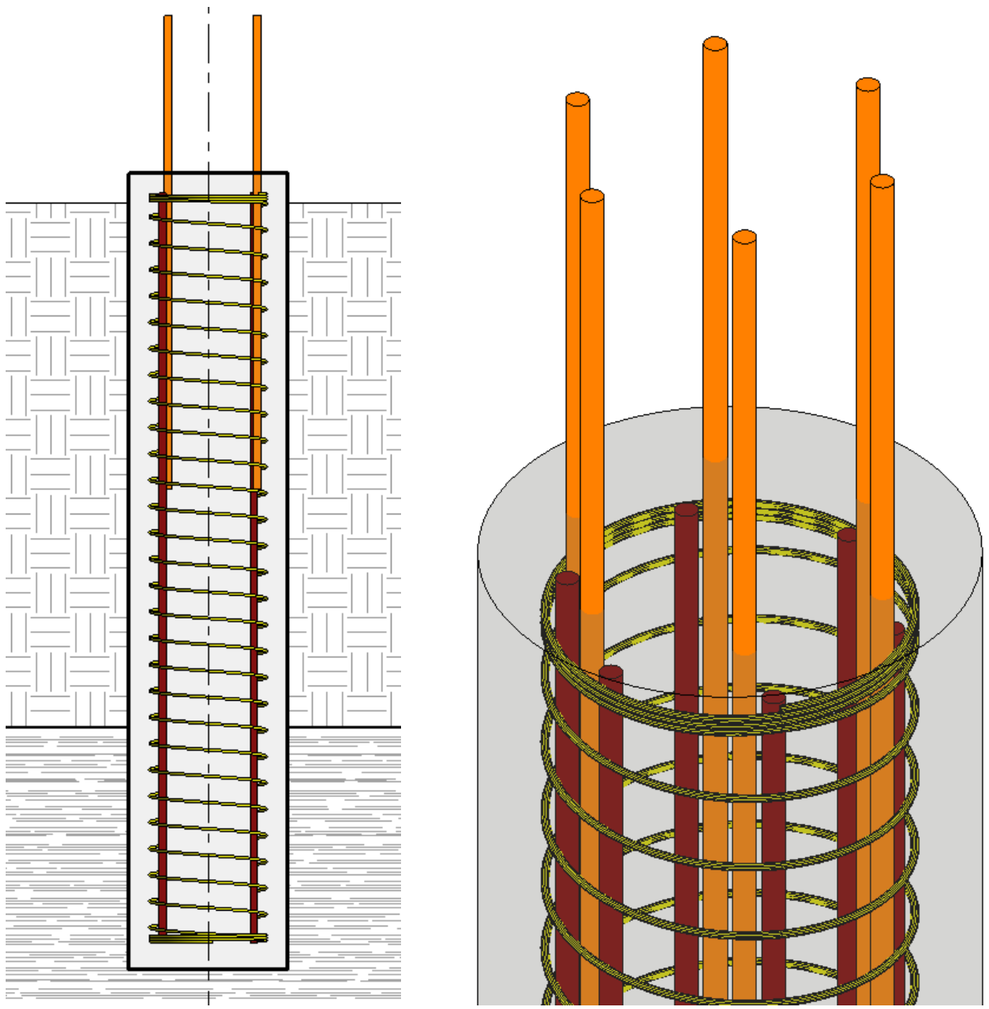
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



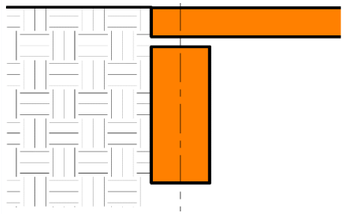
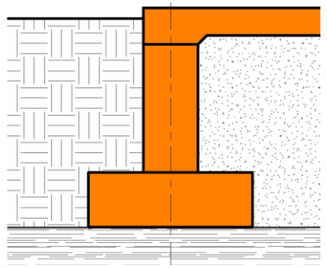
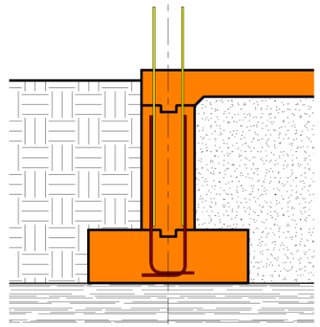
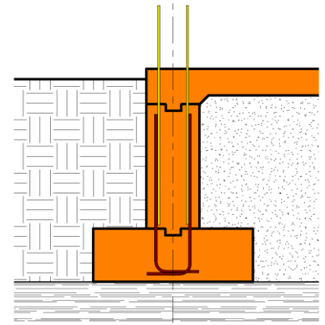
CONCRETE, CAST IN PLACE

LoD 500

Page 45

Wall Foundations (Shallow Foundations)

Uniformat **A1010.10** Omniclass **21-01 10 10 10** Uniclass **Ss 20 05 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com	 *1 A1010.10-LOD-300 Wall Foundation* From Ikerd.com	 *2 A1010.10-LOD-350 Wall Foundations (Shallow Foundations* From Ikerd.com	 *2 A1010.10-LOD-350 Wall Foundations (Shallow Foundations* From Ikerd.com
Description **Associated Masterformat Sections:** **03 30 00 / 03 40 00 / 04 20 00 / 06 14 00**	See A10		See A10 Image Notes: Generic wall foundation is modeled. Site is generically modeled from geotechnical information in geotechnical report.	Element modeling to include: 1. Overall size and geometry of the foundation element 2. Sloping surfaces. 3. External dimensions of the members 4. Geotechnical bearing strata elevation is modeled from geotechnical report. 5. Area of bearing influence – modeled or accommodated by model checking software Image Notes: 1. Wall foundation sizes are accurately modeled with footings where applicable. 2. Bearing elevation is modeled from the geotechnical report. 3. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD. 4. See slab on grade for related conditions at this LOD.	Element modeling to include: Location of sleeve penetrations, Pour joints, Chamfer, Moisture retarder, Dowels 1. All exposed embeds or reinforcement such as lintels 2. Expansion joints 3. Geotechnical Bearing Strata is modeled from geotechnical report estimates. Image Notes: 1. Grade beam sizes are modeled with interfaces to other systems such as but not limited to slab turn downs, key-ways between concrete pours, construction joints and reinforcing dowels into adjacent pours. 2. Bearing elevation is modeled from the geotechnical report with the addition on interface elements such as void boxes where applicable. 3. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD. 4. See slab on grade for related conditions at this LOD.	Element modeling to include: 1. Rebar including hooks and lap splices 2. Dowels 3. Coursing for unit masonry defined 4. Waterproofing
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

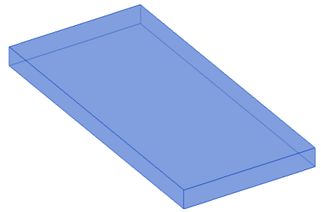
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Floor Structural Frame (Concrete)

Uniformat **B1010.10.10** Omniclass **21-02 10 10 10 10** Uniclass **Ss 30 12 85 18**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00	See B10		Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Composite model assembly by type with overall thickness of structural frame 2. Specific sizes and locations of main concrete structural members modeled per defined structural grid with correct orientation 3. Concrete defined per spec (strength, air entrainment, aggregate size, etc.) 4. All sloping surfaces included in model element with exception of elements affected by manufacturer selection	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Expansion Joints 5. Embeds and anchor rods 6. Post-tension profile and strands modeled if required by the BXP 7. Penetrations for items such as MEP 8. Any permanent forming or shoring components 9. Shear reinforcing and stud rails 10. Critical structural zones for coordination, including but not limited to zones that cannot be penetrated, cut, or damaged. 11. Chamfer	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled camber, etc.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

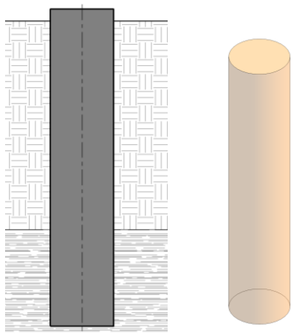
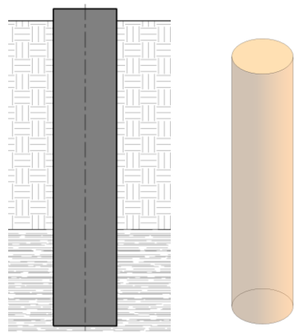
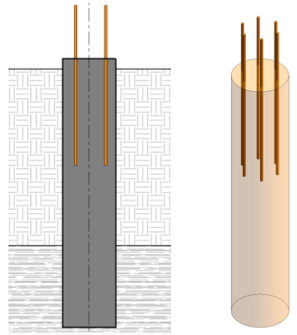
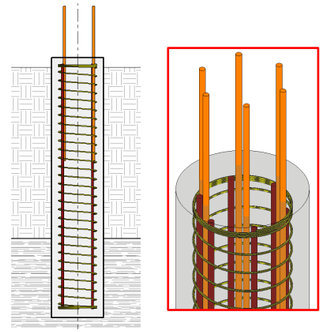
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Pier Foundations (Deep Foundations / Column Foundations)

Uniformat **A1010.30** Omniclass **21-01 10 10 30** Uniclass **Ss 20 05 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *3 A1010.30-LOD-300 Column Foundations (Deep Foundations)* From lkerd.com	 *4 A1010.30-LOD-350 Column Foundations* From lkerd.com	 *5 A1010.30-LOD-400 Column Foundation* From lkerd.com
Description **Associated Masterformat Sections:** 03 30 00	See A10	See A10	Approximate geometry.	Element modeling to include: 1. Assumed bearing depth per geotechnical report with designed penetration geometry modeled. 2. Top of Pier 3. Size of Pier 4. Area of bearing influence - modeled or accommodated by model checking software Image Notes: 1. Pier sizes are accurately modeled with top of pier elevation, estimated depth to bearing and specified depth of penetration into bearing strata. 2. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD.	Element modeling to include: 1. Actual Top of Pier (TOP) and expected Bottom of Pier (BOT) modeled per engineer's review of site conditions. 2. Foundation dowel locations and anchor rods if applicable. Image Notes: 1. Pier sizes are accurately modeled with interfaces to other systems such as but not limited to slab turn downs, key-ways between concrete pours, construction joints and reinforcing dowels into adjacent pours. 2. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD.	Element modeling to include: 1. Depth to bearing stratum 2. Penetration into bearing stratum 3. Locations of lap splices 4. Rebar including hooks and lap splices 5. Dowels 6. Pier sled or Pier wheel for side clear cover 7. Pier bolster for bottom clear cover Image Notes: 1. Pier modeling is developed to include all fabrication content that is part of the element. 2. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD. 3. Pier sled, pier wheel, pier bolsters and other related items are not shown in image for clarity.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

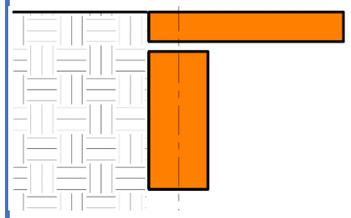
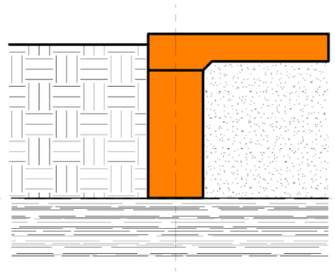
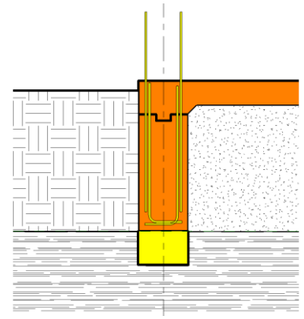
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Grade Beams

Uniformat **A1020.80** Omniclass **21-01 10 20 80** Uniclass **Ss 20 05 15 71**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *6 A1020.80-LOD-200 Grade Beams* From Ikerd.com	 *7 A1020.80-LOD-300 Grade Beams* From Ikerd.com	 *8 A1020.80-LOD-350 Grade Beams* From Ikerd.com	
Description **Associated Masterformat Sections:** 03 30 00	See A10		See A10 Image Notes: 1. Generic beam geometry is shown. 2. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD.	See A1010 Image Notes: 1. Grade Beam 2. See slab on grade (A4010, A4020) for related conditions at this LOD. 3. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD.	Element modeling to include: 1. Water stops 2. Pour joints and sequences required to identify reinforcing lap spice, scheduling, etc. 3. Chamfer Image Notes: 1. Grade beam sizes are modeled with interfaces to other systems such as but not limited to slab turn downs, key-ways between concrete pours, construction joints and reinforcing dowels into adjacent pours. 2. Interface elements such as void boxes or critical bearing zones are modeled where applicable. 3. See slab on grade ((A4010, A4020) for related conditions at this LOD. 4. Geotechnical regions are shown for context and not required to be modeled as part of this element at this LOD.	Element modeling to include: 1. Detailed post-tensioned components 2. Rebar including hooks and lap splices 3. Dowels 4. Waterproofing
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

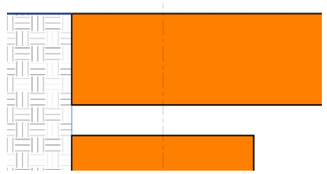
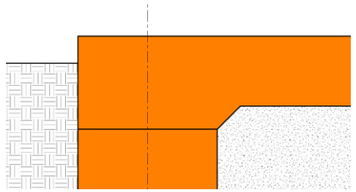
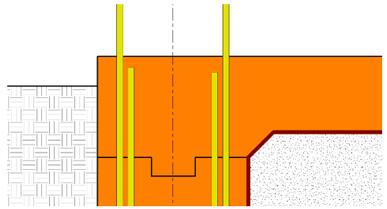
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Standard Slabs-on-Grade

Uniformat **A4010** Omniclass **21-01 40 10** Uniclass **Pr 20 85 14 16**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *9 A40-LOD-200 Slabs-on-Grad* From Ikerd.com	 *10 A4010-LOD-300 Standard Slabs-on-Grad* From Ikerd.com	 *11 A4010-LOD-350 Standard Slabs-on-Grad* From Ikerd.com	
Description **Associated Masterformat Sections:** 03 30 00	See A40	Assumptions for slabs are included in other modeled elements such as a volumetric mass or architectural floor element that contains a layer for assumed structural framing depth.	Element modeling to include: 1. Generic slab with approximate thickness. 2. Structural building grids for local project coordinate system are defined in model and coordinated with global civil coordinate system (State Plane Coordinate System, etc.)	Element modeling to include: 1. Overall size, thickness and geometry of the slab 2. Major openings such as large mechanical elements modeled to nominal dimensions. 3. Slab depressions 4. Edge turn downs 5. Material strength 6. Surfaces modeled to actual slopes	Element modeling to include: 1. All penetrations modeled to rough opening dimensions. 2. Pour joints 3. Control joints 4. Expansion joints 5. Water stops 6. Rebar and any embedded elements modeled at congested areas where specified by project BIMXP which is typically with in a set distance from the area of congestion. 7. Void boxes 8. Anchor rods 9. Dowels 10. Post-tension profile and strands if required by the BXP.	Element modeling to include: 1. Fully modeled rebar 2. Actual slab dimensions and profiles with fully modeled rebar 3. Post tensioning components 4. All joints 5. Water proofing 6. Finish
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

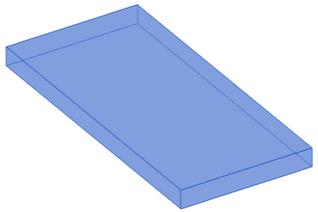
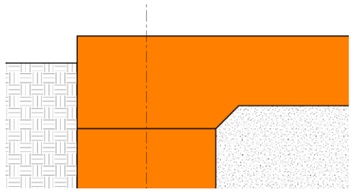
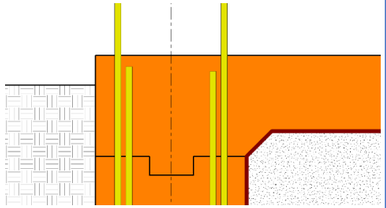
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Structural Slabs-on-Grade

Uniformat **A4020** Omniclass **21-01 40 20** Uniclass **Pr 20 85 14 16**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *12 A4020-LOD-300 Structural Slabs-on-Grad* From Ikerd.com	 *13 A4020-LOD-350 Structural Slabs-on-Grad* From Ikerd.com	
Description **Associated Masterformat Sections:** 03 30 00	See A40		See A40	Element modeling to include: 1. Overall size, thickness and geometry of the slab-on-grade 2. Major openings such as large mechanical elements modeled to nominal dimensions. 3. Slab depressions 4. Edge turn downs 5. All sloping surfaces included in model element with exception of elements affected by manufacturer selection which are not known at this LOD. Such conditions could include floor geometry differences where different specified manufacturers will not be known until the actual system is selected.	Element modeling to include: 1. All penetrations modeled to rough opening dimensions. 2. Pour joints 3. Control joints 4. Expansion joints 5. Water Stops 6. Rebar and any embedded elements modeled at congested areas where specified by project BXP which is typically with in a set distance from the area of congestion. 7. Void boxes 8. Anchor rods 9. Moisture retarder 10. Dowels 11. Post-tension profile and strands modeled if required by the BXP	Element modeling to include: 1. Fully modeled rebar 2. Actual slab dimensions and profiles with fully modeled rebar 3. Post tensioning components 4. All joints 5. Water proofing 6. Finish
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Concrete Column

Uniformat **B1010.10.12** Omniclass **21-02 10 10 10 12** Uniclass **Ss 20 30 75 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *18 B1010.10- LOD 200 Precast Structural Column (Concrete)* From Ikerd.com	 *19 B1010.10- LOD 300 Precast Structural Column (Concrete)* From Ikerd.com	 *20 B1010.10- LOD 350 Precast Structural Column (Concrete)* From Ikerd.com	 *21 B1010.10- LOD 400 Precast Structural Column (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:** See note in left column. Master Class: 03 30 00 / 03 40 00 / 04 20 00 / 05 10 00 / 05 20 00 / 05 21 23 / 05 42 00 / 05 44 00 / 06 11 00 / 06 13 00 / 06 13 26 / 06 17 33 / 06 17 36 / 06 17 53 / 06 18 13 / 06 18 16 / 06 50 00	See B10		Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Specific sizes and locations of main concrete structural members modeled per defined structural grid with correct orientation 2. All sloping surfaces included in model element with exception of elements affected by manufacturer selection	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Chamfer 4. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 5. Expansion Joints 6. Lifting devices 7. Embeds and anchor rods 8. Post-tension profile and strands modeled if required by the BXP 9. Penetrations for items such as MEP 10. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled 2. Finishes
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

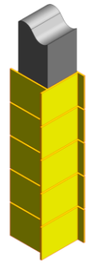
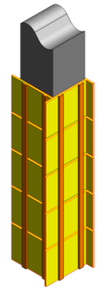
CONCRETE FORMWORK

LoD 500

Page 53

Formwork– Concrete Column

Uniformat -- Omniclass 23-13 31 17 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Concrete Column Formwork* From AscendBKF.org	 *LOD 300 Concrete Column Formwork* From AscendBKF.org	 *LOD 350 Concrete Column Formwork* From AscendBKF.org	 *LOD 400 Concrete Column Formwork* From AscendBKF.org
Description **Associated Masterformat Sections:** 03-10-00			Element modeling to include: 1. Approximate geometry (e.g. panel dimensions or depth).	Element modeling to include: 1. Formwork materials are defined. These may include, but are not limited to plastic, wood or steel. 2. Material properties are defined. These may include, but are not limited to material finish, type, size, grade, strength, etc. 3. Products manufacturer is defined.	Element modeling to include: 1. Insulating faces are defined. 2. Insulating details are defined. These include, but are not limited, too, the type of insulation specified, the temperature change the insulation will cause and the thickness of the insulation within the formwork. 3. Hardware and fastener specification defined (may include Nails, Wood Screws, Bolts, Lag Screws, Ties, Anchors, Hangers, etc.) 4. Shoring connections are defined. 5. Scaffolding connections are defined 6. Liner details are defined.	Element modeling to include: 1. All connections. fasteners, and forms detailed and modeled. 2. Nails, Screws, Anchors, etc.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

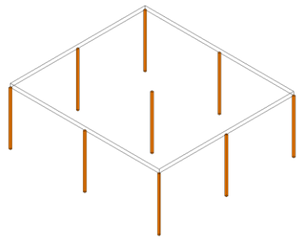
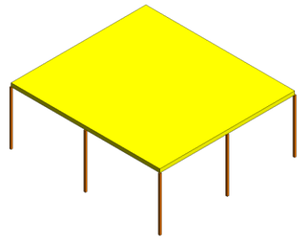
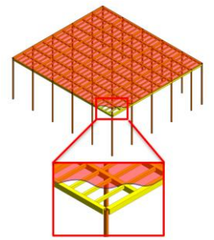
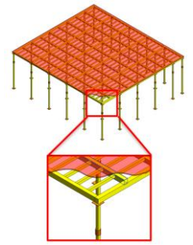
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Formwork– Concrete Slab

Uniformat -- Omniclass 23-13 31 17 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 03-10-00			Element modeling to include: 1. Approximate geometry (e.g. formwork dimensions or depth).	Element modeling to include: 1. Formwork materials are defined. These may include, but are not limited to plastic, wood or steel. 2. Material properties are defined. These may include, but are not limited to material finish, type, size, grade, strength, etc. 3. Products manufacturer is defined.	Element modeling to include: 1. Insulating faces are defined. 2. Insulating details are defined. These include, but are not limited, too, the type of insulation specified, the temperature change the insulation will cause and the thickness of the insulation within the formwork. 3. Hardware and fastener specification defined (may include Nails, Wood Screws, Bolts, Lag Screws, Ties, Anchors, Hangers, etc.) 4. Shoring connections are defined. 5. Scaffolding connections are defined 6. Liner details are defined.	Element modeling to include: 1. All supports and formwork detailed and modeled. 2. Wood supports, metal supports, plates, etc.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

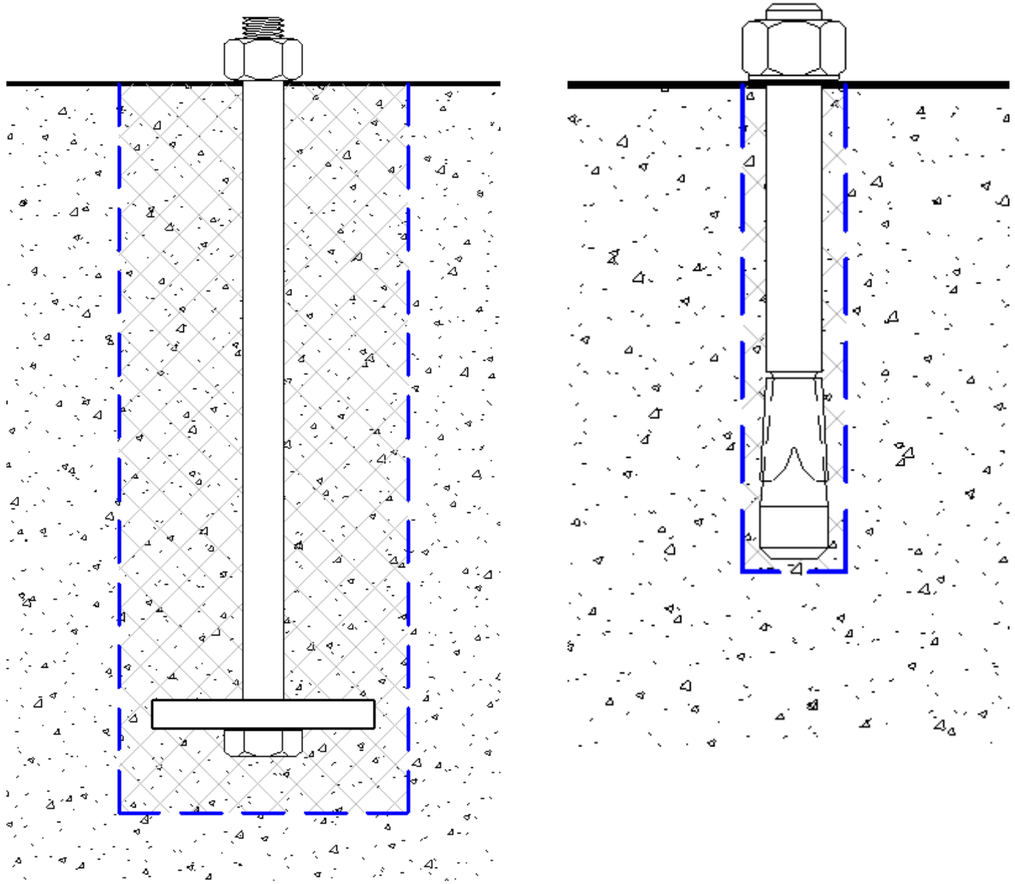
VDCFORUM
VDCForum.org

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD



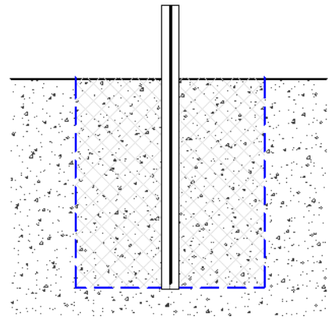
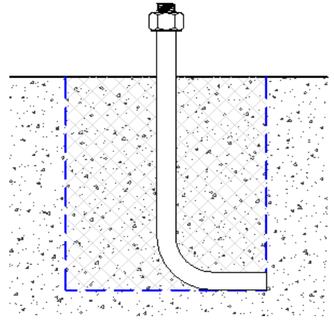
CONCRETE ANCHOR SYSTEM

LoD 500

Page 56

Mechanical Fasteners – L-Bolt

Uniformat -- Omniclass 23-13 23 11 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 L-Bolt Anchor* From AscendBKF.org	 *LOD 400 L-Bolt Anchor* From AscendBKF.org
Description **Associated Masterformat Sections:** N/A			Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads 7. Required non-graphic information associated with model elements to include: • Anchor materials defined • Anchor type defined • Base material type (steel, concrete, masonry, etc) • Base material strength • Base material condition (New, existing, cracked, uncracked, saturated, etc.) • Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts 4. Other non-graphic information may be included such as: • Mark identification that correlates with bill of material (i.e., piece mark) • Member finish (primer, galvanized, etc.) • Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

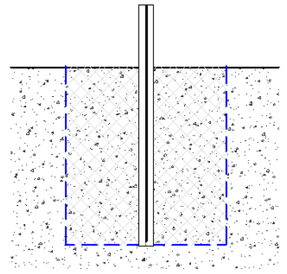
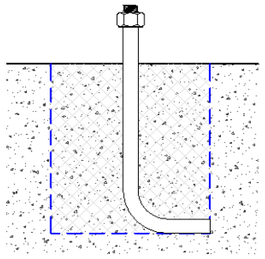
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – J-Bolt

Uniformat -- Omniclass 23-13 23 11 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 J-Bolt Anchor* From AscendBKF.org	 *LOD 400 J-Bolt Anchor* From AscendBKF.org
Description **Associated Masterformat Sections:** N/A			Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads 7. Required non-graphic information associated with model elements to include: • Anchor materials defined • Anchor type defined • Base material type (steel, concrete, masonry, etc) • Base material strength • Base material condition (New, existing, cracked, uncracked, saturated, etc.) • Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts 4. Other non-graphic information may be included such as: • Mark identification that correlates with bill of material (i.e., piece mark) • Member finish (primer, galvanized, etc.) • Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

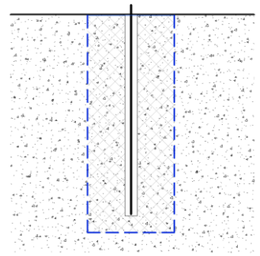
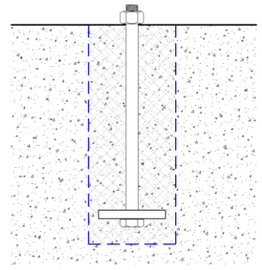
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Hex Head Bolt with Washer

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Hex Head Bolt with Washer* From AscendBKF.org	 *LOD 400 Hex Head Bolt with Washer* From AscendBKF.org
Description **Associated Masterformat Sections:**			Refer to the model element of the main assembly being connected.		Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

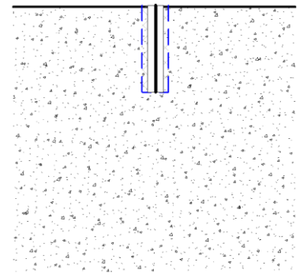
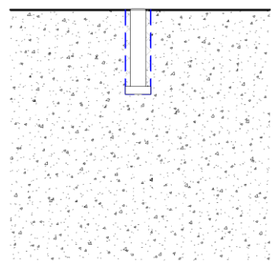
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Welded Headed Stud Bolt

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Welded Headed Stud Bolt* From AscendBKF.org	 *LOD 400 Welded Headed Stud Bolt* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

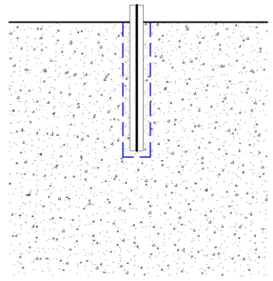
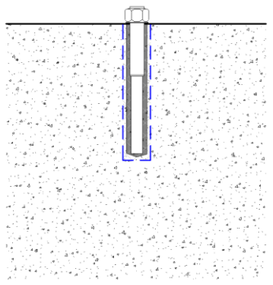
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Adhesive Anchor

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Adhesive Anchor* From AscendBKF.org	 *LOD 350 Adhesive Anchor* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

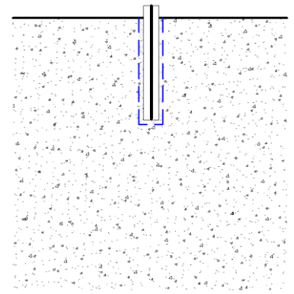
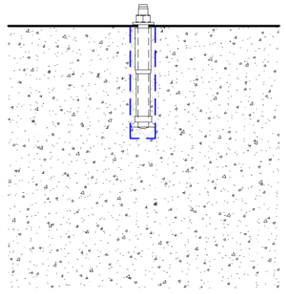
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Undercut Anchor

Uniformat | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Undercut Anchor* From AscendBKF.org	 *LOD 400 Undercut Anchor* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

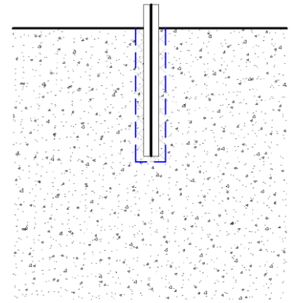
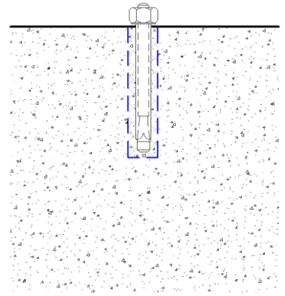
LoA

