Facilities Standards & Guidelines

B.01 – BIM STANDARD 2026.1

Issue Date: 11/01/2026

For any questions regarding this standard, please contact Jake Spasaro at jake.spasaro@baesystems.us.

© BAE Systems

BAE SYSTEMS

Copyright ©2024 BAE Systems, Inc. All Rights Reserved

The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

Table of Contents

Section 1.0 – Definitions 2
Section 2.0 – Purpose and Expectations....2
Section 3.0 – Deliverables....2
Section 4.0 – Model Requirements 4
Section 5.0 – Laser Scanning....7
Section 6.0 – Model Detail Matrix 7
Section 7.0 – Shared Parameters Definition Matrix....8
Revision Log....8

Section 1.0 – Definitions

1.1 Building Information Model (BIM)

1.1.1 A Building Information Model (BIM) is a three-dimensional, data-rich, computer model of a facility.

1.2 Autodesk Revit

1.2.1 Autodesk Revit is a BIM authoring software. Autodesk Revit is the only accepted file type for all BIM deliverables defined in this standard.

Section 2.0 – Purpose and Expectations

2.1 The purpose of this BIM Standard is to ensure that BAE Systems will have the BIM data needed to design, construct, and maintain our built assets throughout their life cycle. Therefore, this standard is unique. No assumptions of similarity should be made between this standard and other industry BIM standards or guidelines.

2.2 This document is not project specific. It is the minimum BIM expectations for ALL facility modifications.

2.3 It will be the responsibility of the project team to coordinate with one another to plan and execute the requirements laid out in this standard.

Section 3.0 – Deliverables

3.1 Summary

3.1.1 The following deliverables are required for ALL facility modifications. If desired, any additional BIM deliverables beyond those defined in this standard will be separately identified in the RFP/SOW.

3.2 Design Team Deliverables

3.2.1 Upon design completion and before construction, the project's design team shall turn over all design models in full compliance with this standard to BAE Systems.

3.2.1.1 When complying with section 6.2.4., design models are to exclude section 6.2.3 and follow the direction given in 6.2.4.3.

Copyright ©2024 BAE Systems, Inc. All Rights Reserved
The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

3.3 Construction Team Deliverables

3.3.1 At project closeout, the construction team shall turn over all as-built models in full compliance with this standard to BAE Systems

3.4 Purchased Services Agreement (PSA) Deliverables

3.4.1 As-built Model(s) in full compliance with this standard shall be turned over to BAE Systems by the installing PSA contractors per individual project.

3.5 Secured Spaces Additional Deliverables

3.5.1 The construction team shall provide as-built Architectural drawings in AutoCAD format (.dwg) for use by the security team in their accreditation submission.

3.5.2 Additional BIM requirements for secured spaces found in “Standard C.54: Secured Spaces BOD” shall be followed.

3.6 Extranet File Transfers

3.6.1 Models or files being sent that are too large to be shared as an email attachment, shall be transferred using the Facilities Department’s Extranet site.

3.6.2 If you do not have access to the Facilities Department’s Extranet site, contact jake.spasaro@baesystems.us for access.

3.7 Micro-Projects

3.7.1 Approval is needed from jake.spasaro@baesystems.us to designate a project as a micro-project.

3.7.2 Examples of a micro-project: Moving a door to a different location along a wall, adding a receptacle to a wall, and swapping out a piece of equipment without changing connections.

3.7.3 In micro-project scenarios, a marked-up PDF file showing the graphical movement/addition of the building element(s) in the horizontal and vertical orientation, as well as a written report on changed/added required non-graphical information in Section 6.0 will be acceptable.

3.8 Do I Need to Model This?

3.8.1 If your project is adding any of the elements listed in Section 6.0, they need to be modeled according to this document regardless of dollar amount or scope.

3.8.2 Any elements not listed in Section 6.0 do not require modeling.

3.8.3 If you are replacing or upgrading any equipment listed in Section 6.0, they need to be modeled according to this document regardless of dollar amount or scope.

3.8.4 Non-graphical information will likely be the largest part of this deliverable.

3.8.5 If your project consists of repairing a piece of equipment and you are not changing any of its non-graphical information, no modeling is required.

Copyright ©2024 BAE Systems, Inc. All Rights Reserved

The Facilities Standards & Guidelines and all information contained therein (the “FSGs”) are the private property of BAE Systems, Inc. (“BAE Systems”) and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

Section 4.0 – Model Requirements

4.1 Accepted File Type

4.1.1 Revit files (.RVT) will be the only accepted file type for all submitted deliverables.

4.2 Accepted Revit Version (Year)

4.2.1 Models submitted shall be in Revit Version 2025.

4.2.2 Any models submitted in the wrong Revit version will be immediately rejected and asked to be returned in the proper version.

4.2.3 If unsure which Revit version to submit, please contact jake.spasaro@baesystems.us.

4.3 Model Naming Standard

4.3.1 Model Naming: (Project Name_Building Name_Discipline Code_ Revit Version)

4.3.1.1 Example: Bathroom Remodel_FT_A_R25.rvt

4.3.1.2 Project Name will be provided by your PM and should match our internal Project Dashboard name.

4.3.1.3 Discipline Codes shall match the National CAD Standard codes.

4.4 Model Separation

4.4.1 Project teams may choose how to separate and submit models in a way that best fits their workflow.

4.5 Worksets

4.5.1 No requirements.

4.6 Project Modeling Boundaries

4.6.1 It is expected that the project boundaries will be agreed upon and communicated before the design begins.

4.6.2 The project team is only responsible for modeling new facility additions or modifications to the existing facility. There is no expectation that unmodified existing facility elements within the project boundaries be modeled unless requested in the RFP/SOW.

4.6.3 It is required that the entirety of the new project will be modeled.

4.6.3.1 Example: 1.5” conduit run to a panel on the floor below will be included in the model even though the floor below is not included in the perceived project boundary.

4.6.4 Demolition

4.6.4.1 The project team is expected to submit a copy of our as-built model that has all applicable model elements switched to the demolition phase per the project scope.

4.7 Owner Provided As-Built Documentation

4.7.1 If existing, the as-built Revit model of the agreed-upon project area will be provided. Reach out to jake.spasaro@baesystems.us at the beginning of each project to ensure you are working the latest Revit models.

4.7.2 If no Revit model exists, any available laser scans, DWG, and PDF files of the agreed-upon area will be provided by BAE Systems if requested.

Copyright ©2024 BAE Systems, Inc. All Rights Reserved

The Facilities Standards & Guidelines and all information contained therein (the “FSGs”) are the private property of BAE Systems, Inc. (“BAE Systems”) and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

4.7.3 In this scenario, the expectation will be that the design team will use this information to construct a generic architectural shell of the project boundaries. There is no expectation to model the entirety of the existing facility unless asked to do so in the RFP/SOW.

4.8 Model Alignment and Coordinates

4.8.1 All submitted models shall align internal origin to internal origin.

4.8.2 If provided, align all models to the existing BAE Systems facility model internal origin to internal origin.

4.8.3 If the model(s) do not align to the existing BAE Systems facility model internal origin to internal origin, they will be rejected.

4.8.4 If no existing condition model is provided, the project team shall align all models to the architectural model internal origin to internal origin.

4.9 Model Structure and System Types

4.9.1 All MEP objects shall be placed and maintained on the correct system.

4.9.2 There shall not be any MEP elements