Mechanical Fasteners – Torque-controlled Expansion Anchor (Sleeve Type)

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Torque-Controlled Expansion Anchor (Sleeve Type)* From AscendBKF.org	 *LOD 400 Torque-Controlled Expansion Anchor (Sleeve Type)* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

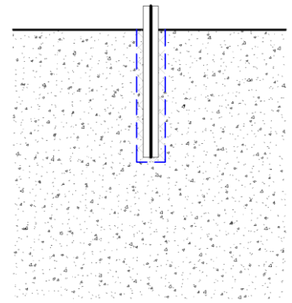
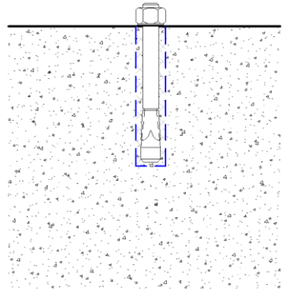
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Torque-controlled Expansion Anchor (Stud Type)

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Torque-Controlled Expansion Anchor (Stud Type)* From AscendBKF.org	 *LOD 400 Torque-Controlled Expansion Anchor (Stud Type)* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

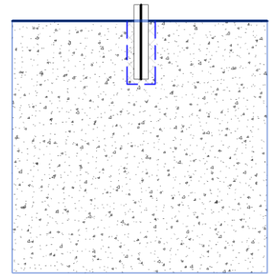
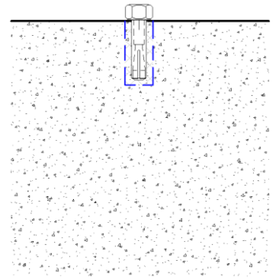
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Mechanical Fasteners – Drop-in Type Displacement-Controlled Expansion Anchor

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *LOD 350 Drop-In Type Displacement-Controlled Expansion Anchor* From AscendBKF.org	 *LOD 400 Drop-In Type Displacement-Controlled Expansion Anchor* From AscendBKF.org
Description **Associated Masterformat Sections:** --	23-13 23 11		Refer to the model element of the main assembly being connected.	Refer to the model element of the main assembly being connected.	Element modeling to include: 1. Anchor Length 2. Embedment Length 3. Projection Length 4. Edge Distance Zone 5. Spacing Zone 6. Geometry, base size without threads Required non-graphic information associated with model elements to include: 1. Anchor materials defined 2. Anchor type defined 3. Base material type (steel, concrete, masonry, etc) 4. Base material strength 5. Base material condition (New, existing, cracked, uncracked, saturated, etc.) 6. Finishes, i.e. primed, galvanized, etc.	Element modeling to include fabrication level information: 1. Anchor Threads 2. Anchor Washers 3. Anchor Nuts Other non-graphic information may be included such as: 1. Mark identification that correlates with bill of material (i.e., piece mark) 2. Member finish (primer, galvanized, etc.) 3. Fastener finish (i.e., black, zinc electroplated, hot-dipped galvanized)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

CONCRETE REPAIR

LoD 500

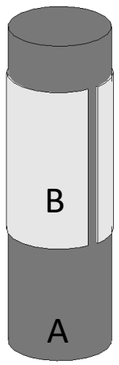
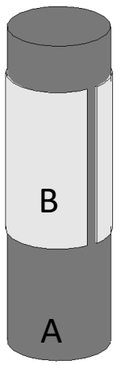
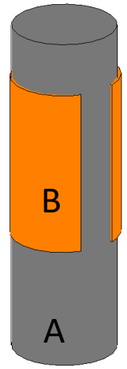
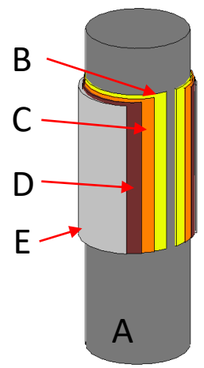
ASCEND
Building Knowledge Foundation

Concrete Strengthening – FRP Fiber-Reinforced Polymer

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Approximate areas of repair are identified as 2D surface patterns (B) on the element being repaired (A). Repair instructions are referenced in specifications and general notes.	Specific areas of repair are identified as 2D surface patterns (B) on the element being repaired (A). On existing structures, specific as-built geometry is defined in the model in the areas that repairs are applied.	Surface repair areas (B) are modeled in 3D with a thickness on the elements being repaired (A). Interface between main element and concrete strengthening are modeled.	Layers and sequences of repair system are modeled in 3D on the element being repaired (A), noted as such in the graphic above: A. Concrete Substrate B. Primer C. Paste and Filler D. Fabric Saturated E. Protective Coating
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

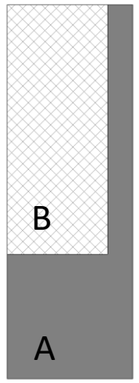
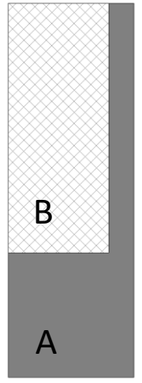
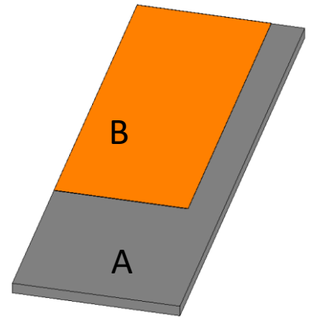
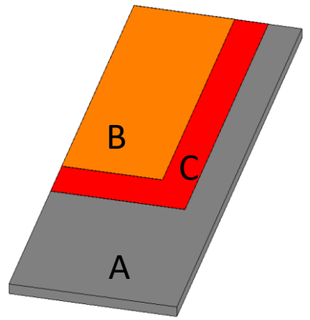
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Concrete Repair
FRCM – Fabric-Reinforced Cementitious Matrix

Uniformat | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Approximate areas of repair is identified (B) on the repair substrate (A). Repair instructions are referenced in specifications and general notes.	Specific areas of repair (A) is modeled as a 2D surface on top of the specific geometry of the element being repaired (B). On existing structures, specific as-built geometry is defined in the model in the areas that repairs are applied	Surface repair (B) areas is modeled in 3D with a thickness on top of the element being repaired (B). Interface between main element and concrete strengthening are modeled.	Layers and sequences of repair surface preparation (C) and repair system (B) are modeled on top of the element being repaired (A).
LoD 500						

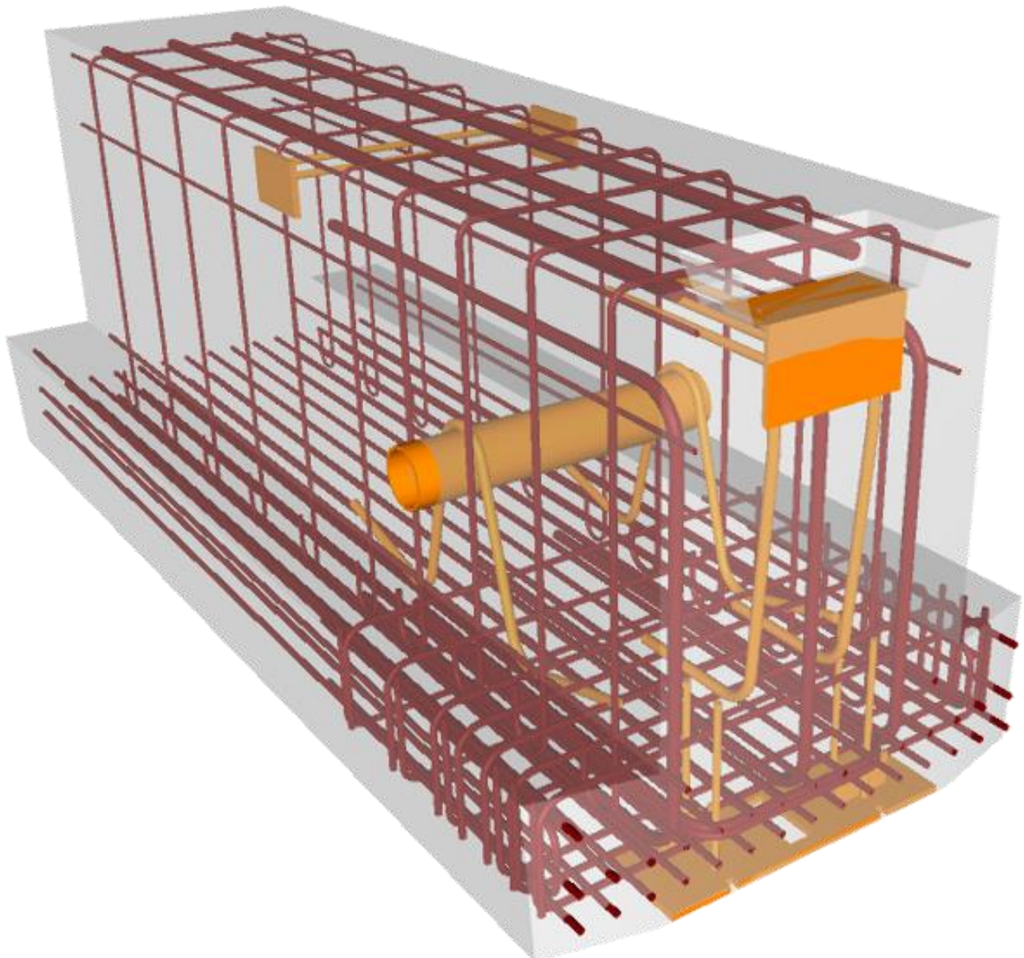
LoA

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD



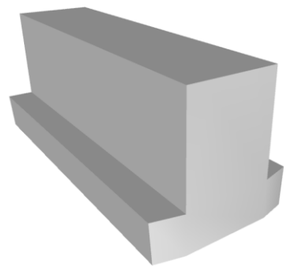
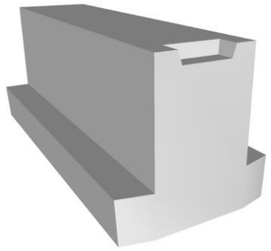
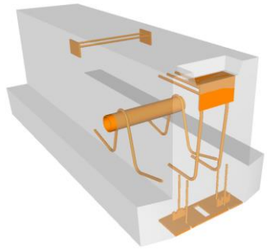
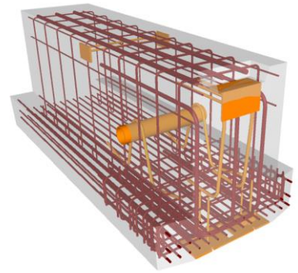
LoD 500

PRECAST CONCRETE

Page 69

All reinforcement including post tensión elements detailed and modeled camber

Uniformat **B1010.10.11** Omniclass **21-02 10 10 10 11** Uniclass **Ss 20 20 75 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Precast Structural Inverted T Beam (Concrete)* From Ikerd.com	 *LOD 300 Precast Structural Inverted T Beam (Concrete)* From Ikerd.com	 *LOD 350 Precast Structural Inverted T Beam (Concrete)* From Ikerd.com	 *LOD 400 Precast Structural Inverted T Beam (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:** See note under descritpoin. Master Class: 03 30 00 / 03 40 00 / 04 20 00 / 05 10 00 / 05 20 00 / 05 21 23 / 05 42 00 / 05 44 00 / 06 11 00 / 06 13 00 / 06 13 26 / 06 17 33 / 06 17 36 / 06 17 53 / 06 18 13 / 06 18 16 / 06 50 00			Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Specific sizes and locations of main concrete structural members modeled per defined structural grid with correct orientation 2. All sloping surfaces included in model element with exception of elements affected by manufacturer selection	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Chamfer 4. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 5. Lifting devices 6. Expansion Joints 7. Embeds and anchor rods 8. Post-tension profile and strands modeled if required by the BXP 9. Penetrations for items such as MEP 10. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcements including post tension elements detailed and modeled. 2. Finishes
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

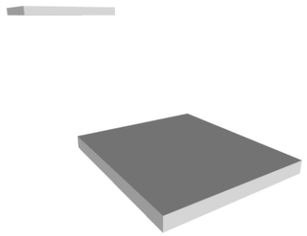
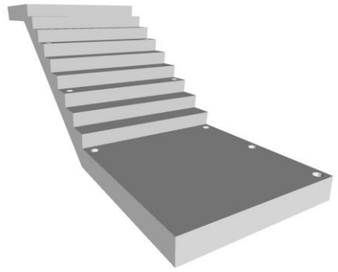
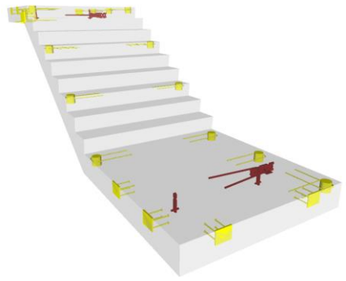
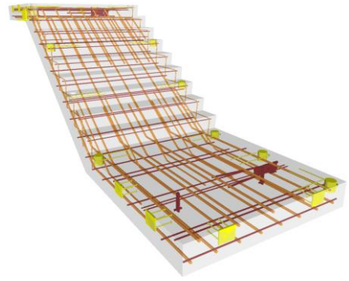
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Precast Structural Stairs (Concrete)

Uniformat **B1080.20** Omniclass **21-02 10 80 10** Uniclass **Ss 35 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *53 B1080.10-LOD 200 Precast Structural Stairs (Concrete)* From Ikerd.com	 *54 B1080.10-LOD 300 Precast Structural Stairs (Concrete)* From Ikerd.com	 *55 B1080.10-LOD 350 Precast Structural Stairs (Concrete)* From Ikerd.com	 *56 B1080.10-LOD 400 Precast Structural Stairs (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:** 03 11 23 / 03 30 00 / 03 41 23 / 03 48 19 / 05 51 00 05 55 00 / 05 71 00 / 06 43 00	See B1080		Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element is accurate as to: 1. Riser count 2. Riser height 3. Tread width 4. Nosing conditions, including top and bottom 5. Landing geometry	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Chamfer 5. Expansion Joints 6. Lifting devices 7. Embeds and anchor rods 8. Post-tension profile and strands modeled if required by the BXP 9. All penetrations modeled to rough opening dimensions. 10. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled 2. Finishes, etc.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

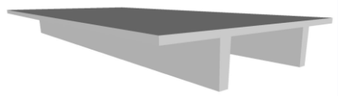
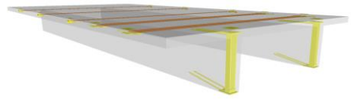
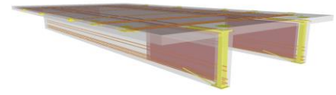
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Precast Structural Double Tee (Concrete)

Uniformat **B1010.20.41** Omniclass **21-02 10 10 20 50** Uniclass **Pr 20 85 08 66**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *45 B1010.20 – LOD 200 Precast Structural Double Tee (Concrete)* From lkerd.com	 *46 B1010.20 – LOD 300 Precast Structural Double Tee (Concrete)* From lkerd.com	 *47 B1010.20 – LOD 350 Precast Structural Double Tee (Concrete)* From lkerd.com	 *48 B1010.20 – LOD 200 Precast Structural Double Tee (Concrete)* From lkerd.com
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 04 20 00 / 05 10 00 / 05 20 00 / 05 21 23 / 05 42 00 / 05 44 00 / 06 11 00 / 06 13 00 / 06 13 26 / 06 17 33 / 06 17 36 / 06 17 53 / 06 18 13 / 06 18 16 / 06 50 00	See B10B10		Element modeling to include: 1. Approximate geometry (e.g. depth) of structural elements.	Element modeling to include: 1. Specific sizes and locations of main concrete structural members modeled per defined structural grid with correct orientation. 2. Concrete defined per spec (strength, air entrainment, aggregate size, etc.) 3. All sloping surfaces included in model element with exception of elements affected by manufacturer selection.	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations. 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas. 3. Chamfer 4. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 5. Expansion Joints 6. Lifting devices 7. Embeds and anchor rods 8. Penetrations for items such as MEP 9. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled 2. Finishes
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Precast Wall Construction (Concrete)

Uniformat **B2010.20.40** Omniclass **21-02 20 10 20 40** Uniclass **Ss 25 16 65**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *79 B2010.20– LOD 350 Precast Wall (Concrete)* From Ikerd.com	 *80 B2010.20– LOD 350 Precast Wall (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 04 20 00 / 05 41 00 / 06 11 00 / 06 12 00 / 06 16 00	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements. Shear panels	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Expansion Joints 5. Lifting devices 6. Embeds and anchor rods 7. Post-tension profile and strands modeled if required by the BXP 8. All penetrations are modeled at actual rough-opening dimensions. 9. Any permanent forming or shoring components 10. Chamfer, reveals, etc.	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

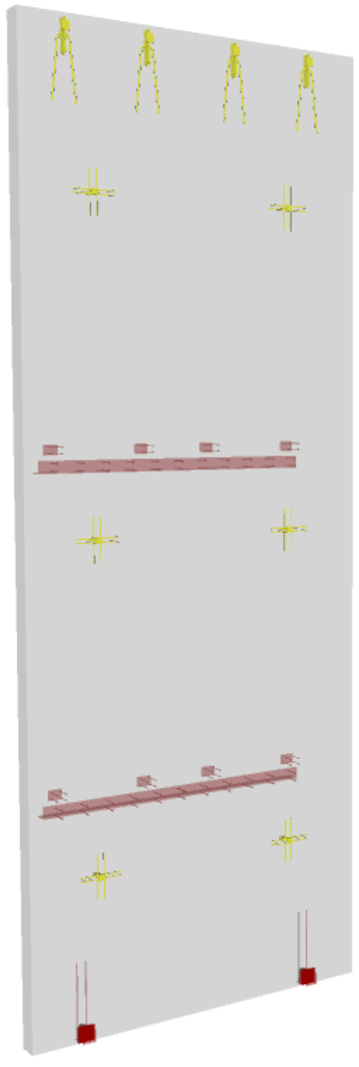
Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

LoA



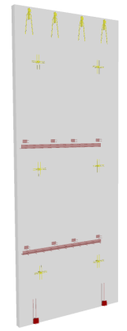
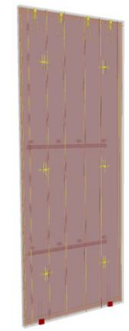
LoD 500

Tilt Wall Concrete

Page 74

Precast Wall Construction (Concrete)

Uniformat **B2010.20.40** Omniclass **21-02 20 10 20 40** Uniclass **Ss 25 16 65**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.			 *79 B2010.20– LOD 350 Tilt Wall (Concrete)* From Ikerd.com	 *80 B2010.20– LOD 400 Tilt-Wall(Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 04 20 00 / 05 41 00 / 06 11 00 / 06 12 00 / 06 16 00	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements. Shear panels	Element modeling to include: 1. Reinforcing 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Expansion Joints 5. Lifting devices 6. Embeds and anchor rods 7. All penetrations are modeled at actual rough-opening dimensions. 8. Any permanent forming or shoring components 9. Chamfer, reveals, etc.	Element modeling to include: 1. All reinforcement elements detailed and modeled
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

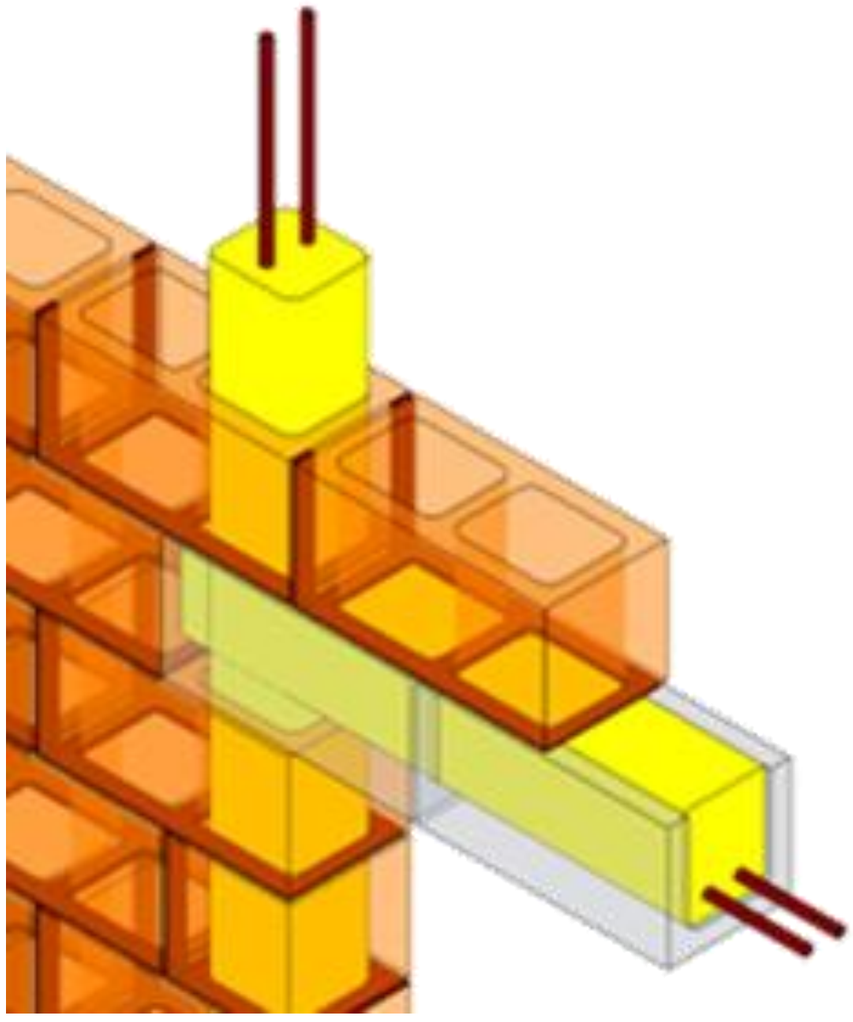
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



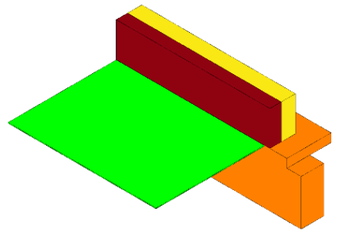
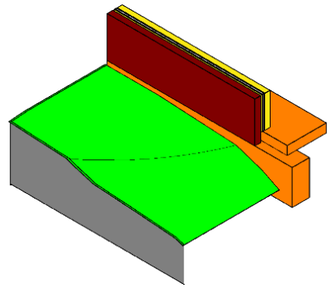
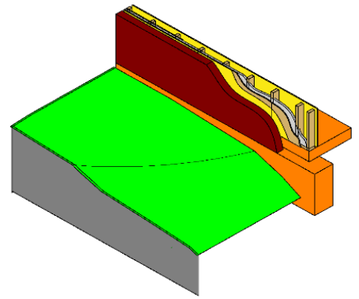
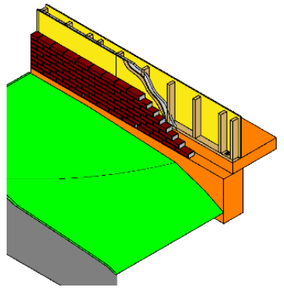
LoD 500

MASONRY

Page 76

Exterior Wall Veneer

Uniformat **B2010.10** Omniclass **21-02 20 10 10** Uniclass **EF 25 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *63 B2010.10-LOD-200 Exterior Wall Veneer* From Ikerd.com	 *64 B2010.10-LOD-300 Exterior Wall Veneer* From Ikerd.com	 *65 B2010.10-LOD-350 Exterior Wall Veneer* From Ikerd.com	 *66 B2010.10-LOD-400 Exterior Wall Veneer* From Ikerd.com
Description **Associated Masterformat Sections:** 03 40 00 / 04 20 00 / 04 26 13 / 04 42 00 / 04 43 13 / 04 70 00 / 05 19 13 / 06 20 13 / 06 61 00 / 07 19 00 / 07 24 00 / 07 42 00 / 07 44 00 / 07 46 00 / 09 24 00 / 09 24 23 / 09 90 00	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Exterior wall veneer modeled as a separate element. Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements.	Exterior wall veneer modeled as a separate element. All penetrations are modeled at actual rough-opening dimensions. Precast concrete panels are individually modeled. Connection points are specified. Connection to interfacing systems Images notes: 1. Wall veneer element 2. Skin layers including but not limited to waterproofing membrane 3. Core framing 4. Concrete slab edge	Element modeling includes: 1. Individual masonry units 2. Skin layers including 3. Moisture barrier, sheathing, and insulation 4. Core framing 5. Bolt 6. Concrete slab edge 7. Weep holes
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

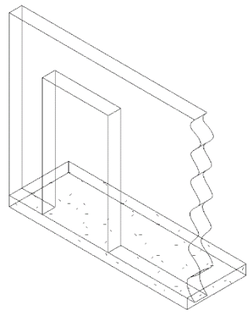
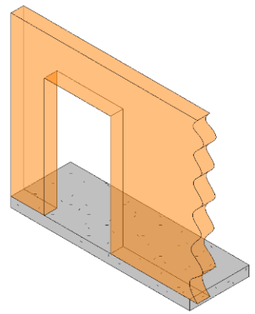
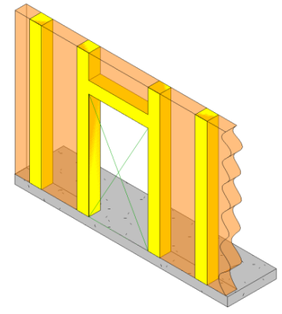
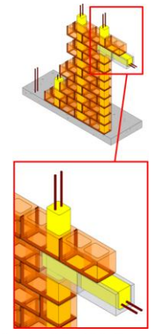
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Masonry Wall Construction – Unit Masonry (Exterior)

Uniformat **B2010.20.30** Omniclass **21-02 20 10 20 30** Uniclass **Ss 25 13 50**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *75 B2010.04-LOD-200 Exterior Wall (Masonry)* From Ikerd.com	 *76 B2010.04-LOD-300 Exterior Wall (Masonry)* From Ikerd.com	 *77 B2010.04-LOD-350 Exterior Wall (Masonry)* From Ikerd.com	 *78 B2010.04-LOD-400 Exterior Wall (Masonry)* From Ikerd.com
Description **Associated Masterformat Sections:** 01 83 16	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements. Shear panels	Element modeling to include: 1. Members modeled at any interface with wall edges (top, bottom, sides) or opening through wall 2. All penetrations are modeled at actual rough-opening dimensions. 3. Openings modeled with support framing around openings 4. Any regions that would impact coordination with other systems such as but not limited to: 5. Bond Beam & Lintel Regions 6. Reinforcing & Embed Regions 7. Jam Regions 8. Any other grouted regions	Element modeling to include: 1. Reinforcing 2. Connections 3. Grouting Material 4. Jams 5. Bond Beams 6. Lintels 7. Member fabrication part number 8. Any part required for complete installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

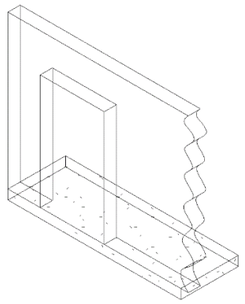
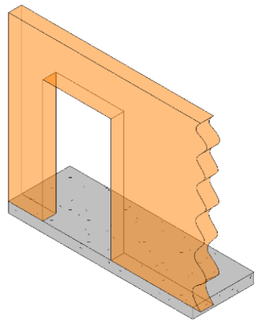
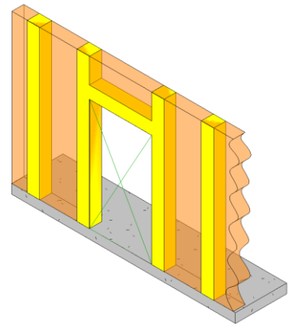
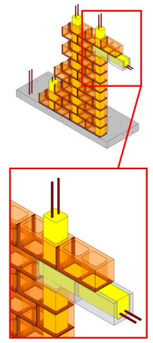
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Floor Structural Frame (Masonry Framing)

Uniformat **B1010.10** Omniclass **21-02 10 10 10** Uniclass **Ss 30 12 33**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *37 B1010.10-LOD-200 Floor Structural Frame (Masonry Framing)* From Ikerd.com	 *38 B1010.10-LOD-300 Floor Structural Frame (Masonry Framing)* From Ikerd.com	 *39 B1010.10-LOD-350 Floor Structural Frame (Masonry Framing)* From Ikerd.com	 *40 B1010.10-LOD-400 Floor Structural Frame (Masonry Framing)* From Ikerd.com
Description **Associated Masterformat Sections:** 04 20 00	See B10		See B10	Element modeling to include: 1. floor element with design-specified locations and geometries	Element modeling to include: 1. Members modeled at any interface with wall edges (top, bottom, sides) or opening through wall 2. Any regions that would impact coordination with other systems such as but not limited to: • Bond Beam & Lintel Regions • Reinforcing & Embed Regions • Jam Regions • Any other grouted regions	Element modeling to include: 1. Reinforcing 2. Connections 3. Grouting Material 4. Jams 5. Bond Beams 6. Lintels 7. Member fabrication part number 8. Any part required for complete installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

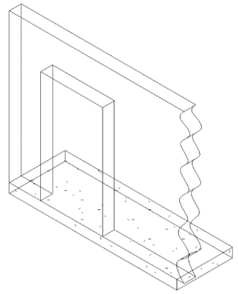
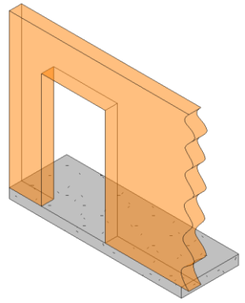
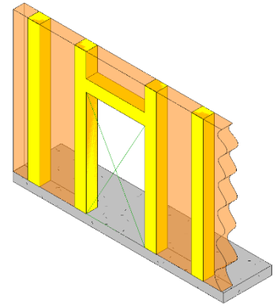
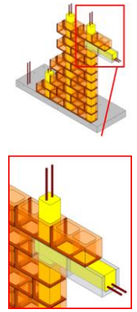
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Masonry Wall Construction – Unit Masonry (Interior)

Uniformat **C1010.10.10** Omniclass **21-03 10 10 10 10** Uniclass **Ss 25 13 50 56**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *85 C1010.04-LOD-200 Interior Wall (Masonry)* From Ikerd.com	 *86 C1010.04-LOD-300 Interior Wall (Masonry)* From Ikerd.com	 *87 C1010.04-LOD-350 Interior Wall (Masonry)* From Ikerd.com	 *88 C1010.04-LOD-400 Interior Wall (Masonry)* From Ikerd.com
Description **Associated Masterformat Sections:** 10 22 00 / 01 84 13	See C10	IN	See C1010	See C1010.10	Element modeling to include: 1. Members modeled at any interface with wall edges (top, bottom, sides) or opening through wall 2. All penetrations are modeled at actual rough-opening dimensions. 3. Any regions that would impact coordination with other systems such as but not limited to: • Bond Beam & Lintel Regions • Reinforcing & Embed Regions 4. Jam Regions	Element modeling to include: 1. Reinforcing 2. Connections 3. Grouting Material 4. Jams 5. Bond Beams 6. Lintels 7. Member fabrication part number 8. Any part required for complete installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoD 500

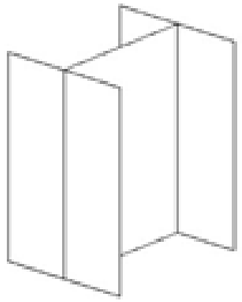
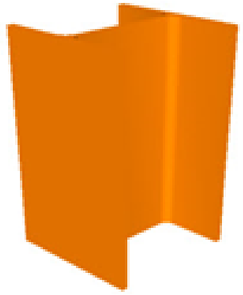
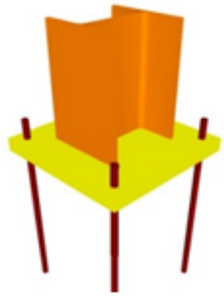
VDCFORUM
VDCForum.org

STRUCTURAL & MISCELLANEOUS STEEL

Page 81

Floor Structural Frame (Steel Framing Column)

Uniformat **B1010.10.30** Omniclass **21-02 10 10 10 30** Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *23 B1010.10-LOD-200 Floor Structural Frame (Steel Framing Columns)* From Ikerd.com	 *24 B1010.10-LOD-300 Floor Structural Frame (Steel Framing Columns)* From Ikerd.com	 *25 B1010.10-LOD-350 Floor Structural Frame (Steel Framing Columns)* From Ikerd.com	 *26 B1010.10-LOD-400 Floor Structural Frame (Steel Framing Columns)* From Ikerd.com
Description **Associated Masterformat Sections:** 05 10 00	Generic column element. See B10.		See B1010	Element modeling to include: 1. Specific sizes of main vertical structural members modeled per defined structural grid with correct location and orientation.	Element modeling to include: 1. Actual elevations and location of member connections 2. Main elements of typical connections applied to all structural steel connections such as base plates, gusset plates, anchor rods, etc. 3. Any miscellaneous steel members with correct size, shape, orientation, and material. 4. Any steel structure reinforcement such as web stiffeners, sleeve penetrations, etc.	Element modeling to include: 1. Welds 2. Coping of members 3. Cap pates 4. Washers, nuts, etc. 5. All assembly elements
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

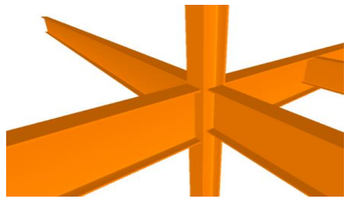
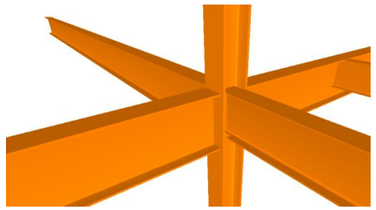
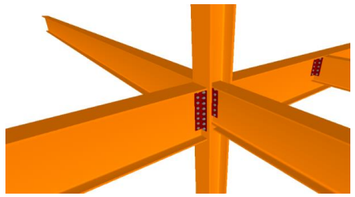
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Floor Structural Frame (Steel Framing Beams)

Uniformat **B1010.10.40** Omniclass **21-02 10 10 10 40** Uniclass **Ss 20 20 75 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *27 B1010.10-LOD-300 Floor Structural Frame (Steel Framing Beams)* From Ikerd.com	 *28 B1010.10-LOD-350 Floor Structural Frame (Steel Framing Beams)* From Ikerd.com	 *29 B1010.10-LOD-400 Floor Structural Frame (Steel Framing Beams)* From Ikerd.com
Description **Associated Masterformat Sections:** : 05 10 00 / 05 20 00 / 05 21 23	See B10		See B1010	Element modeling to include: 1. Specific sizes of main horizontal structural members modeled per defined structural grid with correct orientation, slope and elevation	Element modeling to include: 1. Actual elevations and location of member connections 2. Main elements of typical connections applied to all structural steel connections such as base plates, gusset plates, anchor rods, etc. 3. Any miscellaneous steel members with correct size, shape, orientation and material 4. Any steel structure reinforcement such as web stiffeners, sleeve penetrations, etc.	Element modeling to include: 1. Welds 2. Coping of members 3. Bent plates, cap pates, etc. 4. Bolts, washers, nuts, etc. 5. All assembly elements
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Floor Structural Frame (Steel Framing Bracing Rods)

Uniformat **B1010.10.50** Omniclass **21-02 10 10 10 50** Uniclass **Pr 20 85 84 88**

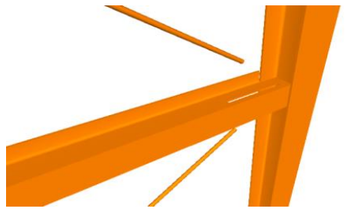
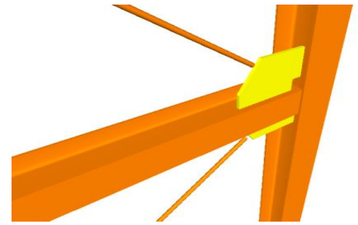
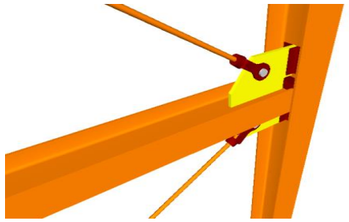
LOD	000[a]	100[b,c]	200[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	
Description **Associated Masterformat Sections:** 05 10 00	See B10		See B1010
LoD 500			
LoA			

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

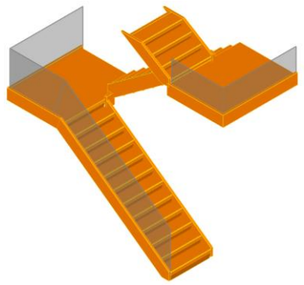
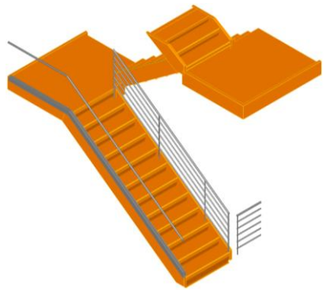
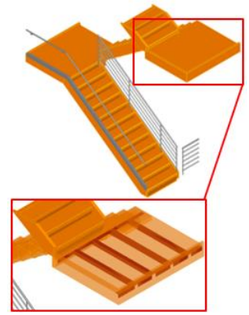
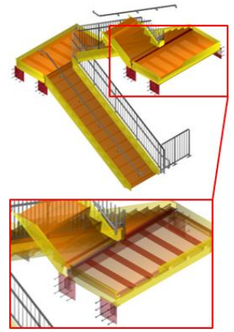
300[b,c]	350[b,c]	400[b,c]
 *30 B1010.100-LOD-300 Floor Structural Frame (Steel Framing Bracing Rods)* From Ikerd.com	 *31 B1010.100-LOD-350 Floor Structural Frame (Steel Framing Bracing Rods)* From Ikerd.com	 *32 B1010.100-LOD-400 Floor Structural Frame (Steel Framing Bracing Rods)* From Ikerd.com
Element modeling to include: 1. Specific sizes of main structural braces modeled per defined structural grid	Element modeling to include: 1. Connection details 2. Actual elevations and location of member connections 3. Main elements of typical connections applied to all structural steel connections such as base plates, gusset plates, anchor rods, etc. 4. Any miscellaneous steel members with correct size, shape, orientation and material	Element modeling to include: 1. Welds 2. Clevis 3. Bolts, washers, nuts, etc. 4. All assembly elements

STEEL STAIRS & RAILING

LoD 500

Stair Construction

Uniformat **B1080.10** Omniclass **21-02 10 80 10** Uniclass **Ss 35 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *49 B1080.10-LOD-200 Stair Construction* From Ikerd.com	 *50 B1080.10-LOD-300 Stair Construction* From Ikerd.com	 *51 B1080.10-LOD-350 Stair Construction* From Ikerd.com	 *52 B1080.10-LOD-400 Stair Construction* From Ikerd.com
Description **Associated Masterformat Sections:** 03 11 23 / 03 30 00 / 03 41 23 / 03 48 19 / 05 51 00 / 05 55 00 / 05 71 00 / 06 43 00	See B1080		Generic model element with simplified treads and risers. Nominal overall unit scope shall include: Nominal plan dimensions (length, width) Nominal vertical dimensions (levels, landings)	Major stair support elements are modeled (stringers). Element is accurate as to: 1. Riser count 2. Riser height 3. Tread width 4. Nosing conditions, including top and bottom 5. Landing geometry	Secondary stair support elements are modeled (hangers, brackets, handrail connection points etc.).	All stair elements are modeled to support fabrication and installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

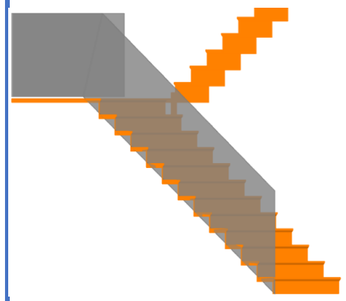
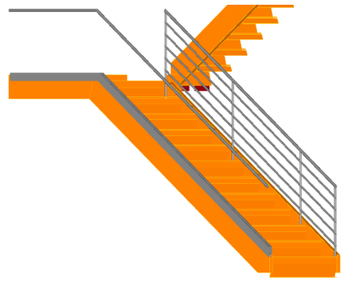
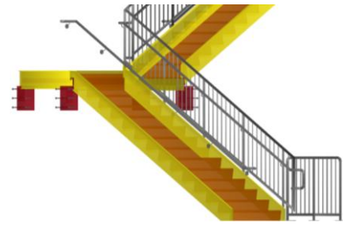
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Stair Railings

Uniformat **B1080.50** Omniclass **21-02 10 80 50** Uniclass **Ss 25 15 60 35**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *57 B1080.50-LOD-200 Stair Railings* From Ikerd.com	 *58 B1080.50-LOD-300 Stair Railings* From Ikerd.com		 *59 B1080.50-LOD-400 Stair Railings* From Ikerd.com
Description **Associated Masterformat Sections:** 05 15 00 / 05 52 00 / 05 73 00 / 06 43 16 / 06 63 00 / 06 81 00	See B1080		Generic model elements without articulation of material or railing structure such as balusters, posts, or supports.	Element is accurate as to: 1. Railing geometry 2. Railing element spacing 3. Supports for wall mounted railings		[See Fundamental LOD Definitions]
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

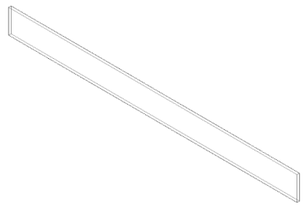
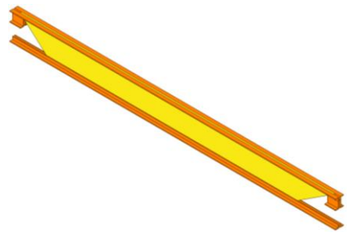
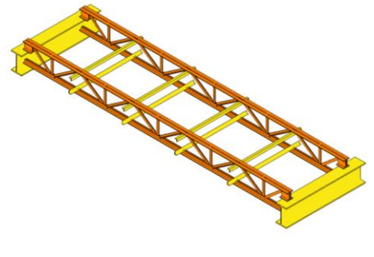
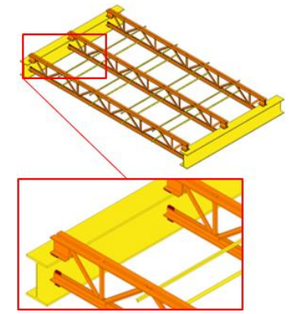
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

STEEL JOISTS

LoD 500

Floor Structural Frame (Steel Joist)

Uniformat **B1010.10.60** Omniclass **21-02 10 10 10 60** Uniclass **Pr 20 85 90 11**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *33 B1010.10-LOD-200 Floor Structural Frame (Steel Joists),* From lkerd.com	 *34 B1010.10-LOD-300 Floor Structural Frame (Steel Joists),* From lkerd.com	 *35 B1010.10-LOD-350 Floor Structural Frame (Steel Joists),* From lkerd.com	 *36 B1010.10-LOD-400 Floor Structural Frame (Steel Joists),* From lkerd.com
Description **Associated Masterformat Sections:** 05 10 00 / 05 20 00 / 05 21 23	See B10		Element modeling to include: 1. Approximate depth	Element modeling to include: 1. Joist size, depth, slope, and material 2. Spacing and end elevations 3. Joist seat depth	Element modeling to include, information needed for cross trade collaboration such as: 1. Actual final joist profile locations with accurate panel points 2. Joist bridging and lateral braces. 3. Fire protection coating 4. Any miscellaneous steel pertaining to the joist 5. Joist seat width 6. Erection details for installation 7. Chord and web member section profiles are defined 8. Joist layout in coordination with metal deck fasteners would be confirmed 9. Non-standard joist seat depths and\or sloping joist seat	Element modeling to include: 1. Welds 2. Connection plates 3. Member fabrication part number 4. Quantity 5. Spacing 6. Anchorage 7. Material required for proper installation 8. Mark identification that correlates with bill of material 9. Type of shop paint if required
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

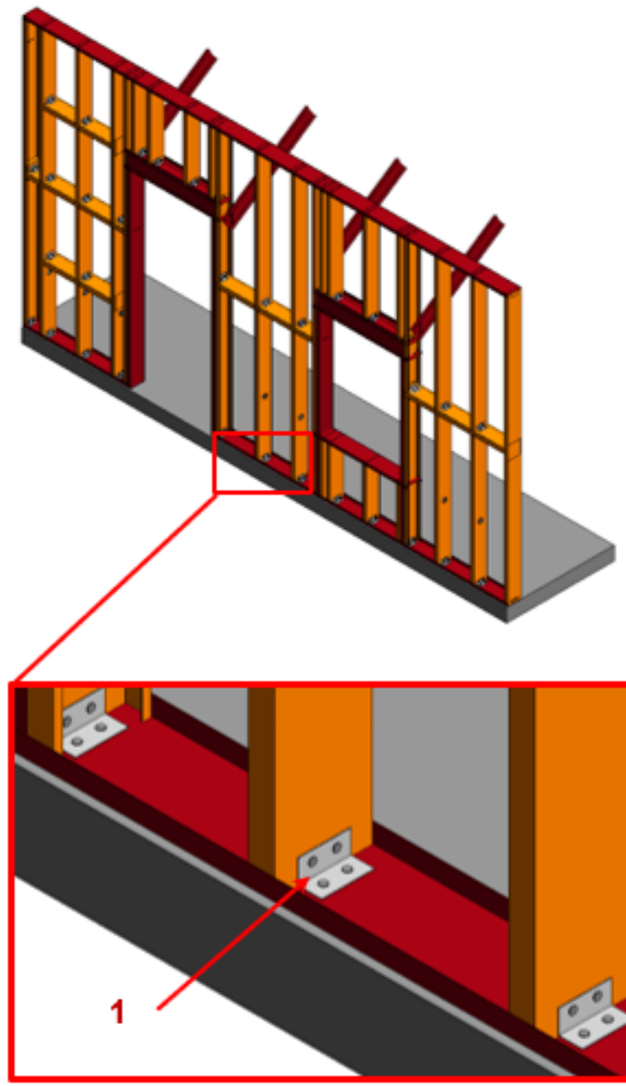
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



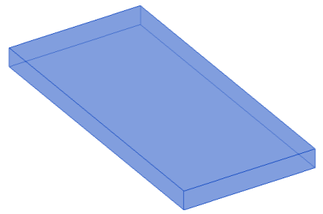
LoD 500

COLD FORMED METAL FRAMING, DRYWALL & SHEATHING

Page 90

Floor Structural Framing (Cold Formed Metal Framing)

Uniformat **B1010.10.70** Omniclass **21-02 10 10 10 70** Uniclass **Ss 20 10 75 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 05 10 00 / 05 42 00 / 05 44 00	See B10		Element modeling to include: 1. Rough architectural masses 2. Approximate member depth 3. Desired member spacing	Element modeling to include: 1. Floor element with design-specified locations and geometries	Element modeling to include: 1. Members modeled at any interface with wall edges (top, bottom, sides) or opening through wall 2. Bridging or straps	Element modeling to include: 1. Welds 2. Connections 3. Member fabrication part number 4. Any part required for complete installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

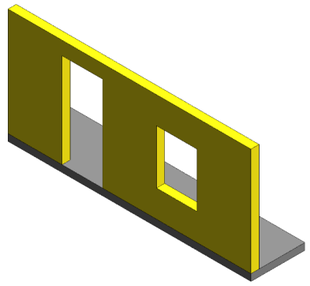
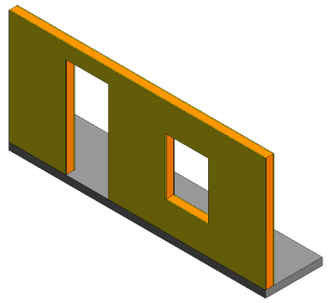
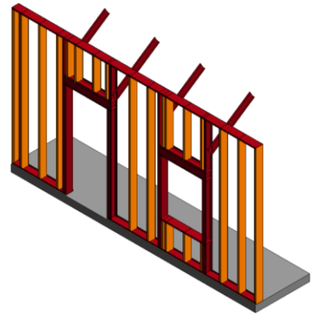
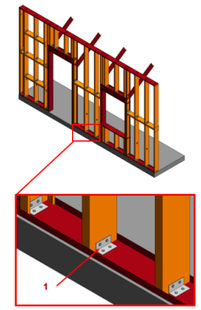
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Wall Construction (Cold-From Metal Framing)

Uniformat **B2010.20.20** Omniclass **21-02 20 10 20 20** Uniclass **Ss 25 10 32 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *71 B2010.05-LOD-200 Exterior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *72 B2010.05-LOD-300 Exterior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *73 B2010.05-LOD-350 Exterior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *74 B2010.05-LOD-400 Exterior Wall (Cold-Form Metal Framing)* From Ikerd.com
Description **Associated Masterformat Sections:** 01 83 16	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements. Shear panels	Cold formed metal framing is developed with sufficient elements to support detailed interface coordination with other systems such as MEP. All penetrations are modeled at actual rough-opening dimensions. Openings modeled with support framing around openings Image notes: 1. Elements in red are critical wall support elements that cannot be easily cut for coordination of MEP opening through the walls. 2. Diagonal bracing (kickers) that may be in the above ceiling space are modeled for coordination with other building content such as MEP passing along the wall in the above ceiling spaces. 3. Infill cold formed metal framing modeling (Orange) may be omitted at this LOD if stated in the BXP. 4. Cladding and sheathing are not shown for clarity in this image.	Cold formed metal framing is developed with sufficient elements that support the fabrication of the CFMF system. Image notes: 1. Connection content is development in the wall elements. This includes but is not limited to fasteners, clips, and other related hardware. 2. Cladding and sheathing are not shown for clarity in this image.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

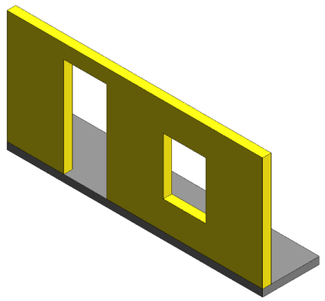
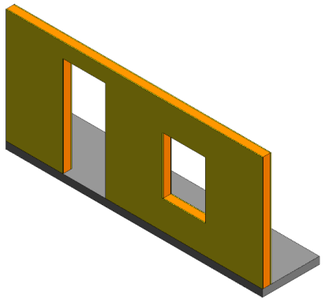
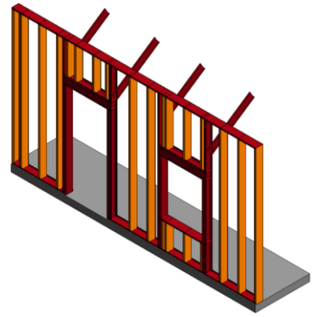
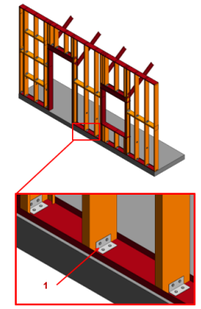
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Wall (Cold-Formed Metal Framing)

Uniformat **C1010.10.20** Omniclass **21-03 10 10 10 20** Uniclass **Ss 25 10 32 45**

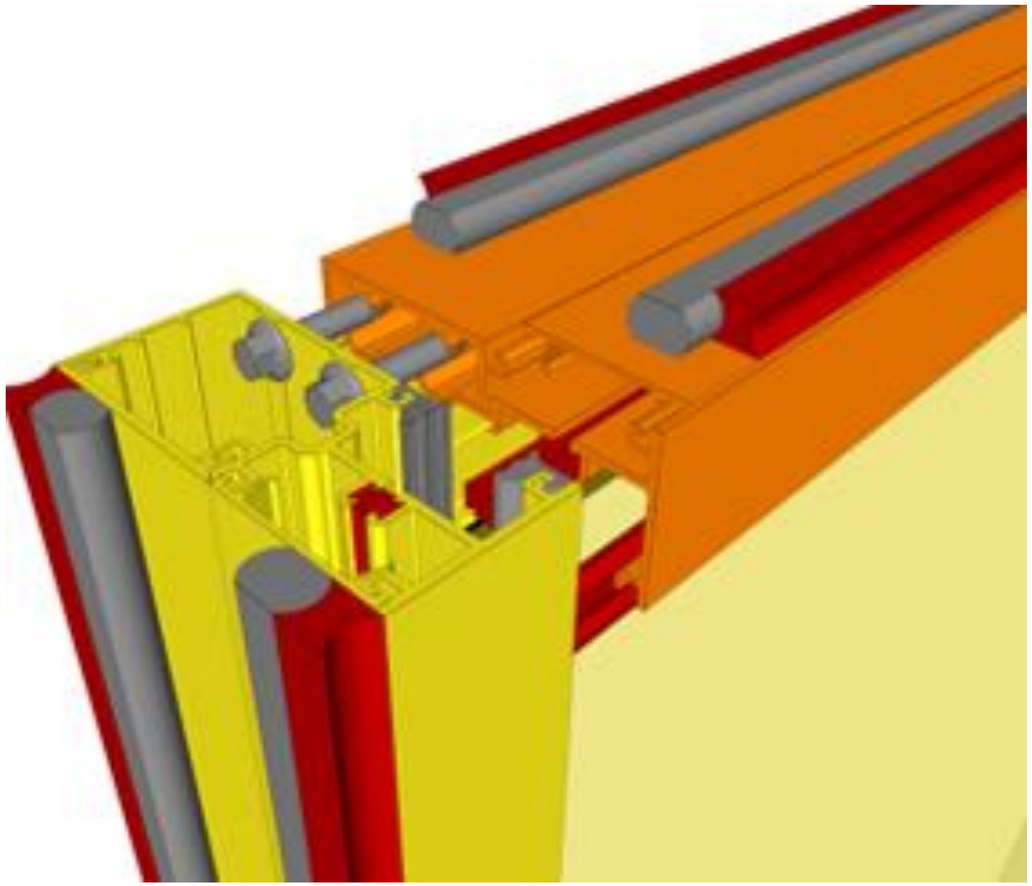
LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *89 C1010.05-LOD-200 Interior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *90 C1010.05-LOD-300 Interior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *91 C1010.05-LOD-350 Interior Wall (Cold-Form Metal Framing)* From Ikerd.com	 *92 C1010.05-LOD-400 Interior Wall (Cold-Form Metal Framing)* From Ikerd.com
Description **Associated Masterformat Sections:** 10 22 00 / 01 84 13	See C10		See C1010	See C1010.10	Cold formed metal framing is developed with sufficient elements to support detailed interface coordination with other systems such as MEP. All penetrations are modeled at actual rough-opening dimensions. Image notes: 1. Elements in red are critical wall support elements that cannot be easily cut for coordination of MEP opening through the walls. 2. Diagonal bracing (kickers) that may be in the above ceiling space are modeled for coordination with other building content such as MEP passing along the wall in the above ceiling spaces. 3. Infill CFMF modeling (Orange) may be omitted at this LOD if stated in the BXP. 4. Cladding and sheathing are not shown for clarity in this image.	Cold formed metal framing is developed with sufficient elements that support the fabrication of the CFMF system. Image notes: 1. Connection content is development in the wall elements. This includes but is not limited to fasteners, clips, and other related hardware. 2. Cladding and sheathing are not shown for clarity in this image.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



VDCFORUM
VDCForum.org

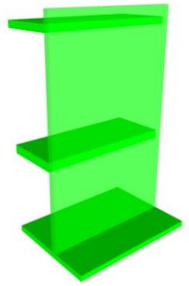
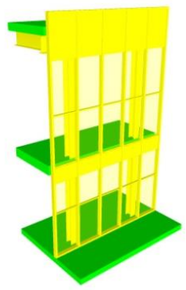
ENCLOSURES CLADDING & CURTAIN WALL

LoD 500

Page 94

Exterior Walls

Uniformat **B2010** Omniclass **21-02 20 10** Uniclass **EF 25 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *60 B2010-LOD-200 Exterior Walls* From Ikerd.com	 *61 B2010-LOD-300 Exterior Walls* From Ikerd.com	 *62 B2010-LOD-350 Exterior Walls* From Ikerd.com	
Description **Associated Masterformat Sections:** 01 83 16	See B20		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate overall wall thickness represented by a single assembly. Layouts and locations still flexible.	Single model element with specific overall thickness that accounts for veneer, structure, insulation, air space, and interior skin specified for the wall system. (Refer to LOD350 and LOD400 for individually modeled elements) Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements.	May be modeled as a single model element. Main structural members such as headers and jambs at openings are modeled. All penetrations are modeled at actual rough-opening dimensions.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

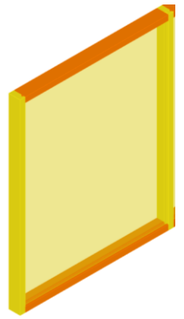
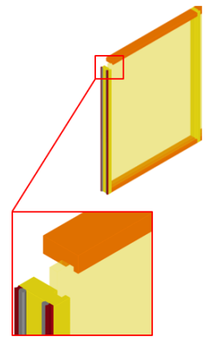
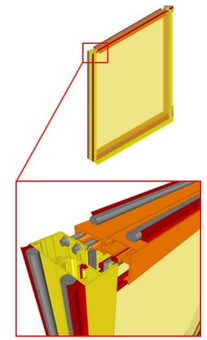
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Window Wall

Uniformat **B2020.30** Omniclass **21-02 20 20 30** Uniclass **Ss 25 30 95 96**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *81 B2020.30-LOD-200 Exterior Window Wall* From Ikerd.com	 *82 B2020.30-LOD-300 Exterior Window Wall* From Ikerd.com	 *83 B2020.30-LOD-350 Exterior Window Wall* From Ikerd.com	 *84 B2020.30-LOD-400 Exterior Window Wall* From Ikerd.com
Description **Associated Masterformat Sections:** 08 43 00	See B20		Generic wall objects representing major types of proposed window wall assemblies. Overall window wall assembly depth represented by a single model object. Layouts and locations still flexible.	Specified location and orientation of face of glass. Nominal face dimensions and thickness of glazing. Spacing, location, size and orientation of mullions. Operable components defined (windows, louvers and doors) and included in model.	Mullion shapes and geometry defined. Actual anchorage layouts and types defined and modeled. Actual panel dimensions (including seating).	Complete mullion extrusion profiles. Interface details between wall systems (within) and wall and support systems including sealants, end dams, flashings and membranes.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Wall Interior Skin

Uniformat **B2010.30** Omniclass **21-02 20 10 30** Uniclass **Ss 25 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *81 B2020.30-LOD-200 Exterior Window Wall* From Ikerd.com	See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 09 20 00	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements.	Exterior wall interior skin modeled as a separate element. All openings modeled to rough opening dimensions.	Element modeling to include: 1. Studs and tracks 2. Individual masonry units 3. Reinforcing 4. Wall board 5. Insulation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Windows

Uniformat **B2020** Omniclass **21-02 20 20** Uniclass **Ss 25 30 95 26**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *81 B2020.30-LOD-200 Exterior Window Wall* From Ikerd.com	See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 16 / 08 50 00	See B20		Windows approximate in terms of location, size, count and type. Units are modeled as a simple, monolithic component; or represented with simple frame and glazing. Nominal unit size is provided.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Operating Windows

Uniformat **B2020.10** Omniclass **21-02 20 20 10** Uniclass **Ss 25 30 95 26**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *81 B2020.30-LOD-200 Exterior Window Wall* From Ikerd.com	See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 50 00 / 08 51 66 / 08 52 66 / 08 53 66 / 08 54 66 08 51 69 / 08 52 69 / 08 53 69 / 08 54 69	See B20		See B2020	Units are modeled based on specified location and nominal size. Outer geometry (profile) of window frame elements and glazing modeled in correct location. Operation is indicated.	Attachment method of window to structure. Embed elements. Backer rod and sealant.	Detailed frame extrusion profiles. Glazing sub-components (gaskets) Attachment components. End dam. Fasteners.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

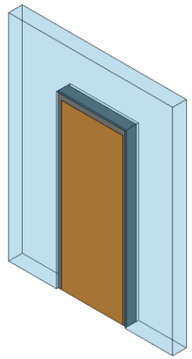
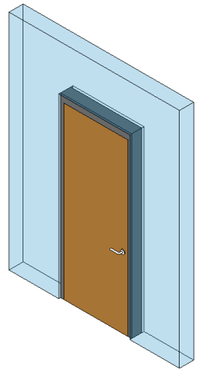
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Doors and Grilles

Uniformat **B2050** Omniclass **21-02 20 50** Uniclass **Ss 25 30 20**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com		See Element Sections For Additional Information	
Description **Associated Masterformat Sections:** 01 83 16	Simple representation of a door unit. Size, count, and location are approximate.		Units are modeled as a simple, monolithic component; or represented with simple frame and panel. Nominal unit size is provided.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

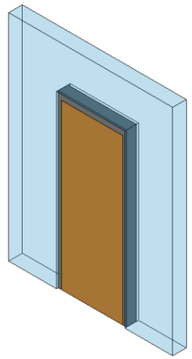
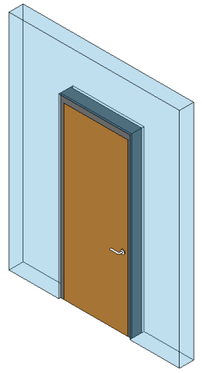
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Entrance Doors

Uniformat **B2050.10** Omniclass **21-02 20 50 10** Uniclass **Ss 25 30 20 25**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com		See Element Sections For Additional Information	
Description **Associated Masterformat Sections:** 08 32 00 / 08 42 00 / 08 42 26 / 08 42 29 / 08 42 33 / 08 42 36 / 08 43 29	See B20		See B2050	Entrance door assemblies modeled by type to include the following: 1. Specific door panels and frames (if applicable). 2. Operation is specified. Spatial requirements for operation may be modeled if required by BXP.	Major framing elements are modeled at jambs and head. Thresholds. Operation or mechanism enclosures are modeled. All connections and interfaces modeled including brackets and supports.	Complete mullion extrusion profiles Actual panel size dimensions.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

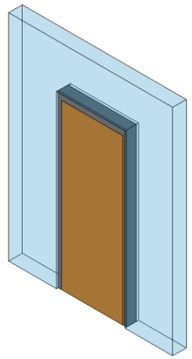
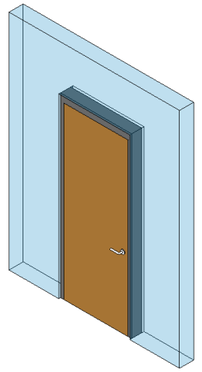
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Exterior Utility Doors

Uniformat **B2050.20** Omniclass **21-02 20 50 20** Uniclass **Ss 25 30 20 25**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com		See Element Sections For Additional Information	
Description **Associated Masterformat Sections:** 08 10 00	See B20		See B2050	See B2050.10 Door hardware is modeled as specified.	See B2050.10	All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

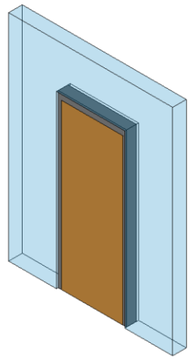
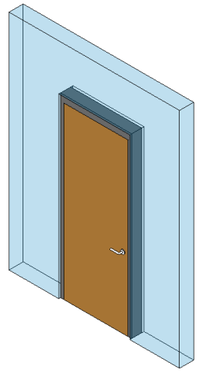
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Oversize Doors

Uniformat **B2050.30** Omniclass **21-02 20 50 30** Uniclass **Ss 25 30 20 25**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com			
Description **Associated Masterformat Sections:** : 08 33 00 / 08 36 00 / 08 36 13 / 08 36 16 / 08 36 19 / 08 36 23 / 08 34 16	See B20		See B2050	Oversize door assemblies modeled by type to include the following: 1. Door panels with nominal dimensions. 2. Frames with nominal dimensions. 3. Clearance zones are modeled or accommodated by model checking software for operation of overhead doors (other than coiling doors). 4. Enclosures and motor housings are modeled with overall nominal dimensions.	Major framing elements in wall are modeled at jambs and head. Attachment elements are modeled	All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

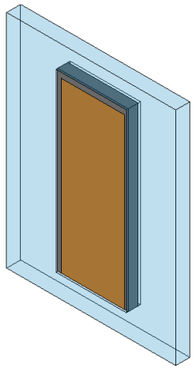
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Exterior Grilles

Uniformat **B2050.60** Omniclass **21-02 20 50 60** Uniclass **Ss 25 50 35**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com	See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 33 00 / 08 35 16	See B20		See B2050	Grille assemblies modeled by type to include the following: 1. Nominal size of unit. 2. Operation is specified.	Major framing elements are modeled at jambs and head.	All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

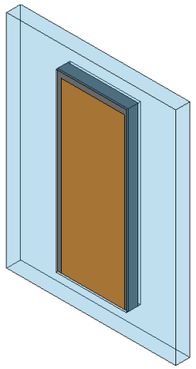
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Louvers and Vents

Uniformat **B2070** Omniclass **21-02 20 70** Uniclass **Ss 25 50 45 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 90 00	See B20		Generic model element that is indicative of approximate area and location of intended louver/vent.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

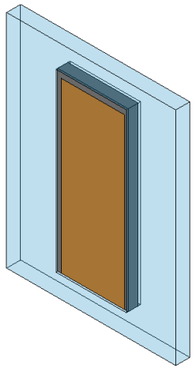
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Louvers

Uniformat **B2070.10** Omniclass **21-02 20 70 10** Uniclass **Ss 25 50 45 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 16 / 08 91 00	See B20		See B2070	Louver assembly modeled by type, indicative of area and location of intended louver/vent. Accurate frame and blade boundary areas. Opening for louver is cut from host wall.	Major framing elements are modeled at connection points. Connection points are modeled.	All connections and interfaces modeled including brackets, supports, and sealants.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

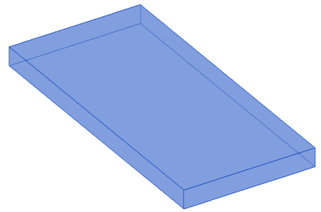
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Ceilings

Uniformat **B3080.10** Omniclass **21-02 30 80 10** Uniclass **Ss 30 25 10 26**

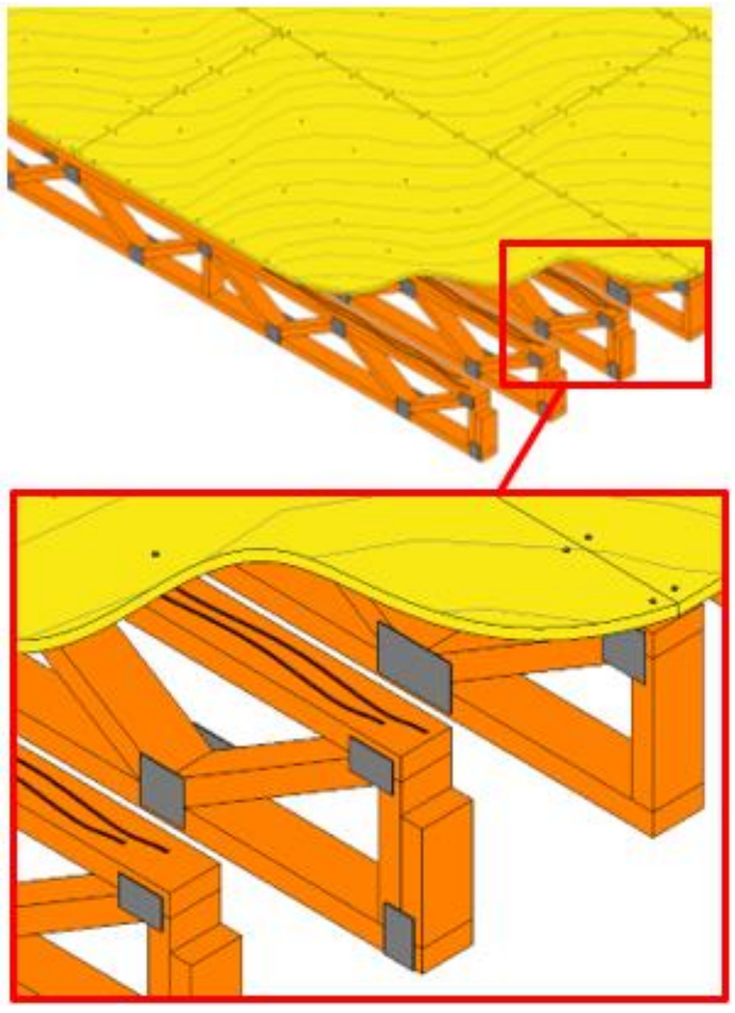
LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 07 42 00 / 07 44 00 / 09 20 00 / 09 54 00 / 09 56 00	See B30		See B3080	Overall assembly modeled to specific system thickness including structural backing. Location of expansion or control joints indicated, but not modeled.	Face material modeled to specific thickness. Structural backing members including bracing/lateral framing/kickers are modeled. Expansion or control joints are modeled to indicate specific width.	Individual elements of face material are modeled. Structural backing members and all support members (kickers) are modeled including all connections. Expansion or control joints are modeled.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



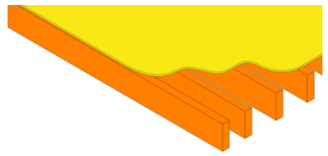
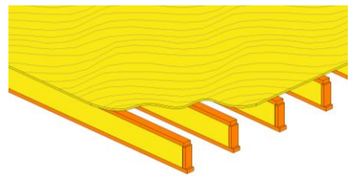
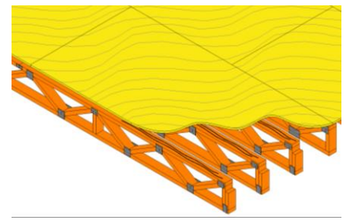
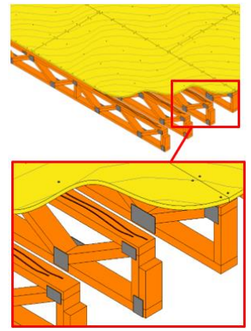
WOOD & TIMBER CONSTRUCTION

LoD 500

Page 108

Floor Structural Frame (Wood Floor Trusses)

Uniformat **B1010.10.80** Omniclass **21-02 10 10 10 80** Uniclass **Pr 20 85 90 81**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *41 B1010.10-LOD-200 Floor Structural Frame (Wood Floor Trusses)* From lkerd.com	 *42 B1010.10-LOD-300 Floor Structural Frame (Wood Floor Trusses)* From lkerd.com	 *43 B1010.10-LOD-350 Floor Structural Frame (Wood Floor Trusses)* From lkerd.com	 *44 B1010.10-LOD-400 Floor Structural Frame (Wood Floor Trusses)* From lkerd.com
Description **Associated Masterformat Sections:** 06 11 00 / 06 13 26 / 06 17 53	See B10		Element modeling to include: 1. Top chord or bottom chord bearing 2. Truss orientation 3. Approximate depth 4. Approximate width 5. Truss orientation 6. Approximate centerline location of individual trusses	Element modeling to include: 1. Truss size, depth, and material with sloping geometry 2. Spacing and end elevations 3. Support locations	Element modeling to include: 1. Actual final truss profile with accurate panel points 2. Bridging and lateral braces 3. Fire protection coating 4. Any miscellaneous framing pertaining the truss 5. Erection details for installation 6. Chord and web member section profiles are accurately defined 7. Truss layout in coordination with deck fasteners would be confirmed 8. Hold down locations for large bolts.	Element modeling to include: 1. Fasteners 2. Sealant 3. Truss plates and connection material 4. Nails and fasteners 5. Truss plates. 6. Deck patterns and joints
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

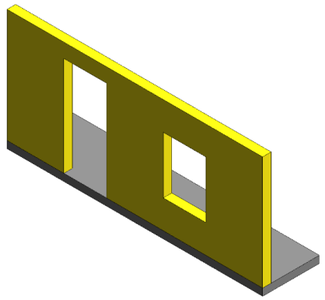
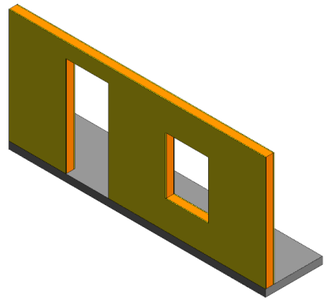
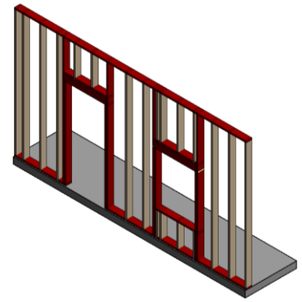
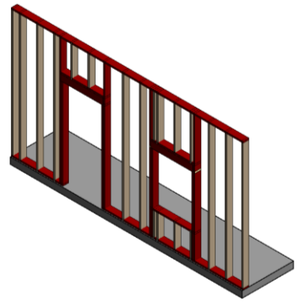
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

Interior Wall (Wood)

Uniformat **C1010.10.30** Omniclass **21-03 10 10 10 30** Uniclass **Ss 25 10 32 90**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *93 C1010.06-LOD-200 Interior Wall (Wood* From Ikerd.com	 *94 C1010.06-LOD-300 Interior Wall (Wood* From Ikerd.com	 *95 C1010.06-LOD-350 Interior Wall (Wood* From Ikerd.com	 *96 C1010.06-LOD-400 Interior Wall (Wood* From Ikerd.com
Description **Associated Masterformat Sections:** 10 22 00 / 01 84 13	See C10		See C1010	See C1010	Wood framing is developed with sufficient elements to support detailed interface coordination with other systems such as MEP. All penetrations are modeled at actual rough-opening dimensions. Image notes: 1. Elements in red are critical wall support elements that cannot be easily cut for coordination of MEP opening through the walls. 2. Infill wood framing modeling may be omitted at this LOD if stated in the BXP. 3. Cladding and sheathing are not shown for clarity in this image.	Wood framing is developed with sufficient elements that support the fabrication of the wood framing system. Openings and penetrations through studs are modeled. Image notes: 1. Connection content is development in the wall elements. This includes but is not limited to fasteners, anchor rods, and other related hardware. 2. Cladding and sheathing are not shown for clarity in this image
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

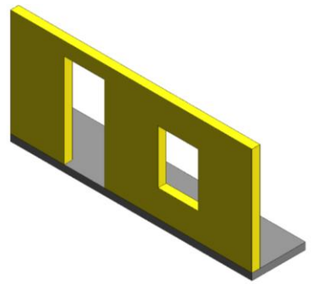
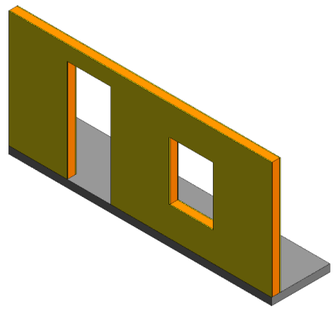
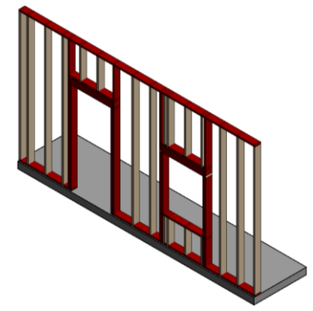
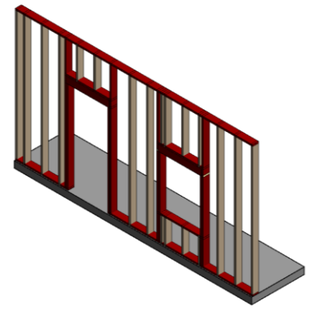
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exterior Wall Construction (Wood)

Uniformat **B2010.20.10** Omniclass **21-02 20 10 20 10** Uniclass **Ss 25 11 90**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *67 B2010.06-LOD-200 Exterior Wall (Wood)* From Ikerd.com	 *68 B2010.06-LOD-300 Exterior Wall (Wood)* From Ikerd.com	 *69 B2010.06-LOD-350 Exterior Wall (Wood)* From Ikerd.com	 *70 B2010.06-LOD-400 Exterior Wall (Wood)* From Ikerd.com
Description **Associated Masterformat Sections:** 01 83 16	N/A		Generic wall objects separated by type of material (e.g. brick wall vs. terracotta). Approximate thickness of layer represented by a single assembly. Layouts and locations still flexible.	Specific wall modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements. Shear panels	Wood framing is developed with sufficient elements to support detailed interface coordination with other systems such as MEP. All penetrations are modeled at actual rough-opening dimensions. Openings modeled with support framing around openings Image notes: 1. Elements in red are critical wall support elements that cannot be easily cut for coordination of MEP opening through the walls. 2. Infill wood framing modeling may be omitted at this LOD if stated in the BXP. 3. Cladding and sheathing are not shown for clarity in this image.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

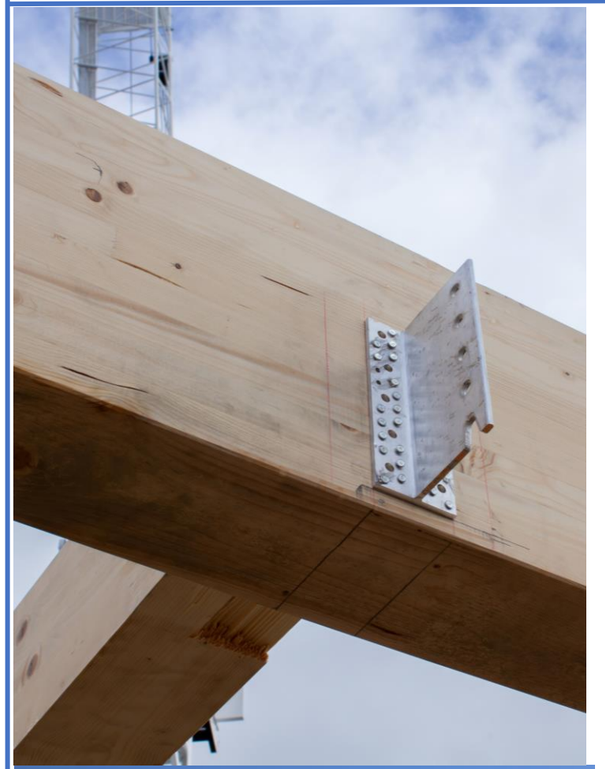
VDCFORUM
VDCForum.org

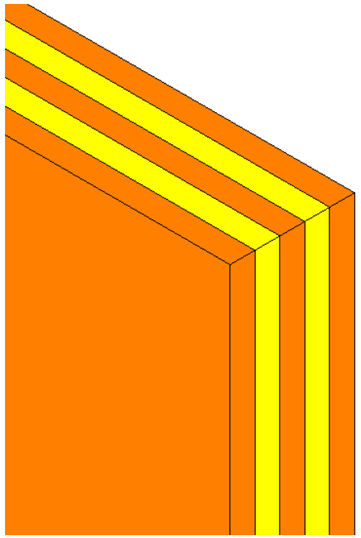
Notes:

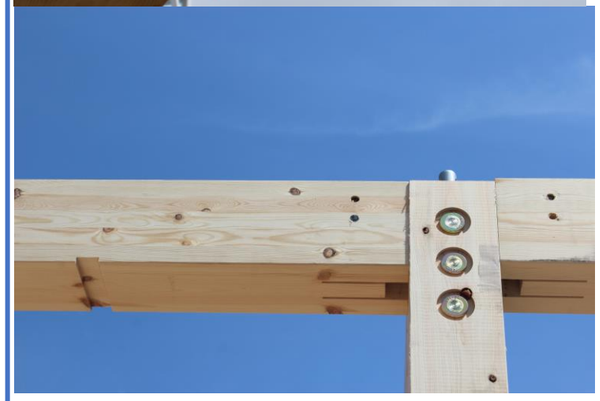
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

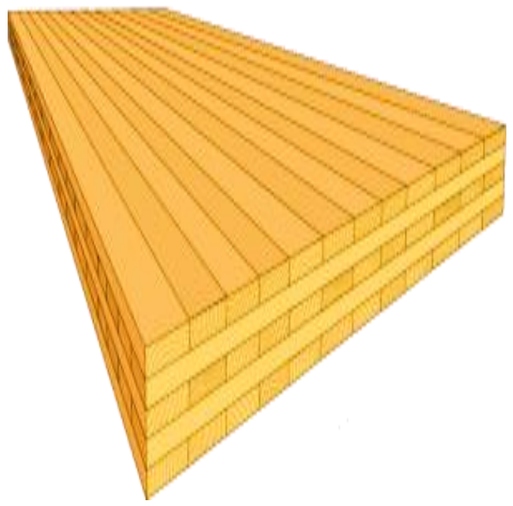
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*







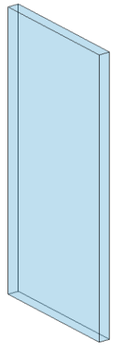
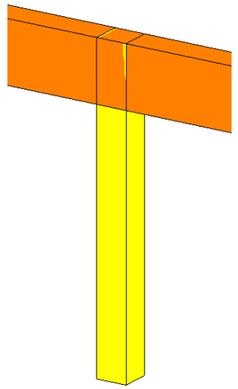
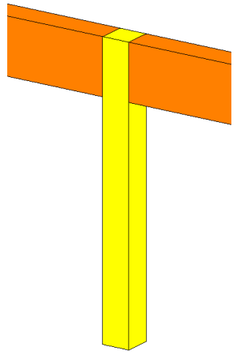
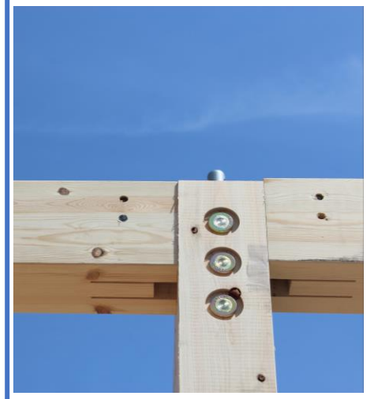


WOOD MASS TIMBER

LoD 500

Wood Mass Timber Framing

Uniformat **B2010.20.10** Omniclass **21-02 20 10 20 10** Uniclass **Ss 25 11 90**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description	N/A		See basic framing members.	Wood specifications Size	Connection locations.	Plys Connections
Associated Masterformat Sections: 01 83 16						
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

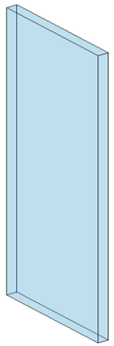
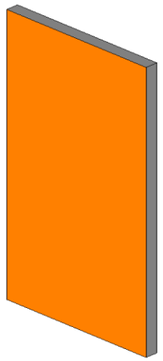
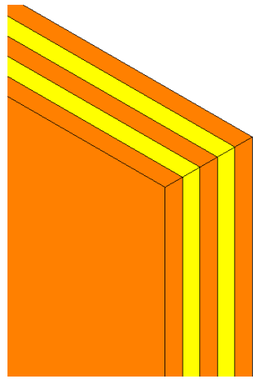
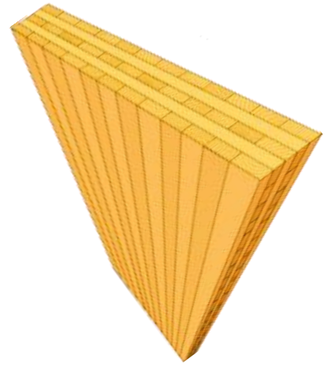
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Wood Mass Timber Walls

Uniformat **B2010.20.10** Omniclass **21-02 20 10 20 10** Uniclass **Ss 25 11 90**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description	N/A			Panel geometry.	CLT Layers Embed locations	CLT Fabrication detail
Associated Masterformat Sections: 01 83 16						
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

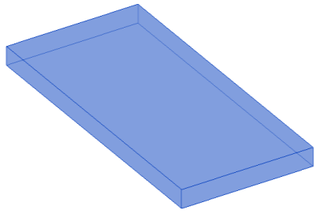
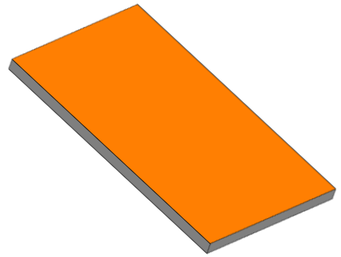
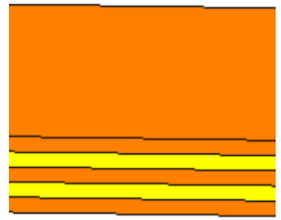
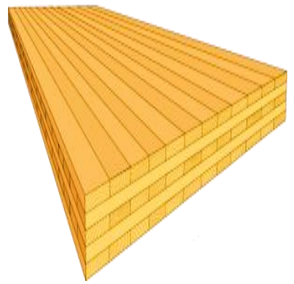
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Wood Mass Timber Floors

Uniformat **B2010.20.10** Omniclass **21-02 20 10 20 10** Uniclass **Ss 25 11 90**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 83 16	N/A		See basic / approximate floor systems.	Panel geometry.	CLT Layers Embed locations	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

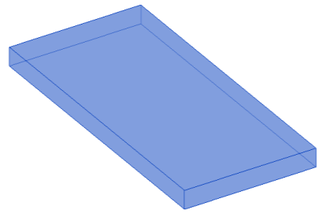
ROOFING

LoD 500

Page 116

Exterior Horizontal Enclosures

Uniformat **B30** Omniclass **21-02 30** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 16	Solid mass model representing overall building volume; or, schematic wall elements that are not distinguishable by type or material. Assembly depth/thickness and locations still flexible.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

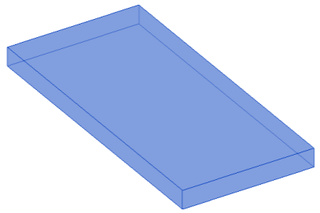
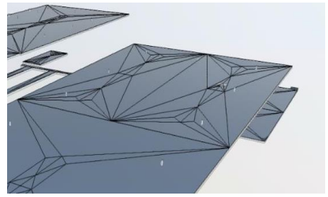
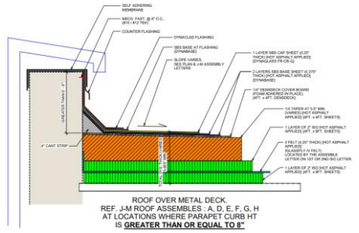
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Roofing

Uniformat **B3010** Omniclass **21-02 30 10** Uniclass **Ss 30 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				Not Commonly Modeled to Fabrication Level For Constructed Roof Systems.
Description **Associated Masterformat Sections:** 01 83 19	See B30		Generic element representing roof exterior skin	Specific element representing roof insulation and exterior skin modeled to actual dimensions. Surface slopes (e.g. tapered insulation) are modeled to actual dimensions. Penetrations are modeled to nominal dimensions for major wall openings such as skylights, and large mechanical elements.	All penetrations are modeled at actual rough-opening dimensions. Flashing	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

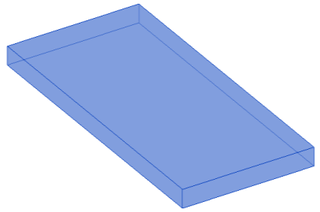
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Roof Accessories

Uniformat **B3020.10** Omniclass **21-02 30 20 10** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 05 51 33 / 07 72 00 / 07 72 13 / 07 72 23 / 07 72 26 07 72 46 / 07 72 53	See B30		See Fundamental LOD Definitions	Ladders: Specific assemblies indicating length and width. Required access/clearance space is modeled or accommodated by model checking software. Walkways: Specific assemblies indicating length, width, and rail/guard height. Vents: Specific assemblies indicating roof opening size. Roof opening element is included. Required service access space is modeled or accommodated by model checking software.	Ladders: Specific assemblies indicating length, width, and attachment/anchoring members. Walkways: Specific assemblies indicating length, width, rail/guard height, and support/attachment/anchoring members. Vents: Specific assemblies indicating roof opening size and attachment/anchoring members if applicable.	See Fundamental LOD Definitions
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

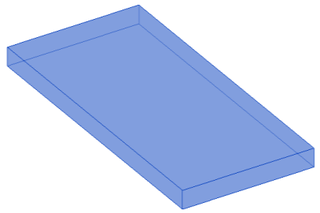
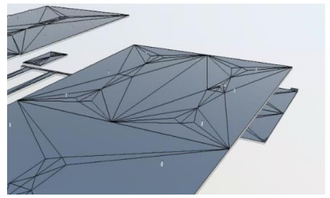
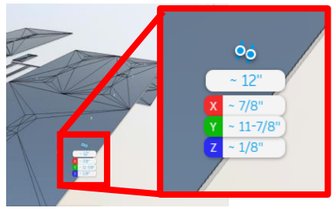
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Traffic Bearing Horizontal Enclosures

Uniformat **B3040** Omniclass **21-02 30 40** Uniclass **Ss 30 12 20**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				Not Commonly Modeled to Fabrication Level For Constructed Roof Systems.
Description **Associated Masterformat Sections:** 01 83 16	See B30		See B3010			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

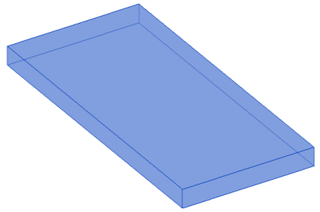
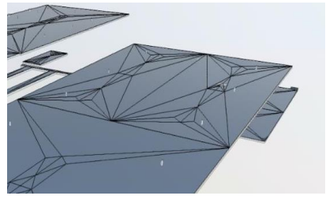
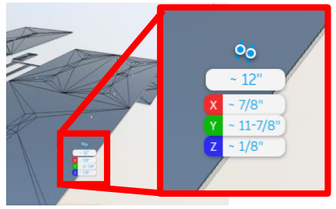
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Horizontal Waterproofing Membrane

Uniformat **B3040.30** Omniclass **21-02 30 40 30** Uniclass **Ss 32 80 79**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				Not Commonly Modeled to Fabrication Level For Constructed Roof Systems.
Description **Associated Masterformat Sections:** 07 10 00	See B30		See B3040	Membrane assembly modeled by type to specified thickness. Major openings such as shafts and hatches are modeled	Individual material layers of membrane assembly are modeled separately. All openings and penetrations are modeled. Expansion joints are modeled indicating specific width	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

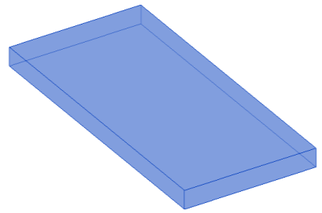
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Wear Surface

Uniformat **B3040.50** Omniclass **21-02 30 40 50** Uniclass **Ss 30 14**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 07 76 00 / 32 13 00 / 32 14 00	See B30		See B3040	Wear surface system modeled by type to specified thickness/depth. Major openings such as shafts and hatches are modeled.	Individual system elements are modeled separately. Pedestals are modeled and located properly, if applicable. Expansion joints are modeled indicating specific width.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

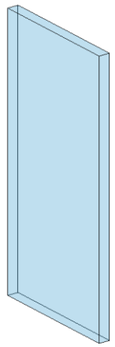
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Construction

Uniformat **C10** Omniclass **21-03 10** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 83 13	A schematic model element or symbol that is not distinguishable by type or material. Types, layouts, and locations are still flexible.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

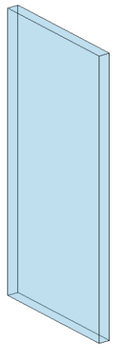
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

ASCEND Building Knowledge Foundation

Interior Partitions

Uniformat C1010 Omniclass 21-03 10 10 Uniclass Ss 25 10 30

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 10 22 00 / 01 84 13	See C10		Generic wall objects separated by type of material (e.g. gypsum board vs. masonry). Approximate overall wall thickness represented by a single assembly. Layouts, locations, heights, and elevation profiles are still flexible.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

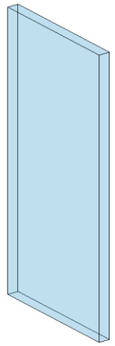
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Fixed Partitions

Uniformat C1010.10 Omniclass 21-03 10 10 10 Uniclass Ss 25 10 30

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 03 30 00 / 03 40 00 / 04 20 00 / 05 41 00 / 06 11 00 / 09 20 00 / 10 22 13	See C10		See C1010	Composite model assembly by type with overall thickness that accounts for framing and finish specified for the wall system. (Refer to LOD350 and LOD400 for individually modeled elements) Wall elements are modeled to specific layouts, locations, heights, and elevation profiles. Penetrations are modeled to nominal dimensions for major wall openings such as windows, doors, and large mechanical elements.	Structure and finish layers of partition assembly modeled as separate elements. All penetrations are modeled at actual rough-opening dimensions. Major framing elements such as king studs, kickers, diagonal bracing, and headers are modeled.	Element modeling to include: 1. Studs and tracks 2. Bracing 3. Insulation 4. Sheathing or wall boards 5. Openings/penetrations
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

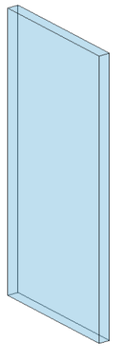
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Glazed Partitions

Uniformat C1010.20 Omniclass 21-03 10 10 20 Uniclass Ss 25 10 30

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 43 00	See C10		See C1010	Specified location and orientation of face of glass. Nominal face dimensions and thickness of glazing. Structural support systems of wall to be modeled. Spacing, location, size and orientation of mullions. Operable components defined (doors) and included in model	Mullion shapes and geometry defined. Actual anchorage layouts and types defined. Actual panel dimensions (including seating).	Complete mullion extrusion profiles. Interface details between wall systems (within) and wall and support systems.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

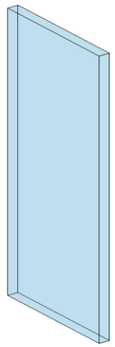
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Operable Partitions

Uniformat C1010.50 Omniclass 21-03 10 10 50 Uniclass Ss 25 12 70

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 01 84 13 / 01 84 13 / 10 22 33 / 10 22 36 / 10 22 39 / 10 22 43	See C10		See C1010	Operable partition system modeled to include spatial requirements for open/storage position and closed position. Spatial requirements for structure (overhead or below) to be modeled.	Major support elements (overhead or below) Mechanical connections	All assembly components including tracks, panels, hardware and supports.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

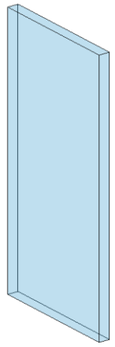
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Windows

Uniformat C1020 Omniclass 21-03 10 20 Uniclass Ss 25 30 95 41

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 50 00 / 01 84 13	See C10		Windows approximate in terms of location, size, count and type. Units are modeled as a simple, monolithic component; or represented with simplified frame and glazing. Nominal unit size is provided.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

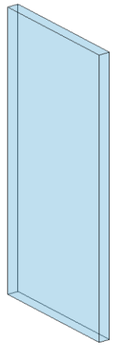
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Operating Windows

Uniformat C1020.10 Omniclass 21-03 10 20 10 Uniclass Ss 25 30 95 41

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		See Element Sections For Additional Information		
Description **Associated Masterformat Sections:** 08 50 00	See C10		See C1020	Units are modeled based on specified location and nominal size. Outer geometry of window frame elements and glazing modeled. Operation is indicated. Non-graphic information associated with model element: 1. Aesthetic characteristics (finishes, glass types) 2. Performance characteristics (i.e. U-value, wind loading, blast resistance, structural, air, thermal, water, sound) 3. Functionality of the window (fixed, casement, double/single hung, awning/project out, pivot, sliding)	Attachment method of window to structure Embed geometry	Frame profiles Glazing sub-components (gaskets) Attachment components
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

DOORS, GATES, ETC.

LoD 500

Page 130

Interior Doors

Uniformat C1030 Omniclass 21-03 10 30 Uniclass Ss 25 30 20 25

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 08 10 00 / 01 84 13	See C10		Units are modeled as a simple, monolithic component; or represented with simple frame and panel. Nominal unit size is provided.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Swinging Doors

Uniformat C1030.10 Omniclass 21-03 10 30 10 Uniclass Ss 25 30 20 25

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 08 10 00	See C10		See C1030	Door assemblies modeled by type to include the following: 1. Specific door panels and frames (if applicable) 2. Operation is specified	Major framing elements are modeled at jambs and head in containing wall. Operation or mechanism enclosures are modeled, if applicable.	Actual frame/mullion extrusions. Actual panel size dimensions. All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Coiling Doors

Uniformat C1030.40 Omniclass 21-03 10 30 40 Uniclass Ss 25 30 20 74

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 08 33 00 / 08 33 13	See C10		See C1030	Coiling door assemblies modeled by type to include the following: 1. Door panels with nominal dimensions. 2. Frames with nominal dimensions. 3. Hardware set functionality and types included in non-graphic information. 4. Clearance zones for operation of overhead doors are modeled or accommodated by model checking software. 5. Enclosures and motor housings are modeled with overall nominal dimensions.	Major framing elements in wall are modeled at jambs and head. Other major structural support elements are modeled.	All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Grilles and Gates

Uniformat C1040 Omniclass 21-03 10 40 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See C10		See C1030			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Grilles

Uniformat C1040.10 Omniclass 21-03 10 40 10 Uniclass Ss 25 50 35

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 08 11 74 / 08 33 00 / 08 35 16	See C10		See C1030	Grille assemblies modeled by type to include the following: 1. Nominal size of unit. 2. Required openness provided as non-graphic information. 3. Operation is specified graphically.	Major framing elements are modeled at jambs and head.	All connections and interfaces modeled including brackets, supports, sealants, and thresholds.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Raised Floor Construction

Uniformat C1060 Omniclass 21-03 10 60 Uniclass Ss 30 20 70

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 84 13 / 01 84 13 / 01 84 13 / 01 84 13 / 01 84 13 01 84 13 / 01 84 13 / 01 84 13 / 01 84 13	See C10		Generic assembly that contains spatial allowance for support system and flooring material.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Access Flooring

Uniformat C1060.10 Omniclass 21-03 10 60 10 Uniclass Ss 30 20 70 70

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 09 69 00	See C10		See C1060	Overall flooring assembly modeled by type to specified thickness/depth. Major openings such as shafts are modeled.	Individual layers of assembly are modeled separately. All openings and penetrations are modeled. Expansion joints are modeled indicating specific width. Pedestals are modeled and located properly, if applicable.	All assembly components are modeled including frame, floor tiles, pedestals, and cross bracing.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Suspended Ceiling Construction

Uniformat C1070 Omniclass 21-03 10 70 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 84 13 / 01 84 13	Ceiling construction is represented in other composite objects such as floors or rooms; or, schematic model elements that are not distinguishable by type or material. Assembly depth/thickness and locations still flexible.		Generic assemblies indicative of overall scope and approximate thickness/system depth of suspended ceiling.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Acoustical Suspended Ceilings

Uniformat C1070.10 Omniclass 21-03 10 70 10 Uniclass Ss 30 25 22 1

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 09 51 00 / 09 81 00	See C1070		See C1070	Overall assembly modeled to specific system thickness including structural backing. Location of expansion or control joints indicated, but not modeled. Ceiling grid is shown as linework.	Ceiling suspension grid is modeled. Structural backing members including bracing/lateral framing/kickers are modeled. Expansion or control joints are modeled to indicate specific width.	All assembly components are modeled including tees, hangers, support structure, and tiles.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Suspended Plaster and Gypsum Board Ceilings

Uniformat C1070.20 Omniclass 21-03 10 70 20 Uniclass Ss 30 25 10 10

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 09 20 00 / 09 22 26 / 09 81 00	See C1070		See C1070	Overall assembly modeled to specific system thickness including framing. Bulkheads Major penetrations are modeled.	Major bracing elements such as kickers are modeled.	All assembly components including furring channels, hangers, lath, plaster coats, and gypsum boards.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Specialties

Uniformat C1090 Omniclass 21-03 10 90 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See C10		Generic model elements with approximate nominal size. Placement and quantity remains flexible.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Railings and Handrails

Uniformat C1090.10 Omniclass 21-03 10 90 10 Uniclass Ss 25 15 60 35

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 84 00 / 01 84 00 / 01 84 00 / 01 84 00 / 05 52 00 05 73 00 / 06 43 16 / 06 63 00 / 06 81 00	See C10		Generic model element representing approximate overall height and location of railing/handrail.	Railing/handrail systems modeled by type to include: 1. All horizontal rails 2. All vertical posts/balusters	Mounting/attachment components	All assembly components including fasteners and supports.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Louvers

Uniformat C1090.15 Omniclass 21-03 10 90 15 Uniclass Ss 25 50 45 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 08 91 00 / 01 84 00	See C10		Generic model element that is indicative of approximate area and location of louver.	Louver assembly modeled by type, indicative of area and location of intended louver/vent. Accurate frame and blade boundary areas. Opening for louver is cut from host wall.	Rough opening is modeled in containing wall. Major framing elements are modeled at jambs and head. Connection points are modeled.	All connections and interfaces modeled including brackets, supports, and sealants.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Interior Finishes

Uniformat C20 Omniclass 21-03 20 Uniclass Ss 25 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 84 19	Non-graphic information attached to model elements providing assumptions that are not distinguishable by type or material Types, layouts and locations are still flexible. See Part II					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Wall Finishes

Uniformat C2010 Omniclass 21-03 20 10 Uniclass Ss 25 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 09 70 00 / 01 84 19 / 01 84 19 / 01 84 19 / 01 84 19 / 01 84	Non-graphic information attached to model elements providing assumptions that are not distinguishable by type or material Types, layouts and locations are still flexible. See Part II See C20		Generic materials other than sheet goods and coatings by type (e.g. tile or paneling), approximate thickness represented by a single assembly.. Layouts, patterns and locations are still flexible	Single model element by type with overall thickness that accounts for finish materials based on specific types other than sheet goods and coatings (e.g. Tile type CT-1). Sheet goods and coatings may be specified in Part II related to interior partitions.	Individual materials are modeled as separate elements. Additional non-graphic information such as manufacturer and model number may be included.	Individual material pattern layouts,expansion/control joints, and finish edges to be modeled as separate elements.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Flooring

Uniformat C2030 Omniclass 21-03 20 30 Uniclass Ss 30 42

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 09 60 00 / 01 84 19	See C20		Generic materials by type (e.g. tile or coatings), approximate thickness represented by a single assembly. Layouts, patterns and locations are still flexible	Single model element by type with overall thickness that accounts for materials based on specific types (e.g. Tile type CT-1).	Individual materials are modeled as separate elements Additional non-graphic information such as manufacturer and model number may be included.	Individual material pattern layouts, expansion/control joints, and finish edges to be modeled as separate elements.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Conveying

Uniformat **D10** Omniclass **21-04 10** Uniclass **Ss 80 20**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 85 00 / 14 00 00	Schematic model elements that are not distinguishable by type or material. Component sizes and locations still flexible.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Vertical Conveying Systems

Uniformat **D1010** Omniclass **21-04 10 10** Uniclass **Ss 80 50**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See D10		Generic representation of the system envelope, including critical path of travel zones.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Escalators

Uniformat **D1010.30** Omniclass **21-04 10 10 30** Uniclass **Ss 80 20 62 28**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 85 00 / 14 31 00	See D10		See D1010	Specific system elements modeled by type, including all path of travel zones. Including: 1. Truss Shape 2. Risers 3. Balustrade Type		
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Material Handling

Uniformat **D1050** Omniclass **21-04 10 50** Uniclass **Ss 80 20 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 85 00	See D10		Generic representation of the material handling system envelope, including critical path of travel zones.	See D10	See D1050	Specific system elements modeled by type, including all path of travel/boom swing zones. Lay-down/pick-up zones are modeled.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Cranes

Uniformat **D1050.10** Omniclass **21-04 10 50 10** Uniclass **Ss 80 30 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 41 22 13	See D10		See D1050	Specific system elements modeled by type, including all path of travel/boom swing zones. Lay-down/pick-up zones are modeled. Major structural support elements modeled. Crane Swing Radius	Sizing adjusted to the actual manufacturer specifications. Guiding tracks/rails Service/access zones Connections to mechanical or electrical services	All connections, supports, framing, and other supplementary components.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Baggage Handling Equipment

Uniformat **D1050.50** Omniclass **21-04 10 50 50** Uniclass **Ss 80 20 06**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 34 77 16	See D10		See D1050	See Fundamental LOD Definitions	See Fundamental LOD Definitions	See Fundamental LOD Definitions
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

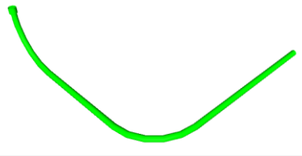
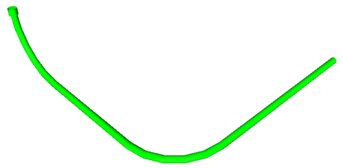
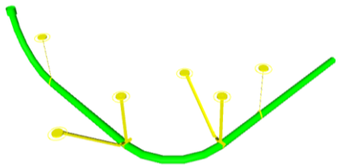
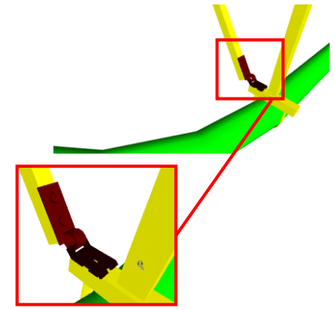
PNEUMATIC TUBING

LoD 500

Page 153

Pneumatic Tube Systems

Uniformat **D1050.70** Omniclass **21-04 10 50 70** Uniclass **Ss 80 20 65**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *98 D1050.70-LOD-200 Pneumatic Tube Systems* From Ikerd.com	 *99 D1050.70-LOD-300 Pneumatic Tube Systems* From Ikerd.com	 *100 D1050.70-LOD-350 Pneumatic Tube Systems* From Ikerd.com	 *101 D1050.70-LOD-400 Pneumatic Tube Systems* From Ikerd.com
Description **Associated Masterformat Sections:** 14 92 00	Diagrammatic elements or quantitative call outs; Conceptual and/or schematic flow diagrams;		Generic elements; schematic layout with approximate size, shape, and location of equipment and tubing;	Modeled as design-specified elements; specified size, shape, spacing, and location of equipment and tubing. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all equipment and tubing are modeled or accommodated by model checking software. Access/code clearance requirements modeled or accommodated by model checking software.	Modeled as actual construction elements. Actual size, shape, spacing, and location/connections of equipment and tubing. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all equipment and tubing are or accommodated by model checking software. Floor and wall penetrations modeled. actual access/code clearance requirements modeled or accommodated by model checking software.	Supplementary components added to the model required for fabrication and field installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

PLUMBING

LoD 500

Page 155

Plumbing

Uniformat **D20** Omniclass **21-04 20** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 16 / 22 00 00	Diagrammatic or schematic model elements. Conceptual and/or schematic layout/flow diagram. Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Domestic Water Distribution

Uniformat D2010 Omniclass 21-04 20 10 Uniclass Ss 55 70 38

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 16 / 22 11 00	See D20		Schematic layout of generic model elements with approximate size, shape, and location of elements. Shaft requirements modeled.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

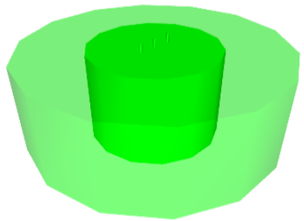
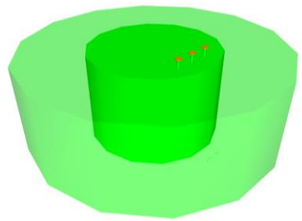
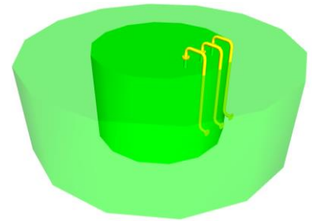
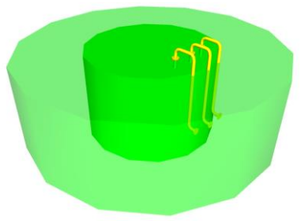
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility Potable-Water Storage Tanks

Uniformat **D2010.10** Omniclass **21-04 20 10 10** Uniclass **Ss 55 15 65**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *102 D2010.10-LOD-200 Facility Potable-Water Storage Tanks* From Ikerd.com	 *102 D2010.10-LOD-300 Facility Potable-Water Storage Tanks* From Ikerd.com	 *102 D2010.10-LOD-350 Facility Potable-Water Storage Tanks* From Ikerd.com	 *102 D2010.10-LOD-400 Facility Potable-Water Storage Tanks* From Ikerd.com
Description **Associated Masterformat Sections:** 22 12 00	See D20		Schematic layout with approximate size, shape, and location of tank(s);	Modeled as design-specified size, shape, spacing, and location of tank(s). Access/code clearance requirements and approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of tanks(s) are modeled or accommodated by model checking software;	Modeled as actual construction elements size and shape, spacing, and location/connections of tank(s) Actual access/code clearance requirements and actual size and shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of tanks(s) are modeled or accommodated by model checking software.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

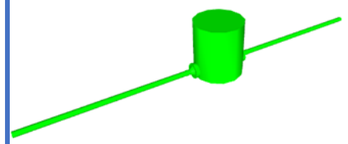
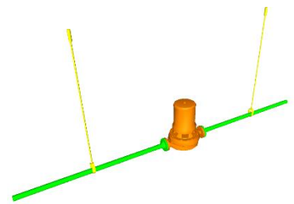
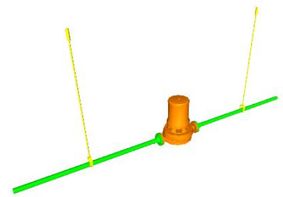
BIMFORUM GLOBAL
BIMForum.Global
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Domestic Water Equipment

Uniformat **D2010.20** Omniclass **21-04 20 10 20** Uniclass **Ss 55 70 38**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *107 D2010.20-LOD-200 Domestic Water Equipment* From Ikerd.com	 *107 D2010.20-LOD-300 Domestic Water Equipment* From Ikerd.com	 *107 D2010.20-LOD-350 Domestic Water Equipment* From Ikerd.com	 *107 D2010.20-LOD-400 Domestic Water Equipment* From Ikerd.com
Description **Associated Masterformat Sections:** 22 11 23 / 22 31 00 / 22 32 00 / 22 33 00 / 22 34 00 / 22 35 00	See D20		Schematic layout with approximate size, shape, and location of equipment; approximate access/code clearance requirements modeled;	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Access/code clearance requirements modeled.	Modeled as actual construction elements size, shape, spacing, and location/connections of equipment. Actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	See D2010.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global
VDCFORUM
VDCForum.org

Notes:

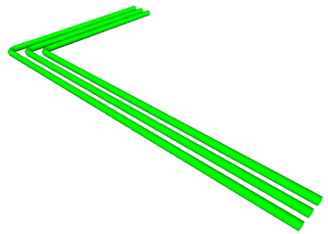
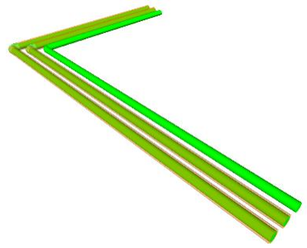
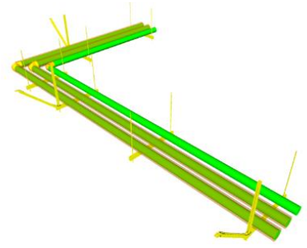
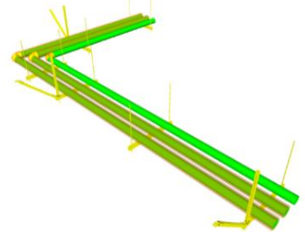
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Domestic Water Piping

Uniformat **D2010.40** Omniclass **21-04 20 10 40** Uniclass **Ss 55 70 38**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *111 D2010.40-LOD-200 Domestic Water Piping* From lkerd.com	 *111 D2010.40-LOD-300 Domestic Water Piping* From lkerd.com	 *111 D2010.40-LOD-350 Domestic Water Piping* From lkerd.com	 *111 D2010.40-LOD-400 Domestic Water Piping* From lkerd.com
Description **Associated Masterformat Sections:** 22 11 16 / 22 11 19	Diagrammatic or schematic model elements. Conceptual and/or schematic flow diagrams. Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.		Schematic layout with approximate size, shape, and location of mains and risers. Shaft requirements modeled.	Modeled as design-specified size, shape, spacing, and location of pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual construction elements. Actual size, shape, spacing, and location/connections of pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches; actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	See D2010.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

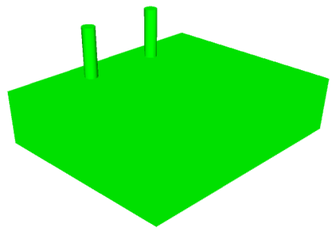
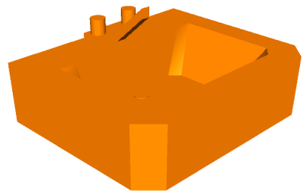
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Plumbing Fixtures

Uniformat **D2010.60** Omniclass **21-04 20 10 60** Uniclass **Ss 40 15 75**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *115 D2010.60-LOD-200 Plumbing Fixtures* From Ikerd.com	 *115 D2010.60-LOD-300 Plumbing Fixtures* From Ikerd.com	 *115 D2010.60-LOD-350 Plumbing Fixtures* From Ikerd.com	 *115 D2010.60-LOD-400 Plumbing Fixtures* From Ikerd.com
Description **Associated Masterformat Sections:** 22 00 00 (See caption on sheet for full list of Master Format References)	See D20		Schematic layout with approximate size, shape, and location of fixtures; carrier and wall width requirements modeled;	Modeled as design-specified size, shape, spacing, and location of fixtures. Approximate allowances for spacing and clearances required for all specified supports that are to be utilized in the layout of all fixtures. Access/code clearance requirements modeled.	Modeled as actual construction elements size, shape, spacing, and location/connections of fixtures/carriers. Actual size, shape, spacing, and clearances required for all supports that are utilized in the layout of all fixtures. Actual access/code clearance requirements modeled.	See D2010.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Drainage

Uniformat **D2020** Omniclass **21-04 20 20** Uniclass **Ss 50 30 4**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 16 / 22 13 00	See D20		See D2010			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

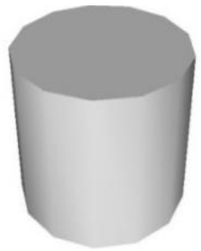
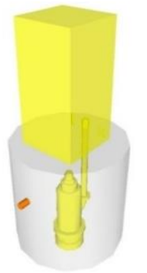
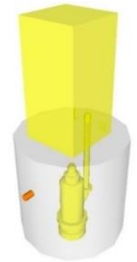
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Sewerage Equipment

Uniformat **D2020.10** Omniclass **21-04 20 20 10** Uniclass **Ss 50 30 04**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *119 D2020.10-LOD-200 Sanitary Sewerage Equipment* From Ikerd.com	 *119 D2020.10-LOD-300 Sanitary Sewerage Equipment* From Ikerd.com	 *119 D2020.10-LOD-350 Sanitary Sewerage Equipment* From Ikerd.com	 *119 D2020.10-LOD-400 Sanitary Sewerage Equipment* From Ikerd.com
Description **Associated Masterformat Sections:** 22 13 23 / 22 13 26 / 22 13 29 / 22 13 33 / 22 13 36 22 13 43 / 22 13 53	See D20		Schematic layout with approximate size, shape, and location of equipment;	Modeled as design specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment are modeled. Access/code clearance requirements modeled.	Actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

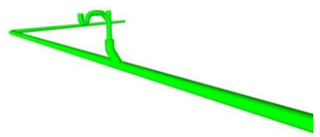
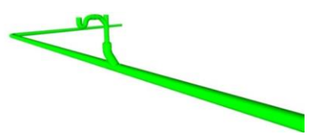
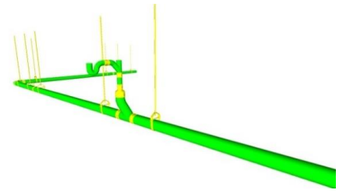
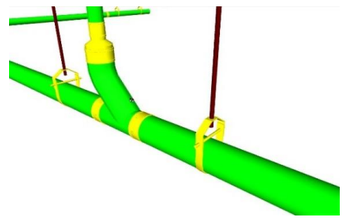
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Sewerage Piping

Uniformat **D2020.30** Omniclass **21-04 20 20 30** Uniclass **Ss 50 30 04**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *123 D2020.30-LOD-200 Sanitary Sewerage Piping* From Ikerd.com	 *123 D2020.30-LOD-300 Sanitary Sewerage Piping* From Ikerd.com	 *123 D2020.30-LOD-350 Sanitary Sewerage Piping* From Ikerd.com	 *123 D2020.30-LOD-400 Sanitary Sewerage Piping* From Ikerd.com
Description **Associated Masterformat Sections:** 22 13 13 / 22 13 16 / 22 13 19 / 22 05 73 / 22 05 76	See D20		Schematic layout with approximate size, shape, and location of mains and risers; shaft requirements modeled;	Modeled as design-specified size, shape, spacing, location, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled	Modeled as actual construction elements. Actual size, shape, spacing, location, connections, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches. Actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled	See D2020.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Building Support Plumbing Systems

Uniformat D2030 Omniclass 21-04 20 30 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 16 / 22 14 00	See D20		See D2010			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

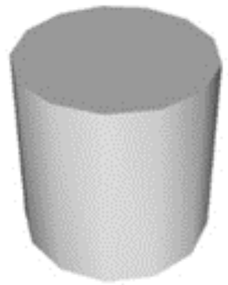
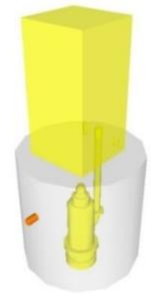
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Stormwater Drainage Equipment

Uniformat **D2030.10** Omniclass **21-04 20 30 10** Uniclass **Ss 50 35 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *127 D2030.10-LOD-200 Stormwater Drainage Equipment* From Ikerd.com	 *127 D2030.10-LOD-300 Stormwater Drainage Equipment* From Ikerd.com	 *127 D2030.10-LOD-350 Stormwater Drainage Equipment* From Ikerd.com	 *127 D2030.10-LOD-400 Stormwater Drainage Equipment* From Ikerd.com
Description **Associated Masterformat Sections:** 22 14 29 / 22 14 33 / 22 14 36 / 22 14 53	Diagrammatic or schematic model elements. Conceptual and/or schematic layout;		Schematic layout with approximate size, shape, and location of equipment. Approximate access/code clearance requirements modeled;	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Access/code clearance requirements modeled.	Modeled as actual construction elements size, shape, spacing, and location/connections of equipment. Actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

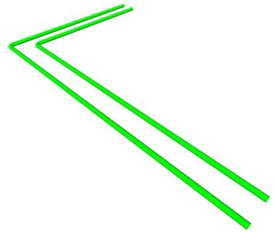
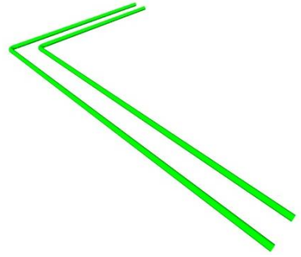
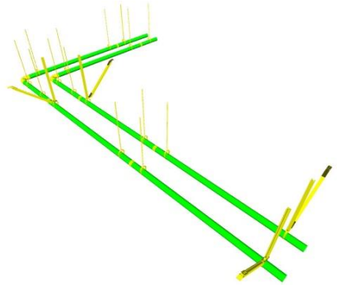
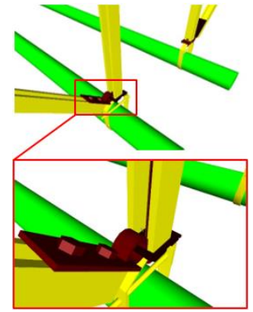
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Stormwater Drainage Piping

Uniformat **D2030.20** Omniclass **21-04 20 30 20** Uniclass **Ss 50 35 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *131 D2030.20-LOD-200 Stormwater Drainage Piping* From Ikerd.com	 *131 D2030.20-LOD-300 Stormwater Drainage Piping* From Ikerd.com	 *131 D2030.20-LOD-350 Stormwater Drainage Piping* From Ikerd.com	 *131 D2030.20-LOD-400 Stormwater Drainage Piping* From Ikerd.com
Description **Associated Masterformat Sections:** 22 05 73 / 22 05 76 / 22 14 13 / 22 14 16 / 22 14 23	See D20		Schematic layout with approximate size, shape, and location of mains and risers; shaft requirements modeled;	Modeled as design-specified size, shape, spacing, location, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, location, connections, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size and shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches. Actual access/code clearance requirements modeled. Actual floor and wall penetration elements modeled.	See D2030.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

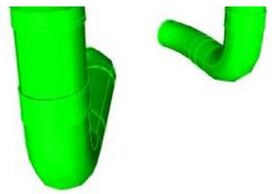
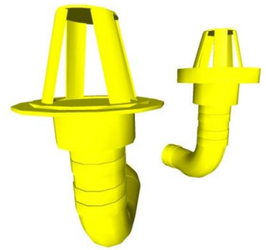
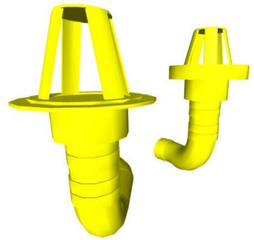
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility Stormwater Drains

Uniformat **D2030.30** Omniclass **21-04 20 30 30** Uniclass **Ss 50 35 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *135 D2030.30-LOD-200 Facility Stormwater Drains* From Ikerd.com	 *135 D2030.30-LOD-300 Facility Stormwater Drains* From Ikerd.com	 *135 D2030.30-LOD-350 Facility Stormwater Drains* From Ikerd.com	 *135 D2030.30-LOD-400 Facility Stormwater Drains* From Ikerd.com
Description **Associated Masterformat Sections:** 22 14 26	See D20		Schematic layout with approximate size, shape, and location of components.	Modeled as design-specified size, shape, spacing, and location of components. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all components. Access/code clearance requirements modeled.	Modeled as actual construction elements size, shape, spacing, and location/connections of components. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all components. Actual access/code clearance requirements modeled.	See D2030.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

ASCEND Building Knowledge Foundation

Process Support Plumbing Systems

Uniformat **D2060** Omniclass **21-04 20 60** Uniclass **Ss 55 60**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See D20		Schematic layout with approximate size, shape, and location of mains and risers; shaft requirements modeled;			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Compressed-Air Systems

Uniformat **D2060.10** Omniclass **21-04 20 60 10** Uniclass **Ss 55 20 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				139 D2060.10-LOD-400 Compressed-Air Systems From Ikerd.com
Description **Associated Masterformat Sections:** 01 86 16 / 22 61 00 / 22 61 13 / 22 61 19	See D20		See D2060	Modeled as design-specified size, shape, spacing, location, and slope of equipment/pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, location, connections, and slope of equipment/pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches. Actual access/code clearance requirements modeled. Actual floor and wall penetration elements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

MECHANICAL (HVAC)

LoD 500

Page 171

Heating, Ventilation, and Air Conditioning (HVAC)

Uniformat D30 Omniclass 21-04 30 Uniclass Ss 60

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19 / 23 00 00	Diagrammatic or schematic model elements. Conceptual and/or schematic layout/flow diagram;					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility Fuel Systems

Uniformat **D3010** Omniclass **21-04 30 10** Uniclass **Ss 55 50**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19 / 23 10 00	See D30		Schematic layout with approximate size, shape, and location of element(s). Approximate access/code clearance requirements modeled. Shaft requirements modeled;			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

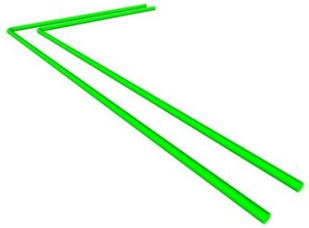
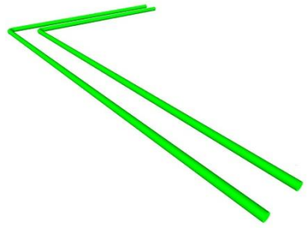
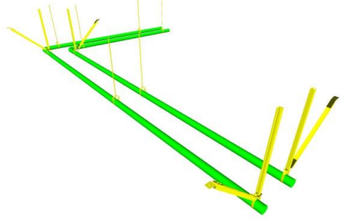
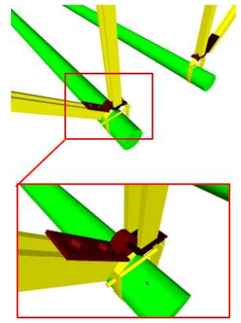
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Fuel Piping

Uniformat **D3010.10** Omniclass **21-04 30 10 10** Uniclass **Ss 55 50 46**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *143 D3010.10-200 Fuel Piping* From Ikerd.com	 *143 D3010.10-300 Fuel Piping* From Ikerd.com	 *143 D3010.10-350 Fuel Piping* From Ikerd.com	 *143 D3010.10-400 Fuel Piping* From Ikerd.com
Description **Associated Masterformat Sections:** 23 11 00	See D30		See D3010	Modeled as design-specified size, shape, spacing, and location of pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches. Actual access/code clearance requirements modeled. Actual floor and wall penetration elements modeled.	Supplementary components added to the model required for fabrication and field installation
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Fuel Pumps

Uniformat **D3010.30** Omniclass **21-04 30 10 30** Uniclass **Ss 55 50**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 23 12 00 / 23 12 13 / 23 12 16	See D30		See D3010	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of equipment; actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	See D3010.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

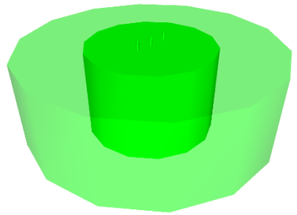
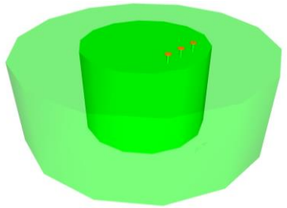
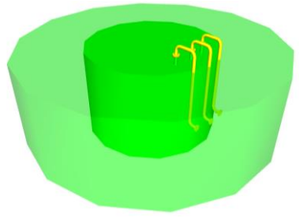
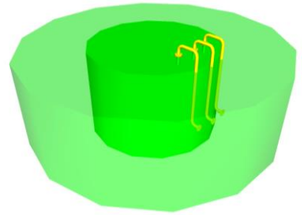
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Fuel Storage Tanks

Uniformat **D3010.50** Omniclass **21-04 30 10 50** Uniclass **Ss 55 10 75 0**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *147 D3010.50-LOD-200 Fuel Storage Tanks* From Ikerd.com	 *147 D3010.50-LOD-300 Fuel Storage Tanks* From Ikerd.com	 *147 D3010.50-LOD-350 Fuel Storage Tanks* From Ikerd.com	 *147 D3010.50-LOD-400 Fuel Storage Tanks* From Ikerd.com
Description **Associated Masterformat Sections:** 23 13 00	See D30		See D3010	Modeled as design-specified size, shape, spacing, and location of tank(s). Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of tanks(s). Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of tank(s); actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of tanks(s). Actual access/code clearance requirements modeled.	See D3010.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Heating Systems

Uniformat D3020 Omniclass 21-04 30 20 Uniclass Ss 60 40 37

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19	See D30		Schematic layout with approximate size, shape, and location of element(s). Shaft requirements modeled;			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

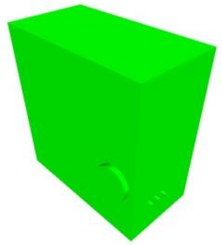
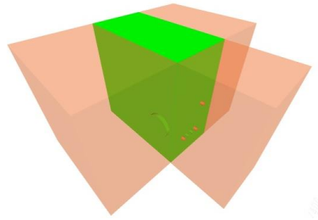
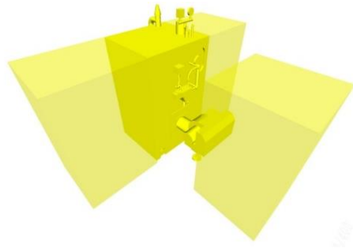
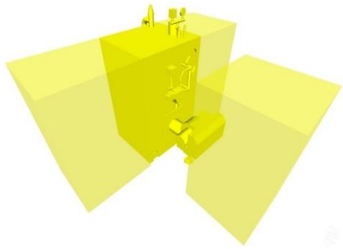
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Heat Generation

Uniformat **D3020.10** Omniclass **21-04 30 20 10** Uniclass **Ss 60 40 37**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *151 D3020.10-LOD-200 Heat Generation* From lkerd.com	 *151 D3020.10-LOD-300 Heat Generation* From lkerd.com	 *151 D3020.10-LOD-350 Heat Generation* From lkerd.com	 *151 D3020.10-LOD-400 Heat Generation* From lkerd.com
Description **Associated Masterformat Sections:** 23 51 00 / 23 52 00 / 23 52 13 / 23 53 00 / 23 53 13 / 23 53 16 / 23 54 00 / 23 56 00 / 23 56 13 / 23 56 16 / 23 55 00 / 23 57 00	See D30		See D3020	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of equipment, actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Cooling Systems

Uniformat D3030 Omniclass 21-04 30 30 Uniclass Ss 60 40 17

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19	See D30		Schematic layout with approximate size, shape, and location of element(s). Shaft requirements modeled;			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

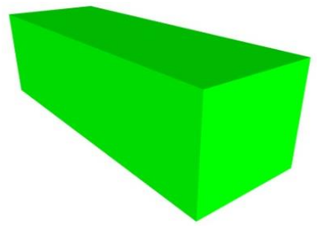
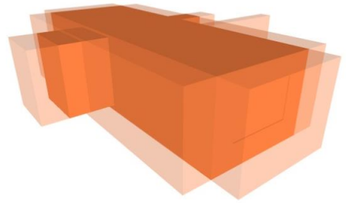
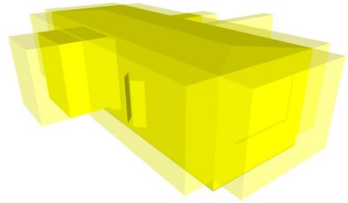
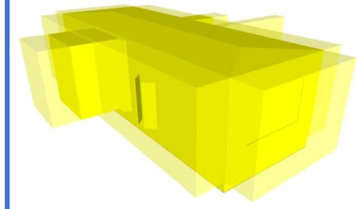
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Central Cooling

Uniformat **D3030.10** Omniclass **21-04 30 30 10** Uniclass **Ss 60 40 17 0**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *155 D3030.10-LOD-200 Central Cooling* From Ikerd.com	 *155 D3030.10-LOD-300 Central Cooling* From Ikerd.com	 *155 D3030.10-LOD-350 Central Cooling* From Ikerd.com	 *155 D3030.10-LOD-400 Central Cooling* From Ikerd.com
Description **Associated Masterformat Sections:** 23 60 00 / 23 61 00 / 23 62 00 / 23 63 00 / 23 64 00 / 23 65 00	See D30		See D3030	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of equipment; actual size, shape, spacing, and clearances required for all specified anchors, supports, vibration and seismic control that are utilized in the layout of equipment. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

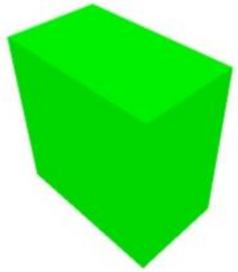
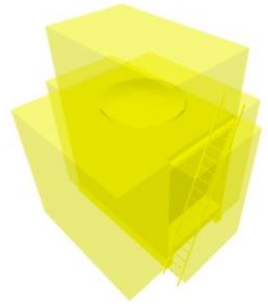
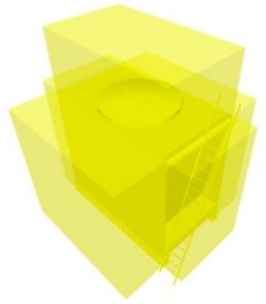
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Evaporative Air-Cooling

Uniformat **D3030.30** Omniclass **21-04 30 30 30** Uniclass **Ss 65 80 45 25**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *159 D3030.30-LOD-200 Evaporative Air-Cooling* From Ikerd.com	 *159 D3030.30-LOD-300 Evaporative Air-Cooling* From Ikerd.com	 *159 D3030.30-LOD-350 Evaporative Air-Cooling* From Ikerd.com	 *159 D3030.30-LOD-400 Evaporative Air-Cooling* From Ikerd.com
Description **Associated Masterformat Sections:** 23 76 00	See D3030.10		See D3030.10	See D3030.10	See D3030.10	See D3030.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility HVAC Distribution Systems

Uniformat D3050 Omniclass 21-04 30 50 Uniclass Ss 60 40 84

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See D30		Schematic layout with approximate size, shape, and location of element(s).			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

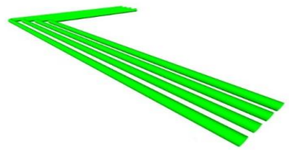
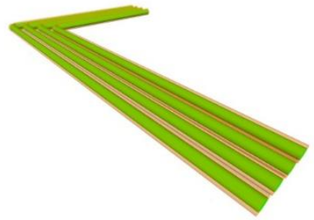
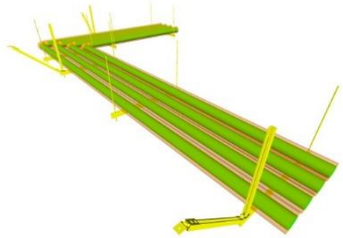
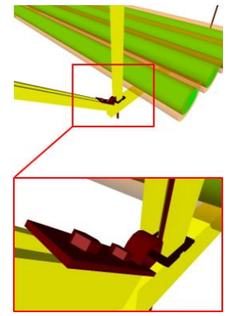
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility Hydronic Distribution

Uniformat **D3050.10** Omniclass **21-04 30 50 10** Uniclass **Ss 60 40 84 0**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *D3050.10-LOD-200 Facility Hydronic distribution* From Ikerd.com	 *D3050.10-LOD-300 Facility Hydronic distribution* From Ikerd.com	 *D3050.10-LOD-350 Facility Hydronic distribution* From Ikerd.com	 *D3050.10-LOD-400 Facility Hydronic distribution* From Ikerd.com
Description **Associated Masterformat Sections:** 01 86 19 / 23 21 13 / 23 21 23 / 23 25 00	See D30		See D3050	Modeled as design-specified size, shape, spacing, location, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, location, connections, and slope of pipe, valves, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches; actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

HVAC Air Distribution

Uniformat D3050.50 Omniclass 21-04 30 50 50 Uniclass Ss 65 80 0 0

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19 / 23 73 00 / 23 74 00 / 23 75 00 / 23 30 00 / 23 34 00 / 23 31 00 / 23 32 00 / 23 33 00 / 23 36 00 / 23 37 00 / 23 40 00 / 23 41 00 / 23 42 00 / 23 43 00 / 23 84 00	See D30		See D3050	Modeled as design-specified size, shape, spacing, and location of duct, dampers, fittings, and insulation for risers, mains, and branches. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of duct, dampers, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches. Actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	See D3050.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Ventilation

Uniformat D3060 Omniclass 21-04 30 60 Uniclass Ss 65 40 0 0

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 19	See D30		Schematic layout with approximate size, shape, and location of mains and risers.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

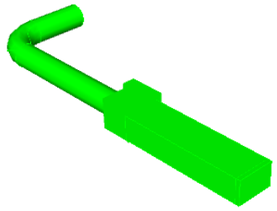
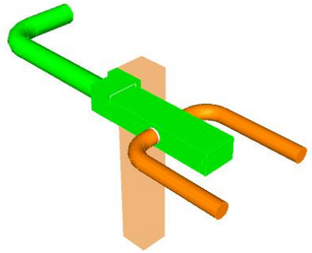
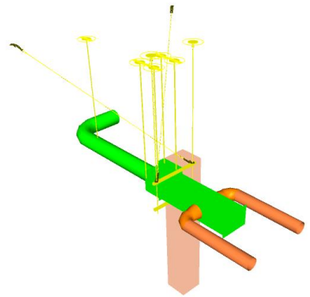
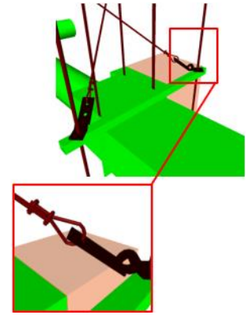
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Supply Air

Uniformat **D3060.10** Omniclass **21-04 30 60 10** Uniclass **Ss 65 40 33 51**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *167 D3060.10-LOD-200 Supply Air* From Ikerd.com	 *167 D3060.10-LOD-300 Supply Air* From Ikerd.com	 *167 D3060.10-LOD-350 Supply Air* From Ikerd.com	 *167 D3060.10-LOD-400 Supply Air* From Ikerd.com
Description **Associated Masterformat Sections:** 23 34 00 / 23 31 00 / 23 32 00 / 23 33 00 / 23 36 00 / 23 37 00	See D30		See D3060	Modeled as design-specified size, shape, spacing, and location of duct, dampers, fittings, and insulation for risers, mains, and branches. Approximate specified allowances for spacing and clearances required for all hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of duct, dampers, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches; actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

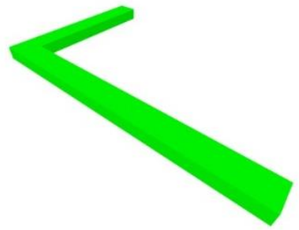
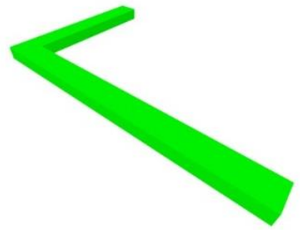
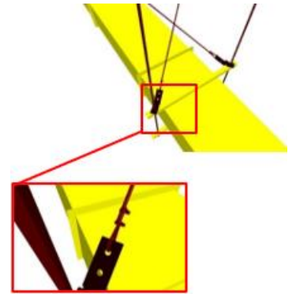
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Exhaust Air

Uniformat **D3060.30** Omniclass **21-04 30 60 30** Uniclass **Ss 65 40**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *D3060.30-LOD-200 Exhaust Air* From Ikerd.com	 *D3060.30-LOD-300 Exhaust Air* From Ikerd.com	 *D3060.30-LOD-350 Exhaust Air* From Ikerd.com	 *D3060.30-LOD-400 Exhaust Air* From Ikerd.com
Description **Associated Masterformat Sections:** 23 35 00 / 23 35 13.13 / 23 35 16 / 23 38 00 / 23 38 13 / 23 38 16 / 23 34 00 / 23 31 00 / 23 32 00 / 23 33 00 / 23 37 00	See D30		See D3060	Modeled as design-specified size, shape, spacing, location, duct slope (if required), dampers, fittings, insulation for risers, mains, and branches. Approximate specified allowances for spacing and clearances required for all hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, location, and slope (if required)/connections of duct, dampers, fittings, and insulation for risers, mains, and branches. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches; actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	See D3060.10
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Special Purpose HVAC Systems

Uniformat D3070 Omniclass 21-04 30 70 Uniclass Ss 60

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See D30		Schematic layout with approximate size, shape, and location of components.			
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Snow Melting

Uniformat D3070.10 Omniclass 21-04 30 70 10 Uniclass Ss 60 30 60

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 23 83 13 / 23 83 16	See D30		See D3070	Modeled as design-specified size, shape, spacing, and location of supplementary components. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all supplementary components. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of supplementary components. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all supplementary components. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

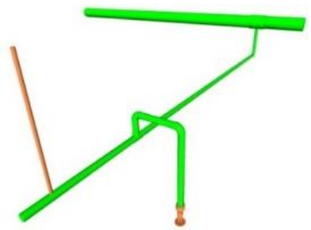
FIRE PROTECTION

LoD 500

Page 190

Fire Protection

Uniformat **D40** Omniclass **21-04 40** Uniclass **Ss 55 30**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements; Conceptual and/or schematic layout/flow diagram;		Approximate geometry.	Modeled as design-specified size, shape, spacing, and location of pipe/slope (if required)/valves/fittings/insulation for risers, mains, and branches/standpipes. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches/standpipes. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/ slope (if required)/connections of pipe, valves, fittings, and insulation for risers, mains, and branches/standpipes. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches/standpipes. Actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

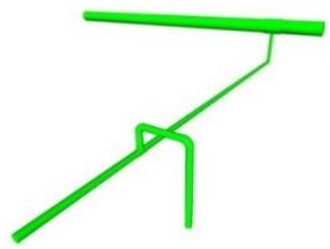
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Water-Based Fire-Suppression

Uniformat **D4010.10** Omniclass **21-04 40 10 10** Uniclass **Ss 55 30 98**

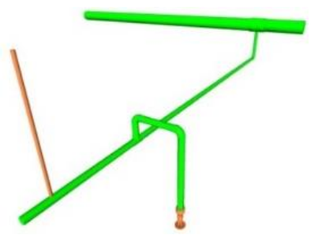
LOD	000[a]	100[b,c]	200[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *175 D4010.10-LOD-200 Water-Based Fire-Suppression* From Ikerd.com
Description **Associated Masterformat Sections:** 01 86 13 / 21 10 00 / 21 11 00 / 21 12 00 / 21 13 00 / 21 13 13 / 21 13 16 / 21 13 19 / 21 13 23 / 21 13 26 / 21 13 29 / 21 13 36 / 21 13 39 / 21 30 00 / 21 40 00	See D40		See D4010
LoD 500			
LoA			

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

300[b,c]	350[b,c]	400[b,c]
 *175 D4010.10-LOD-300 Water-Based Fire-Suppression* From Ikerd.com	 *175 D4010.10-LOD-350 Water-Based Fire-Suppression* From Ikerd.com	 *175 D4010.10-LOD-400 Water-Based Fire-Suppression* From Ikerd.com
Modeled as design-specified size, shape, spacing, and location of pipe/slope (if required)/valves/fittings/insulation for risers, mains, and branches/standpipes. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all risers, mains, and branches/standpipes. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/ slope (if required)/connections of pipe, valves, fittings, and insulation for risers, mains, and branches/standpipes. Actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all risers, mains, and branches/standpipes. Actual floor and wall penetration elements modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.

Fire Protection Cabinets

Uniformat D4030.10 Omniclass 21-04 40 30 10 Uniclass Pr 80 77 28 28

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 10 44 13	See D40		See D4030	Modeled as design-specified size, shape, spacing, and location of components. Approximate allowances for spacing and clearances required for all specified hangers, supports, vibration and seismic control that are to be utilized in the layout of all components. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location/connections of components. actual size, shape, spacing, and clearances required for all hangers, supports, vibration and seismic control that are utilized in the layout of all components. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

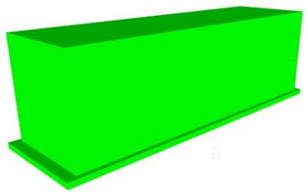
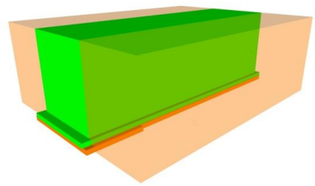
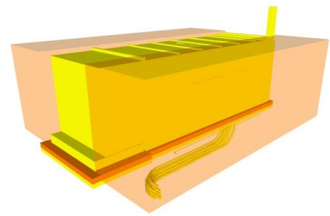
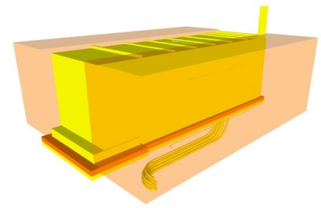
ELECTRICAL

LoD 500

Page 194

Packaged Generator Assemblies

Uniformat **D5010.10** Omniclass **21-04 50 10 10** Uniclass **Ss 70 10 30**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *179 D5010.10-LOD-200 Packaged Generator Assemblies* From Ikerd.com	 *179 D5010.10-LOD-300 Packaged Generator Assemblies* From Ikerd.com	 *179 D5010.10-LOD-350 Packaged Generator Assemblies* From Ikerd.com	 *179 D5010.10-LOD-400 Packaged Generator Assemblies* From Ikerd.com
Description **Associated Masterformat Sections:** 26 32 00 / 26 32 13 / 26 32 16 / 26 32 19 / 26 32 23 / 26 32 26 / 26 32 29 / 26 32 33	See D50		See D5010	Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

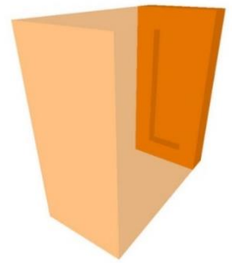
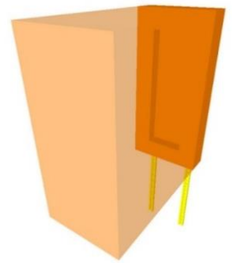
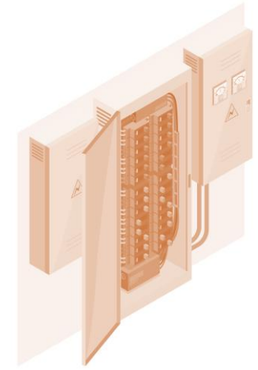
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Electrical Service and Distribution

Uniformat **D5020** Omniclass **21-04 50 20** Uniclass **Ss 70 30**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 26	See D50		Schematic layout with approximate size, shape, and location of equipment.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Electrical Service Entrance

Uniformat **D5020.10** Omniclass **21-04 50 20 10** Uniclass **Ss 70 30 45 45**

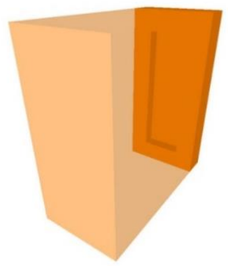
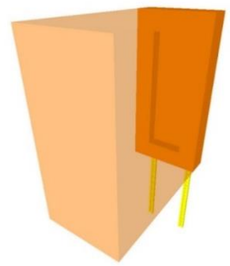
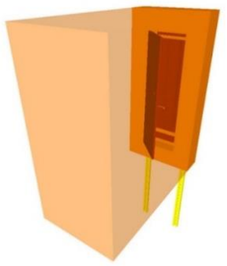
LOD	000[a]	100[b,c]	200[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	
Description **Associated Masterformat Sections:** 26 21 00 / 26 16 00 / 26 11 00 / 26 12 00 / 26 22 00 / 26 13 00 / 22 23 00 / 26 18 00 / 22 28 00	See D50		See D5020
LoD 500			
LoA			

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

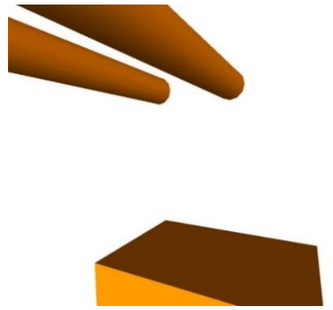
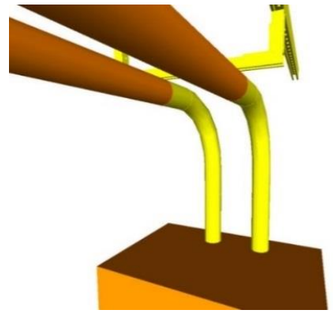
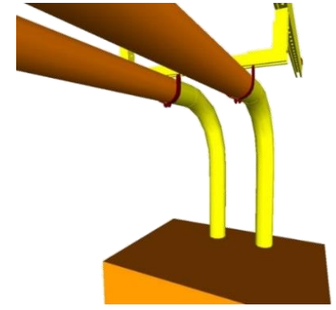
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

300[b,c]	350[b,c]	400[b,c]
 *183 D5020.10-LOD-300 Electrical Service Entrance* From Ikerd.com	 *183 D5020.10-LOD-350 Electrical Service Entrance* From Ikerd.com	 *183 D5020.10-LOD-400 Electrical Service Entrance* From Ikerd.com
Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.

Power Distribution

Uniformat **D5020.30** Omniclass **21-04 50 20 30** Uniclass **Ss 70 30 45 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *186 D5020.30-LOD-300 Power Distribution* From Ikerd.com	 *186 D5020.30-LOD-350 Power Distribution* From Ikerd.com	 *186 D5020.30-LOD-400 Power Distribution* From Ikerd.com
Description **Associated Masterformat Sections:** 26 20 00 / 26 24 00 / 26 24 13 / 26 24 16 / 26 24 19 / 26 25 00 / 26 27 00 / 26 27 16 / 26 05 33 / 26 05 43 / 26 05 36 / 26 05 13	See D50		See D5020	Modeled as design-specified size, shape, spacing, and location of raceways, boxes, enclosures, and equipment. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, and enclosures. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Facility Grounding

Uniformat D5020.70 Omniclass 21-04 50 20 70 Uniclass Ss 70 30 45 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 26 05 26 / 26 05 33 / 26 05 13	See D50		See D5020	Modeled as design-specified size, shape, spacing, and location of raceways, boxes, enclosures, and the electrical equipment and end-devices served. Approximate allowances for spacing and clearances required for all specified hangers, supports, and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, enclosures, and the electrical equipment and end-devices served. Actual size, shape, spacing, and location for supports and seismic control. Actual floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

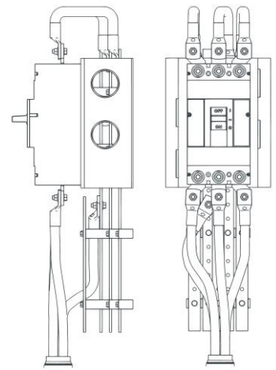
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Electrical Service and Distribution Supplementary Components

Uniformat D5020.90 Omniclass 21-04 50 20 90 Uniclass Ss 70 30 45 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 05 45 16 / 26 05 00 / 26 05 26 / 26 05 29 / 26 05 33 / 26 05 36 / 26 05 46 / 26 05 48 / 26 05 53 / 26 05 83 / 26 09 00	See D50		See D5020	1. Modeled as design-specified size, shape, spacing, and location of raceways, boxes, enclosures, and the electrical equipment and end-devices served. 2. Approximate allowances for spacing and clearances required for all specified hangers, supports, and seismic control. 3. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, enclosures, and the electrical equipment and end-devices served. Actual size, shape, spacing, and location for supports and seismic control. Actual floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

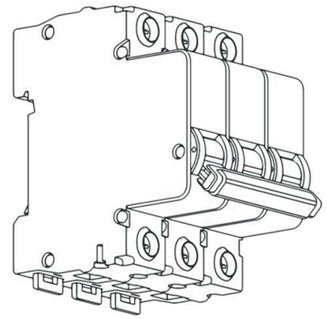
a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

General Purpose Electrical Power

Uniformat D5030 Omniclass 21-04 50 30 Uniclass Ss 70 30 45 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 86 26	See D50		Schematic layout with approximate size, shape, and location of equipment.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

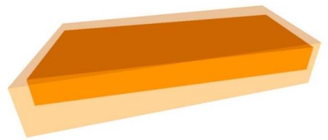
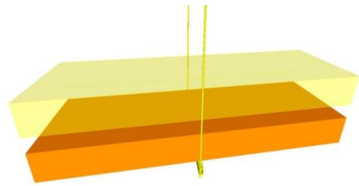
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Branch Wiring System

Uniformat **D5030.10** Omniclass **21-04 50 30 10** Uniclass **Ss 70 30 45 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *189 D5030.10-LOD-300 Branch Wiring System* From Ikerd.com	 *189 D5030.10-LOD-350 Branch Wiring System* From Ikerd.com	
Description	See D50		See D5030	Modeled as design-specified size, shape, spacing, and location of raceways, boxes, and enclosures. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, enclosures. Actual size, shape, spacing, and location for supports and seismic control. Actual floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
Associated Masterformat Sections: 26 05 33 / 26 05 43 / 26 05 36 / 26 05 19						
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Wiring Devices

Uniformat **D5030.50** Omniclass **21-04 50 30 50** Uniclass **Ss 70 30 45 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 26 27 26	See D50		See D5030	Modeled as design-specified size, shape, spacing, and location of outlet boxes and devices. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of outlet boxes and devices. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

General Purpose Electrical Power Supplementary Components

Uniformat D5030.90 Omniclass 21-04 50 30 90 Uniclass Ss 70 30 45 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 05 45 16 / 26 05 00 / 26 05 26 / 26 05 29 / 26 05 33 / 26 05 36 / 26 05 48 / 26 05 53 / 26 05 83 / 26 09 00	See D50		See D5030	Modeled as design-specified size, shape, spacing, and location of outlet boxes and devices. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of outlet boxes and devices. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Miscellaneous Electrical Systems

Uniformat D5080 Omniclass 21-04 50 80 Uniclass Ss 70

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See D50		Schematic layout with approximate size, shape, and location of equipment.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LIGHTING

LoD 500

Page 206

Lighting

Uniformat **D5040** Omniclass **21-04 50 40** Uniclass **Ss 70 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 26 50 00 / 01 86 26	See D50		Schematic layout with approximate size, shape, and location of equipment.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Lighting Control

Uniformat **D5040.10** Omniclass **21-04 50 40 10** Uniclass **Pr 70 70 47**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 6 09 23 / 26 09 26 / 26 09 33 / 26 09 36 / 26 09 43 / 26 09 61	See D50		See D5040	Modeled as design-specified size, shape, spacing, and location of enclosures, equipment, and devices. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of enclosures, equipment, and control devices. Actual size, shape, and location/connections of equipment and control devices. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Branch Wiring for Lighting

Uniformat D5040.20 Omniclass 21-04 50 40 20 Uniclass Ss 70 80 33 35

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 26 05 33 / 26 05 43 / 26 05 36 / 26 05 19 / 26 27 26	See D50		See D5040	Modeled as design-specified size, shape, spacing, and location of raceways, boxes, and enclosures to fixture locations. Approximate allowances for spacing and clearances required for all specified hangers, supports, and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, and enclosures to fixture locations. Actual size, shape, spacing, and location for supports and seismic control. Actual floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

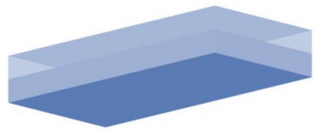
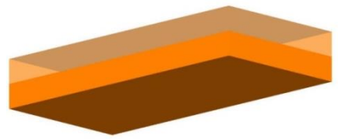
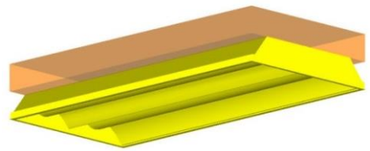
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Lighting Fixtures

Uniformat **D5040.50** Omniclass **21-04 50 40 50** Uniclass **Ss 70 80**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *191 D5040.50-LOD-300 Lighting Fixtures* From Ikerd.com	 *191 D5040.50-LOD-350 Lighting Fixtures* From Ikerd.com	
Description **Associated Masterformat Sections:** 26 50 00 / 26 51 00 / 26 52 00 / 26 53 00 / 26 54 00 / 26 55 00 / 26 55 23 / 26 55 29 / 26 55 33 / 26 55 36 / 26 55 39 / 26 55 53 / 26 55 59 / 26 55 61 / 26 55 63 / 26 55 70	See D50		See D5040	Modeled as design-specified size, shape, spacing, and location of lighting fixtures. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of lighting fixtures. Actual size, shape, spacing, and location for supports and seismic control. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Data Communications Network Equipment

Uniformat D6010.10 Omniclass 21-04 60 10 10 Uniclass Ss 75 10 21 21

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 27 21 00 / 27 21 13 / 27 21 16 / 27 21 29 / 27 21 33	See D50		See D5010	Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Data Communications Hardware

Uniformat **D6010.20** Omniclass **21-04 60 10 20** Uniclass **Pr 70 75 52**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 27 22 00 / 07 22 13 / 07 22 16 / 07 22 19 / 07 22 23 / 07 22 26 / 07 22 29	See D50		See D5010	Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Data Communications Peripheral Data Equipment

Uniformat **D6010.30** Omniclass **21-04 60 10 30** Uniclass **Pr 70 75 15**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 27 24 00 / 27 24 13 / 27 24 26 / 27 24 19 / 27 24 23 / 27 24 26 / 27 24 29	See D50		See D5010	Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Equipment

Uniformat **E10** Omniclass **21-05 10 00** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 11 00 00 / 01 87 13	Diagrammatic or schematic model elements: Conceptual and/or schematic layout; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Vehicle and Pedestrian Equipment

Uniformat **E1010** Omniclass **21-05 10 10** Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 11 10 00	See E10		Schematic layout with approximate size, shape, and location of equipment; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Vehicle Servicing Equipment

Uniformat **E1010.10** Omniclass **21-05 10 10 10** Uniclass **Ss 40 85 72 33**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 11 11 00 / 11 11 19 / 11 11 23 / 11 11 26	See E10		See E1010	Modeled as design-specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment and associated components. Actual size, shape, spacing, and location for supports and seismic control. Actual size, shape, and location of service connections and support structure/pads. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Furnishings

Uniformat **E20** Omniclass **21-05 20** Uniclass **Ss 40 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 12 00 00 / 01 87 16	A schematic model element or symbol that is not distinguishable by type or material. Types, layouts, and locations are still flexible.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

ASCEND Building Knowledge Foundation

Fixed Furnishings

Uniformat **E2010** Omniclass **21-05 20 10** Uniclass **Ss 40 45**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See E20		Generic model elements with approximate nominal size. Placement and quantity remains flexible.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

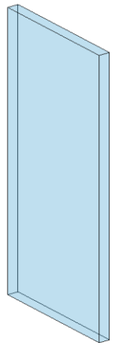
FIXED ART

LoD 500

Page 219

Fixed Art

Uniformat **E2010.10** Omniclass **21-05 20 10 10** Uniclass **Ss 40 25 20 4**

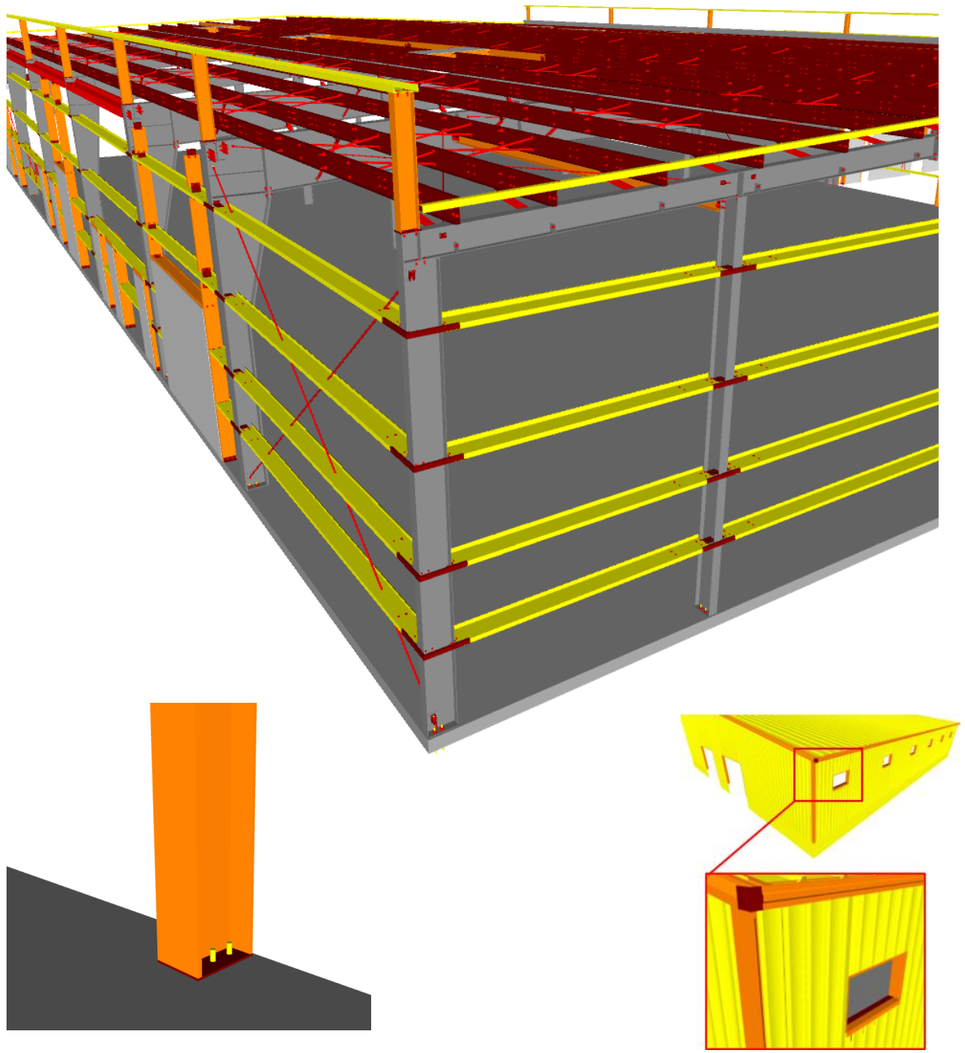
LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		Model Geometry Varies By Object Type		
Description **Associated Masterformat Sections:** 12 10 00 / 12 11 00 / 12 12 00 / 12 12 23 / 12 12 26 / 12 14 00 / 12 17 00 / 12 19 00	See E20		See E2010	Modeled types with specific dimensions, locations, and quantities.	Include any applicable service or installation clearances. Include any applicable support and connection points.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



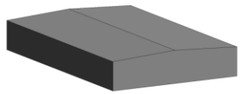
METAL BUILDING SYSTEMS

LoD 500

Page 221

Metal Building Systems

Uniformat **F1020.40** Omniclass **21-06 10 20 40** Uniclass **Ss 40 5**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *193 F1020.40-LOD 100 Metal Building Systems* From Ikerd.com			
Description **Associated Masterformat Sections:** 13 34 00 / 01 88 13 / 13 34 13 / 13 34 16 / 13 34 19 / 13 34 56		Generic mass of special structure with system typically noted with a design narrative for conceptual pricing.				
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

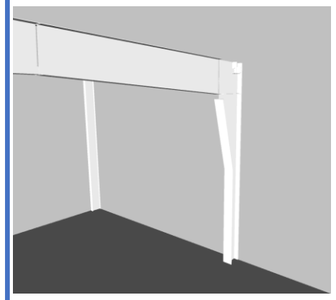
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Metal Building Systems
Primary Framing and Bracing

Uniformat **F1020.40.10** Omniclass **21-06 10 20 40.10** Uniclass **Ss 40 5**

LOD	000[a]	100[b,c]	200[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 194 *F1020.40-LOD 200 Metal Building Systems - Primary Framing* From Ikerd.com
Description **Associated Masterformat Sections:** 13 34 00 / 01 88 13 / 13 34 13 / 13 34 16 / 13 34 19 / 13 34 56	See F1020.40	See F1020.40	Element modeling to include: 1. Primary frame, approximate member size and location per defined structural grids. 2. Bracing, approximate member size and location.
LoD 500			
LoA			

BIMFORUM GLOBAL
BIMForum.Global

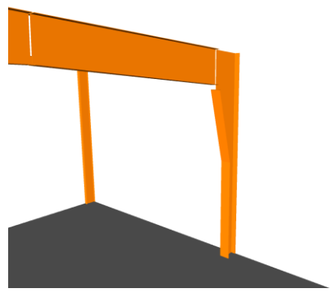
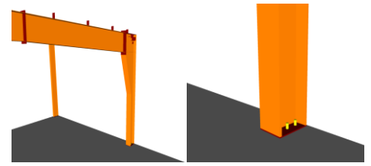
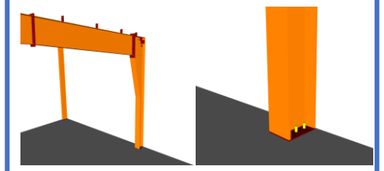
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

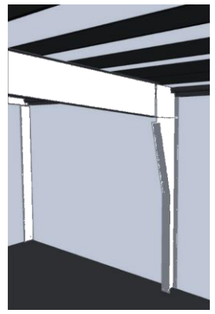
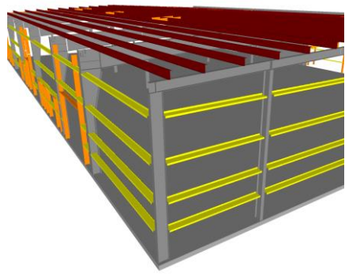
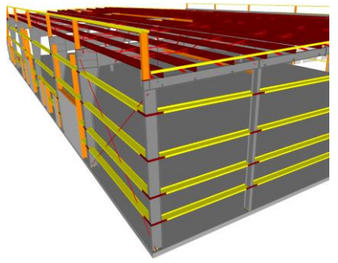
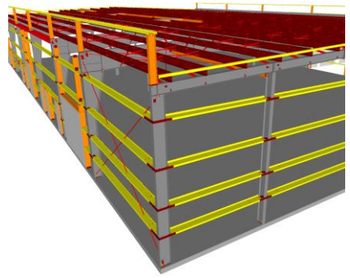
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

300[b,c]	350[b,c]	400[b,c]
 *195 F1020.40-LOD 300 Metal Building Systems - Primary Framing* From Ikerd.com	 196 *F1020.40-LOD 350 Metal Building Systems - Primary Framing* From Ikerd.com	 197 *F1020.40-LOD 400 Metal Building Systems - Primary Framing* From Ikerd.com
Element modeling to include: 1. Primary frame, specific member size and location per defined structural grids. 2. Bracing, specific member size and location.	Element modeling to include: 1. Actual elevations and locations of connections. 2. Main elements of connections (bolts, places, stiffeners, etc.). 3. Any miscellaneous steel (mill secondary framing, equipment supports, etc.).	Element modeling to include: 1. Welds 2. Reinforcement plates 3. Coping of members 4. Bolts, nuts, washers, etc. 5. Holes, slots, etc., including holes for future element attachments 6. All assembly elements

Metal Building Systems
Secondary Framing

Uniformat **F1020.40.20** Omniclass **21-06 10 20 40.20** Uniclass **Ss 40 5**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *198 F1020.40-LOD 200 Metal Building Systems - Secondary Framing* From Ikerd.com	 *199 F1020.40-LOD 300 Metal Building Systems - Secondary Framing* From Ikerd.com	 *200 F1020.40-LOD 350 Metal Building Systems- Secondary Framing* From Ikerd.com	 *201 F1020.40-LOD 400 Metal Building Systems - Secondary Framing* From Ikerd.com
Description **Associated Masterformat Sections:** 13 34 00 / 01 88 13 / 13 34 13 / 13 34 16 / 13 34 19 / 13 34 56	See F1020.40	See F1020.40	Generic mass of special structure with system typically noted with a design narrative for conceptual pricing. Generic open wall conditions identified (i.e., open for material by others, open for passage, etc.) Approximate overall depth and extent represented by secondary roof and wall framing members.	Element modeling to include: 1. Secondary roof and wall framing members, specific size and location (spacing and elevations). 2. Overall depth and end seat depth for open web members.	Element modeling to include: 1. Nested members 2. Connections for member bracing 3. Clips joining secondary framing members 4. Large elements of typical connections applied to all secondary steel connections such as girt to column, purlin to rafter, jamb to girt, header to jamb, etc. 5. Secondary angles, including sheeting angles and rake angles 6. Base attachment members 7. Any miscellaneous secondary steel members with correct orientation, i.e. canopies, parapets, door framing, etc. 8. For open web members, see B1010.10.60	Element modeling to include: 1. Welds 2. Bolts, nuts, washers, screws, and fasteners 3. Coping of members 4. Holes cut for bracing 5. Nested member attachments 6. All assembly elements 7. For open web members, see B1010.10.60
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

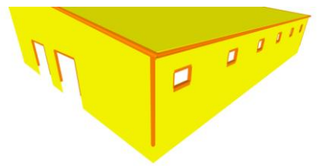
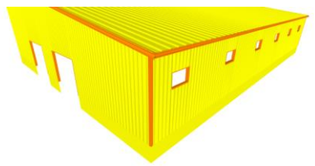
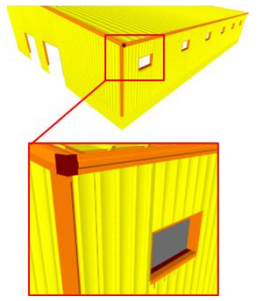
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Metal Building Systems
Cladding and Exterior Trim

Uniformat **F1020.40.30** Omniclass **21-06 10 20 40.20.30** Uniclass **Ss 40 5**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *202 F1020.40-LOD 200 Metal Building Systems –Cladding and Exterior Trim* From Ikerd.com	 *202 F1020.40-LOD 300 Metal Building Systems –Cladding and Exterior Trim* From Ikerd.com	 *202 F1020.40-LOD 350 Metal Building Systems –Cladding and Exterior Trim* From Ikerd.com	Element modeling to include fabrication level information: 1. Panel: Individual panel objects, with actual profile shown, positioned accurately within the building plane boundary and shown at installed length. 2. Fasteners at critical locations 3. Closures 4. Trim: Minor trims (end caps, transition pieces, etc.) are shown accurately. 5. Attachment or accessories (fasteners, etc.) shown at critical locations. Note: Other non-graphic information may be included such as: Additional material and its installation instructions required for proper installation. Mark identification that correlates with bill of material (i.e., piece mark). Fastener material.
Description **Associated Masterformat Sections:** 13 34 00 / 01 88 13 / 13 34 13 / 13 34 16 / 13 34 19 / 13 34 56	See F1020.40	See F1020.40	Element modeling to include: 1. Secondary roof and wall framing members, approximate size and location.	Element modeling to include: 1. Panel: Panel with actual profile or graphical texture shown, filling the boundary set by the plane object. 2. Significant accessories provided by metal building manufacturer (i.e., light transmitting panels, ridge vents, curbs). 3. Shop-located openings/Voids are represented in true dimensions/locations. 4. Trim: Major trims (primary exterior pieces) are shown, represented by the assumed trim profile and thickness. • Gutters • Corner boxes • Corner trim • Open wall trim • Framed opening trim	Element modeling to include: 1. Panel: Actual profile modeled filling the boundary set by the plane object. 2. Closures 3. Downspouts 4. Trim: Minor trims (end caps, transition pieces, etc.) are shown, represented by the assumed trim profile and thickness. Note: Other non-graphic information may be included such as: Textual information on installation details	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global
VDCFORUM
VDCForum.org

Notes:

a. LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.

b. LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.

c. In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD

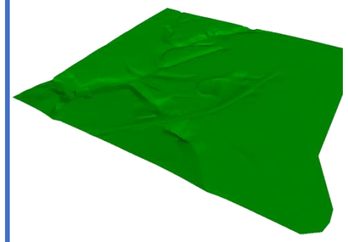
CIVIL & SITE

LoD 500

Page 226

Site Preparation

Uniformat **G10** Omniclass **21-07 10 00** Uniclass **Ac 10**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *205 G10-LOD-100 Site Preparation* From Ikerd.com			
Description **Associated Masterformat Sections:** 01 89 13	A simple topographic surface is provided.		Element modeling to include: 1. Approximate size and shape of foundation element 2. Approximate size/location of utilities and structures 3. Approximate code and clearance requirements 4. Approximate pipe material 5. Rough modeling of site grading			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

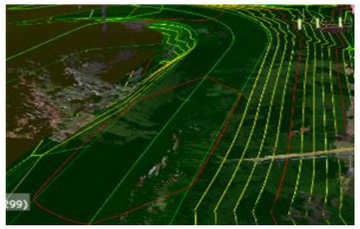
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Grading

Uniformat G1070.10 Omniclass 21-07 10 70 10 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 From Ikerd.com			 From Ikerd.com
Description **Associated Masterformat Sections:** 31 20 00 / 01 89 13	Proposed Surfaces shown as a plane.		Proposed Surface: Generic Surface Interpolation between the following elements: Building Envelope at Finish Floor, Finish Grade at Retaining Walls, Grading Limits. Curbs, hardscape, finish surface at building envelopes.	Proposed Surface: Complete and accurate surface definition based on defined fine grading, grade breaks, curbs, hardscape, buildings, swales, etc. Local Coordinate Control. Shared Coordinate from Building Grid base point to real-world project control	Include existing Surface: 3D surface generated from site topography, with grade breaks and lines as needed to define accurate surface. 3D site features included if provided by surveyor (i.e. walls, signage, stairs, etc., as defined in Survey LOC-Grade). Added definition from supplemental survey, revised limits of work	Surface modeled to facilitate robotic controlled grading and GPS grade-control systems.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Improvements

Uniformat G20 Omniclass 21-07 20 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 16	Diagrammatic or schematic model elements.		Element modeling to include: 1. Approximate size and shape of foundation element 2. Approximate size/location of utilities and structures 3. Approximate code and clearance requirements 4. Rough modeling of site grading			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Parking Lot Pavement

Uniformat G2020.10 Omniclass 21-07 20 20 10 Uniclass Ss 30 14 05 6

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 32 10 00 / 32 12 00 / 32 13 00 / 32 14 00 / 32 15 00	See G20		See G20	Specific thickness of pavement and substrate modeled. All drainage slopes modeled.	Openings for drains and other services modeled.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Parking Lot Curbs and Gutters

Uniformat G2020.20 Omniclass 21-07 20 20 20 Uniclass Ss 30 75 45

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 32 16 13	See G20		See G20	Full extents of curbs and gutters (above and below grade) are modeled.	Element modeling to include: 1. Reinforcing 2. Pour stops 3. Expansion joints	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Liquid and Gas Site Utilities

Uniformat G30 Omniclass 21-07 30 Uniclass Ss 55 20

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 19	Narrative that references the grading model		Approximate sizes, vertical control, and apparatus.			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Water Utilities

Uniformat **G3010** Omniclass **21-07 30 10** Uniclass **Ss 55 70**

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 33 10 00	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Domestic Water Distribution

Uniformat G3010.10 Omniclass 21-07 30 10 10 Uniclass Ss 55 70 38

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 19 / 33 21 00 / 33 11 00 / 33 12 00 / 33 12 13 / 33 12 16 / 33 12 19 / 33 12 23 / 33 12 33 / 33 13 00 / 33 16 00 / 33 47 19.13 / 33 47 13.13 / 33 47 16.13	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Fire Protection Water Distribution

Uniformat G3010.30 Omniclass 21-07 30 10 30 Uniclass Ss 55 30 96

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** : 01 89 19 / 33 21 00 / 33 11 19 / 33 12 00 / 33 12 13 / 33 12 16 / 33 12 19 / 33 12 23 / 33 12 33 / 33 16 00 / 33 47 19.33 / 33 47 13.13 / 33 47 16.13			See G30			
LoD 500						

LoA

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Sewerage Utilities

Uniformat G3020 Omniclass 21-07 30 20 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 33 30 00 / 01 89 19	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Sewerage Piping

Uniformat G3020.20 Omniclass 21-07 30 20 20 Uniclass Ss 50 35 08 30

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 33 31 00 / 33 33 00 / 33 34 00	See G30		See G30	Specific elevations, sizes, materials		
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Sanitary Sewerage Structures

Uniformat G3020.50 Omniclass 21-07 30 20 50 Uniclass Ss 50 35 08

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 33 39 00 / 33 39 13 / 33 39 23	See G30		Approximate structure types, sizes and materials	Specific structure elements at all locations, specific sizes and materials		
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Storm Drainage Utilities

Uniformat G3030 Omniclass 21-07 30 30 Uniclass Ss 50 35 80

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 19	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Energy Distribution

Uniformat G3050 Omniclass 21-07 30 50 Uniclass Ss 70 30

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Fuel Distribution

Uniformat G3060 Omniclass 21-07 30 60 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	See G30		See G30			
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Electrical Site Improvements

Uniformat G40 Omniclass 21-07 40 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 26	Diagrammatic or schematic model elements: Conceptual and/or schematic layout; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.					
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

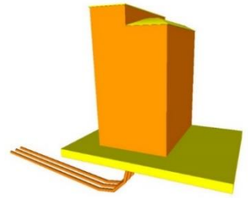
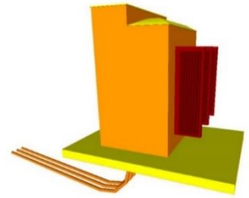
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Electric Distribution Systems

Uniformat G4010 Omniclass 21-07 40 10 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.		 *206 G4010-LOD-300 Site Electric Distribution Systems* From Ikerd.com	 207 G4010-LOD-350 Site Electric Distribution Systems From Ikerd.com	 *208 G4010-LOD-400 Site Electric Distribution Systems* From Ikerd.com
Description **Associated Masterformat Sections:** 01 89 26	See G40		Generic model elements in schematic layout with: Approximate size, shape, and location of equipment; Approximate access/code clearance requirements modeled; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.	Modeled as design-specified size, shape, spacing, and location of raceways/ boxes/enclosures/duct banks in the power distribution system. Specified size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control . Access/code clearance requirements modeled	Modeled as actual size, shape, spacing, and location of raceways/ boxes/enclosures/duct banks in the power distribution system. Actual size, shape, spacing, and location for supports and seismic control; actual size, shape, and location/connections of equipment and support structure/pads. Actual access/code clearance requirements modeled	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Lighting

Uniformat G4050 Omniclass 21-07 40 50 Uniclass Ss 70 80 25

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 26 56 29	See G40		Generic elements in schematic layout with: Approximate size, shape, and location of equipment; Approximate access/code clearance requirements modeled; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.	Modeled as design-specified size, shape, spacing, and location of lighting fixtures. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control. Required pole bases and footing elements. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, and enclosures in the power distribution system. Size, shape, spacing, and location for supports and seismic control; Size, shape, location, and connections of equipment and support structure or pads. Floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Communications

Uniformat G50 Omniclass 21-07 50 Uniclass Ss 75 10

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements: Conceptual and/or schematic layout; Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.					
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Site Communications Systems

Uniformat G5010 Omniclass 21-07 50 10 Uniclass Ss 75 10

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 33 80 00	See G50		Generic elements in a schematic layout with: approximate size, shape, and location of equipment; approximate access/code clearance requirements modeled; design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.	Modeled as design-specified size, shape, spacing, and location of raceways, boxes, and enclosures in the power distribution system. Size, shape, spacing, and location of equipment and associated components. Approximate allowances for spacing and clearances required for all specified hangers, supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of raceways, boxes, and enclosures in the power distribution system; size, shape, spacing, and location for supports and seismic control. Size, shape, location, and connections of equipment and support structure or pads. Floor and wall penetration elements are modeled. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for fabrication and field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Trenches

Uniformat -- Omniclass 22-31 23 16 13 Uniclass --

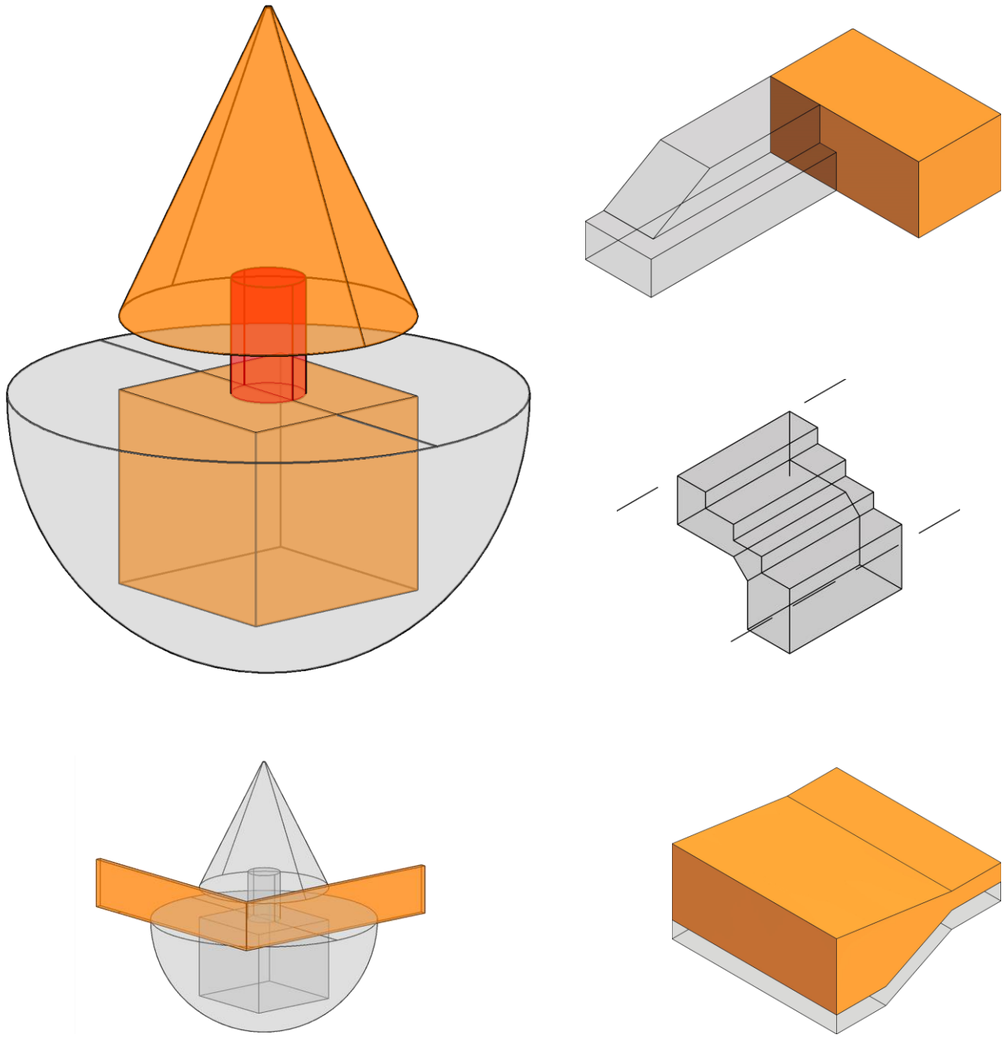
LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 31 06 20.13 / 31 23 16.13 / 31 23 33 / 31 35 26.23 / 31 41 33 / 31 77 13 / 33 05 07.53	Assumptions for trenches are included in other modeled elements such as foundations, civil piping and duct banks, etc.		Assumptions for trenches are included in other modeled elements such as foundations, civil piping and duct banks, etc.	Elements are modeled to represent the required size and shape for temporary trenching to accommodate the installation of model elements. Element modeling to include: 1. Overall size and geometry of the trench 2. loping surfaces	Element modeling to include: 1. Thrust block or underground reinforcements.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

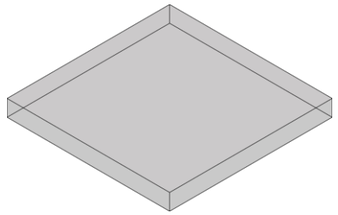
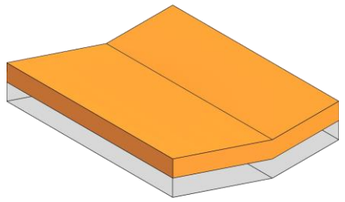
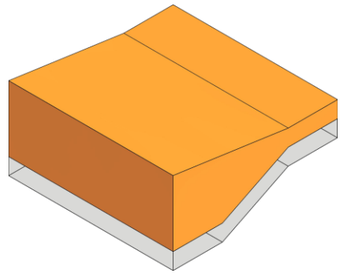


Site Landscape Elements

LoD 500

Site Landscape Paving

Uniformat G2030 | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Full plan extent. Nominal thickness of buildup	Actual thickness of build up Grading information (points and edges) 2D pattern of joints	Slab or thickened edges Rough openings 3D expansion joints that interface with other elements	All joints
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

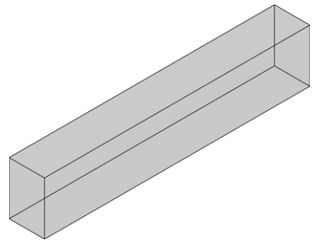
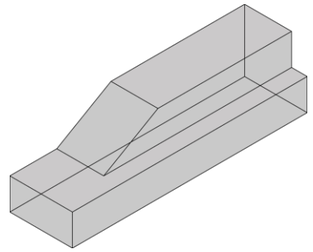
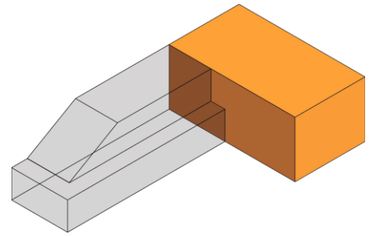
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Landscape Curbs

Uniformat G2030 Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Full plan extents	Full profile of curb Finish grade (top) Full depth Curb cuts and tapers	Rough openings for storm drains or inlets	Profile includes any chamfer or nosing Joints
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

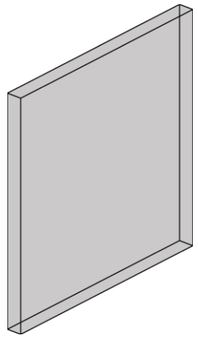
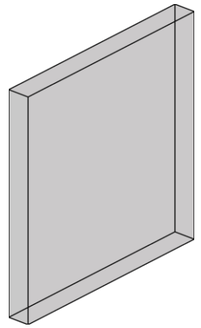
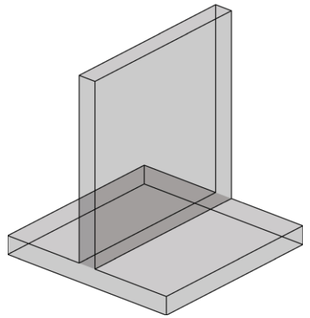
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Site Landscape Walls

Uniformat G2060 | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Full plan extents	Full profile/thickness of wall. Finish grade (top) Full depth	All material layers/buildup Footing	Joints Reinforcing
LoD 500						
LoA						

CIP = SEE CONCRETE WALLS
PC = SEE PRECAST
MASONRY = SEE UNIT MASONTRY
.

BIMFORUM GLOBAL
BIMForum.Global

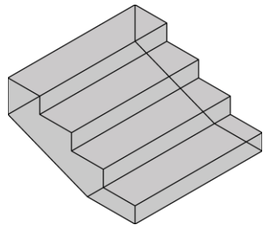
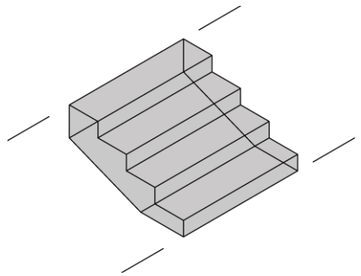
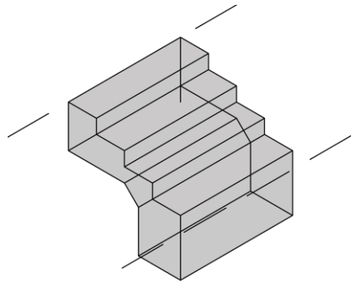
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Landscape Steps / Stairs

Uniformat **G2060** Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description			Full plan extents	Stair is accurately graded at top and bottom Nosing (taper) is included	Thickened edges and/or footings	Additional profile and nosing details Dowels and reinforcing
Associated Masterformat Sections:				RERER TO STAIRS FOR ADDITIONAL INFORMATION 300 base line for accessibility review. .		
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

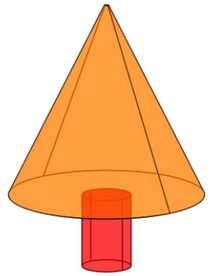
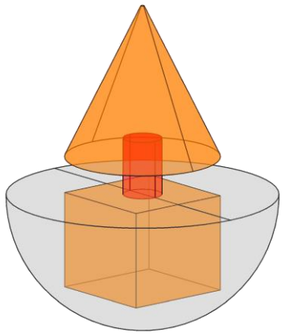
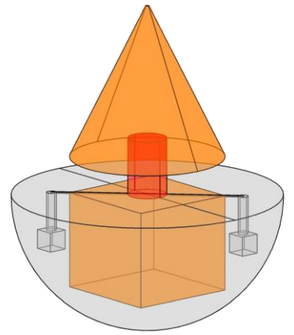
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Landscape Plants (Trees and Large Shrubs)

Uniformat G2080 | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Tree location is shown	Location of tree is accurate 3D rootball and clear zone for hole (at installation) Canopy shape/ size at maturity (75-100% height) (for design and visualization BIM Use)	Staking and/or guying Canopy clearances at maturity (for clash detection)	
Visualization:						
Growth Planning:				Installed size (boxed size) Mature size	Installed size (boxed size) Mature size	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

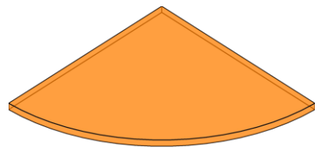
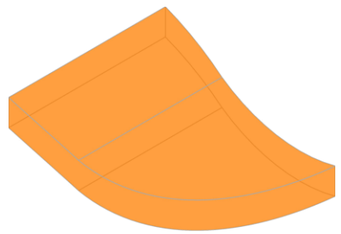
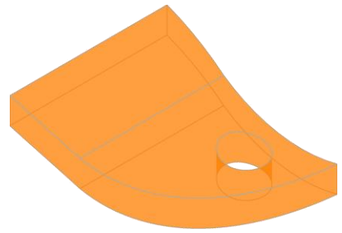
a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM)*

Reference:
BIMForum.Global/LOD

Site Landscape Plants (Smaller Plants and Shrubs)

Uniformat G2080 | Omniclass | Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Larger mass, zones, or areas. May be flat or not 3D form.	All areas are separated by distinct species or mix 3D form that follow grade (mass or individual plants)	Clear zones around trees Individual plants may be shown, though exact location is approx. Root or container element shown for smaller plants or included in thickness for massed areas	All individual plants are shown Location is exact for install
Visualization:						
Growth Planning:				Installed size (boxed size) Mature size	Installed size (boxed size) Mature size	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM)*

Reference:
BIMForum.Global/LOD

Site Landscape Turf and Seeding

Uniformat G2080 Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Turf and seeding areas are shown. Areas may be flat or not represented as 3D elements	All areas are separated by distinct species or mix Areas or masses follow the grading surface	Root system is accounted for within the depth of the massing element.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

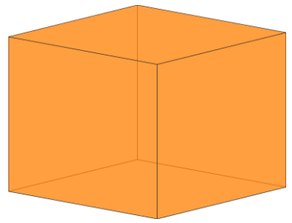
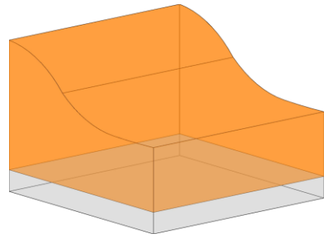
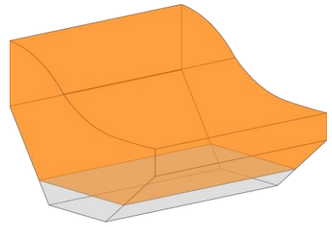
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Landscape Planting Soil

Uniformat G2080 Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Full plant extents Nominal thickness of build up	Accurate finish grade Actual thickness of buildup, including varying bottom slope(s)	Tapered edges	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

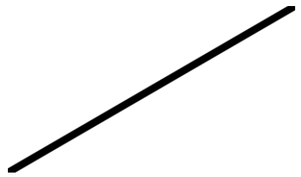
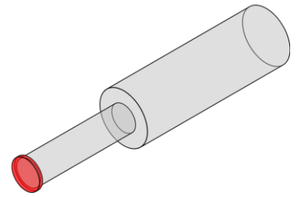
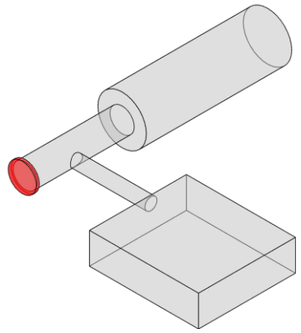
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Landscape Planting Irrigation

Uniformat G2080 Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Schematic single line layout with approximate size, shape, and location of mainline.	Accurate mainline and point of connection (POC) All fittings (valves, sprinkler heads, etc) are shown, though may be schematic and not fully sized on laterals Drip areas designated in plan	Mainline sleeving Drip lines, may be delineated as massing/area element at specified elevation (in 3d model) Lateral lines and sleeving are modeled as design-specified size and location	Modeled as actual construction elements Actual size, shape, spacing, and location/connections of pipe, valves, fittings, and sleeves
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

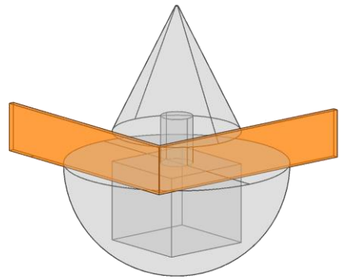
Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA

Site Landscape Tree and Plant Protection

Uniformat Z1050 Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Locations of existing trees are accurate, but model representation of planting size and extents may be approximate.. Existing trees, both to be removed and to retain Tree protection zone/massing for existing trees	3D location of existing root zone is delineated in the model.	Tree protection element/fencing for existing trees is modeled at correct height and shape	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Athletic, Recreational, and Playfield Areas

Uniformat G2050 Omniclass 21-07 20 50 Uniclass Ss 30 14

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:** 01 89 16	See G20		See G20	Element modeling to include: 1. Overall size and geometry of all elements 2. Crossfalls & drainage slopes	Element modeling to include: 1. Fences detailed geometry 2. Including footings 3. Fall zones 4. Materials	Element modeling to include: 1. Subsurface structure including thickness, material,… 2. Linemarking 3. Accurate materials and finishes (colored concrete,…)
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

SITE ELEMENTS

LoD 500

Site Trailers

Uniformat -- Omniclass 35-51-11 11 11 11 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements: 1. Conceptual and/or schematic layout;		Generic elements in schematic layout with: 1. approximate size and location; 2. approximate access/code clearance requirements modeled.	Modeled as design-specified size, shape, spacing, and location of decking, stairs, ramps. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of decking, stairs, ramps. Actual size, shape, spacing, and location for supports and seismic control. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Site Temporary Lighting

Uniformat -- Omniclass 35-51 11 11 11 27 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements: 1. Conceptual and/or schematic layout;		Generic elements in schematic layout with: 1. Approximate size, shape, and location of equipment; 2. Approximate access/code clearance requirements modeled; 3. Design performance parameters as defined in the BXP to be associated with model elements as non-graphic information.	Modeled as design-specified size, shape, spacing, and location of temporary lighting fixtures. Allowances for spacing and clearances for service/maintenance and code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of lighting fixtures. Actual access/code clearance requirements modeled.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Temporary Fencing

Uniformat -- Omniclass 35-51 17 27 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements: 1. Conceptual and/or schematic layout;		Generic elements in schematic layout with: approximate size and location of fencing; approximate access/code clearance requirements modeled;	Modeled as design-specified size, shape, spacing, and location of temporary fencing; allowances for spacing and clearances for service/maintenance and code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of temporary fencing; actual access/code clearance requirements modeled.	
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Batch Plants

Uniformat -- Omniclass 35-61 31 31 21 51 26 Uniclass --

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Diagrammatic or schematic model elements: 1. Conceptual and/or schematic layout;		Generic elements in schematic layout with: 1. Approximate size and location; 2. Approximate access/code clearance requirements modeled;	Modeled as design-specified size, shape, spacing, and location of equipment. Approximate allowances for spacing and clearances required for all specified supports and seismic control. Access/code clearance requirements modeled.	Modeled as actual size, shape, spacing, and location of equipment. Actual size, shape, spacing, and location for supports and seismic control. Actual access/code clearance requirements modeled.	Supplementary components added to the model required for field installation.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

HIGHWAY BRIDGE

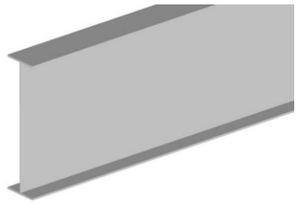
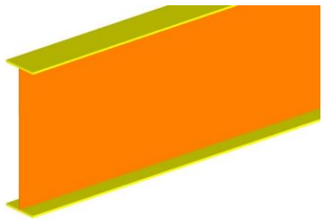
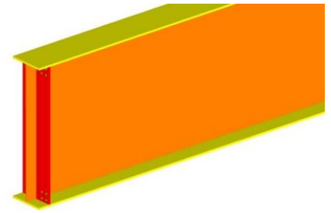
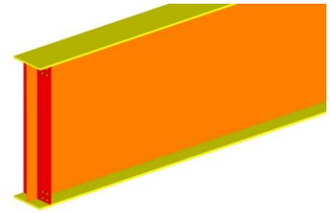
LoD 500

Highway Bridge Girder Steel

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Railroad Bridge Girder Steel* From AscendBKF.org	 *LOD 300 Railroad Bridge Girder Steel* From AscendBKF.org	 *LOD 350 Railroad Bridge Girder Steel* From AscendBKF.org	 *LOD 400 Railroad Bridge Girder Steel* From AscendBKF.org
Description **Associated Masterformat Sections:**			Generic mass of Girder	Element modeling to include: 1. Girder Depth 2. Web Plate Length 3. Flange Plate Width	Element modeling to include: 1. Stiffeners 2. Exact sloping of members 3. Splits between Plate Girders	Element modeling to include fabrication level information: 1. Welds 2. Coping of members 3. Washers, nuts, etc. 4. Grating, holes in grating 5. All assembly elements
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

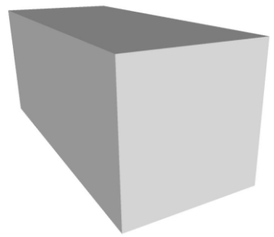
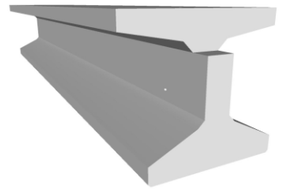
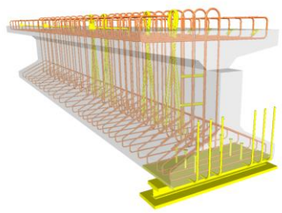
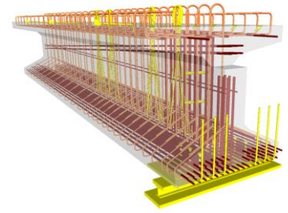
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Highway
Bridges Precast Structural I Girder (Concrete)

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 300 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 350 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 400 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:**			Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Chamfer 5. Expansion Joints 6. Lifting devices 7. Embeds and anchor rods 8. Post-tension profile and strands modeled if required by the BXP 9. Penetrations for items such as MEP 10. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled 2. Finishes
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

RAILROAD BRIDGE

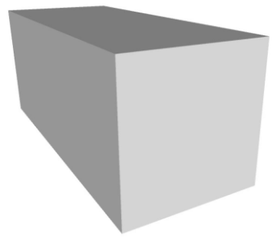
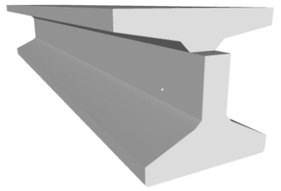
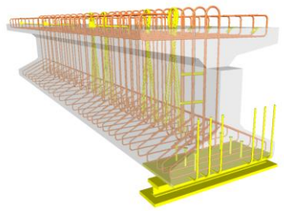
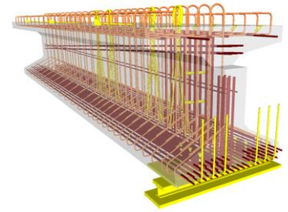
LoD 500

Railroad Bridges Precast Structural I Girder (Concrete)

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 300 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 350 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com	 *LOD 400 Railroad Bridges Precast Structural I Girder (Concrete)* From Ikerd.com
Description **Associated Masterformat Sections:**			Element modeling to include: Type of structural concrete system Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Type of structural concrete system 2. Approximate geometry (e.g. depth) of structural elements	Element modeling to include: 1. Reinforcing Post-tension profiles and strand locations 2. Reinforcement called out, modeled if required by the BXP, typically only in congested areas 3. Pour joints and sequences to help identify reinforcing lap splice locations, scheduling, etc. 4. Chamfer 5. Expansion Joints 6. Lifting devices 7. Embeds and anchor rods 8. Post-tension profile and strands modeled if required by the BXP 9. Penetrations for items such as MEP 10. Any permanent forming or shoring components	Element modeling to include: 1. All reinforcement including post tension elements detailed and modeled 2. Finishes
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

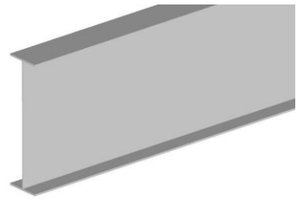
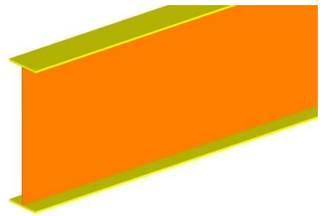
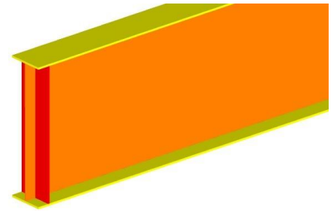
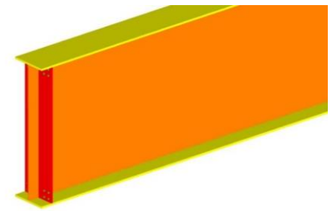
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

Railroad Bridge Girder Steel

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.	 *LOD 200 Railroad Bridge Girder Steel* From Ikerd.com	 *LOD 300 Railroad Bridge Girder Steel* From Ikerd.com	 *LOD 350 Railroad Bridge Girder Steel* From Ikerd.com	 *LOD 400 Railroad Bridge Girder Steel* From Ikerd.com
Description **Associated Masterformat Sections:**			Generic mass of Girder	Element modeling to include: 1. Stiffeners 2. Exact sloping of members 3. Splits between Plate Girders	Element modeling to include: 1. Stiffeners 2. Exact sloping of members 3. Splits between Plate Girders	Element modeling to include fabrication level information: 1. Welds 2. Coping of members 3. Washers, nuts, etc. 4. Grating, holes in grating 5. All assembly elements
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

VDCFORUM
VDCForum.org

APPENDIX

LoD 500

VDCFORUM
VDCForum.org

CRAIN SYSTEMS

LoD 500

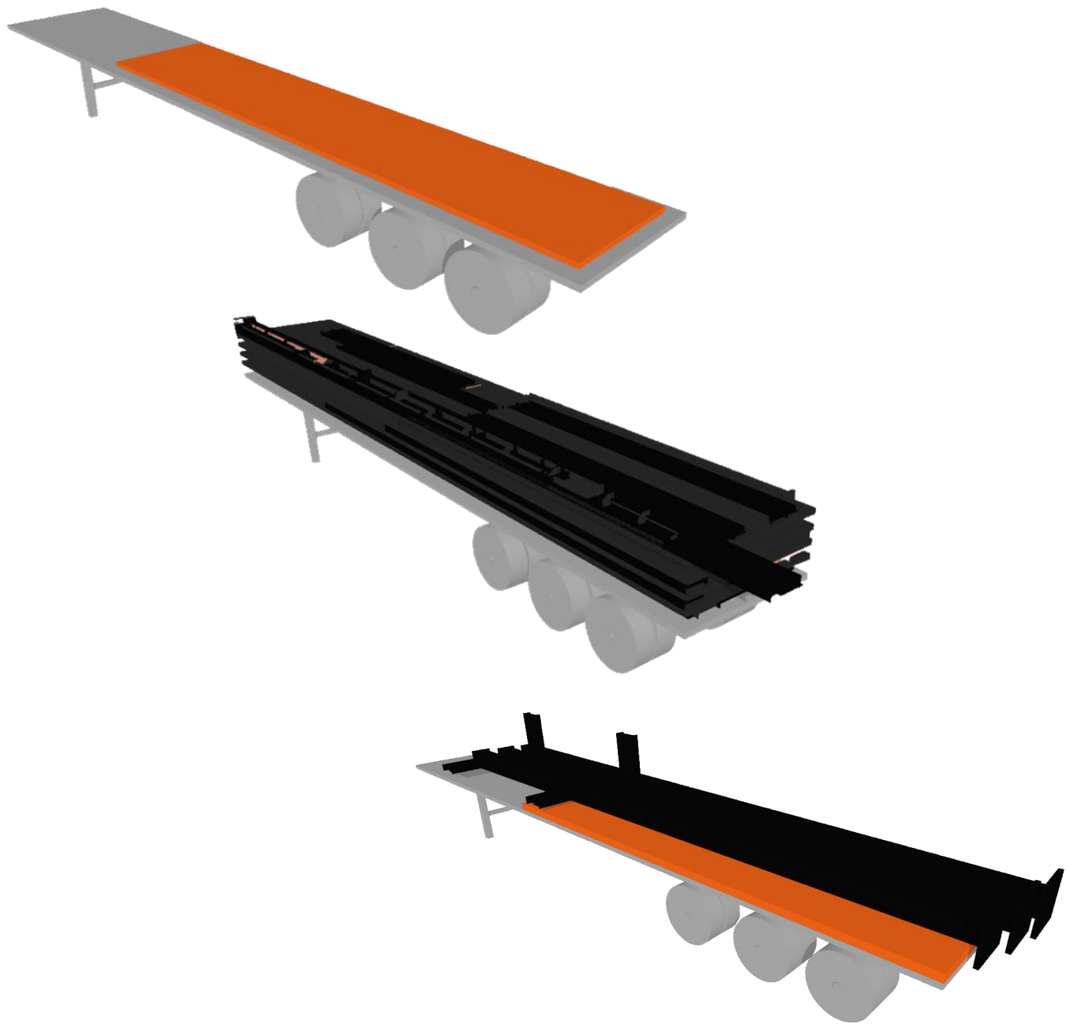
LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**						
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*
b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*
c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



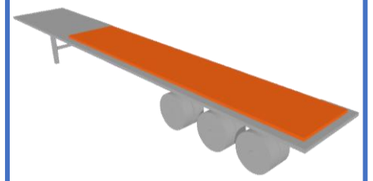
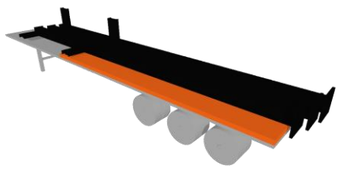
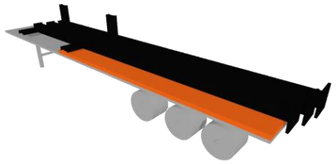
LoD 500

VDCFORUM
VDCForum.org

TRAILERS – LOAD MODELING

Trailers – Load Modeling

Uniformat Omniclass Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**	Load list is generated without any modeling.	A block mass is generated the collectively defined a given load. Not trailer is modeled.	Approximate trailer is model. Load geometry is modeled with overall clearance envelope. Modeled load may reference a load list for the elements referenced in the load. The interface of the elements in the shipping load is not established.	Specific trailer is modeled with specific geometry and clearances. Load is modeled with specific elements for quantities. These elements may be raw materials with out connections The interface of the elements in the shipping load is not established.	Load elements are modeled with connection geometry that corresponds to LOD 350 for the given elements. Load elements are arranged as they are shipped in the sequence the elements will be placed and removed from the load.	Fabrication level modeling is included with the elements arranged as shipped in the load.
LoD 500						
LoA						

BIMFORUM GLOBAL
BIMForum.Global

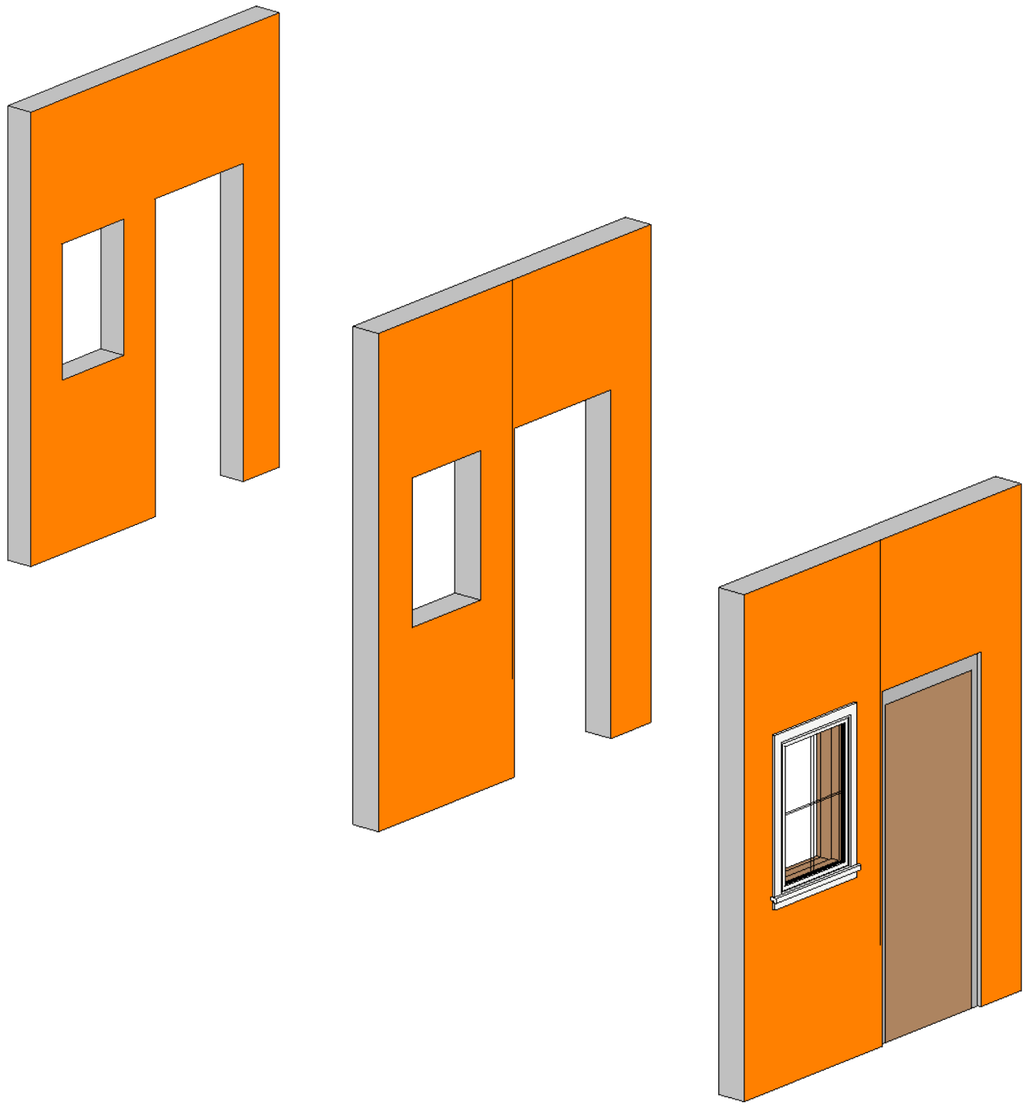
VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*



LoD 500

VDCFORUM
VDCForum.org

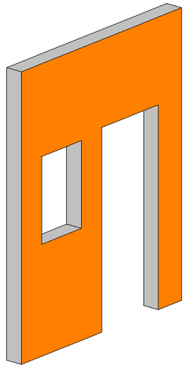
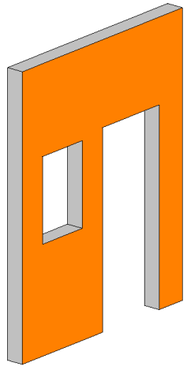
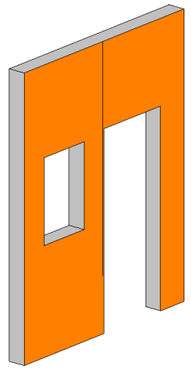
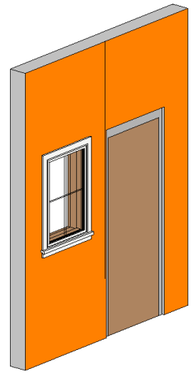
STRUCTURAL INSULATED PANELS

Structural Insulated Panels

Uniformat

Omniclass

Uniclass

LOD	000[a]	100[b,c]	200[b,c]	300[b,c]	350[b,c]	400[b,c]
	 NO DISTINCT MODEL ELEMENTS EXIST ***AND*** NO INFERENCE CAN BE MADE FROM AN OVERALL MASS FOR THESE ELEMENTS AT THIS LOD IN THIS SYSTEM.	 NO DISTINCT MODEL ELEMENTS EXIST ***BUT*** INFERENCE ABOUT ELEMENTS CAN BE MADE FROM AN OVERALL MASS AT THIS LOD IN THIS SYSTEM.				
Description **Associated Masterformat Sections:**			Approximate SIP system thickness and geometry are modeled. Approximate opening are modeled.	Specific openings are modeled with specific SIP wall thickness.	SIP panel joints are defined for penalization. Rough opening geometry supports CNC cutting of panels. SIP screw locations regions and fasteners types into adjacent members are defined without each fasten being modeled. Regions of air sealing tape per manufactures speciation are defined in the model without modeling the tape layer with exact thicknesses. .	SIP fasteners are modeled at the specified spacing. Fabrication level modeling of sealants and connections are included with the element.
LoD 500						

BIMFORUM GLOBAL
BIMForum.Global

VDCFORUM
VDCForum.org

Notes:

a. *LOD 000 does not exist in many LOD definitions. It has been added in the BIMForum Global LOD Specification to address data structures when no model elements existing and to define contact scopes when element at omitted from modeling.*

b. *LOD definitions should be defined in the Project Execution Plan's (PEP) Building Information Modeling (BIM) section. These may also be referred to as a BIM Execution Plan (BxP, BEP) on your project.*

c. *In the absence of a PEP, BEP, BxP, etc, the LOD definitions shall be per the BIMForum Global LOD Definitions, Reference: BIMForum.Global/LOD*

LoA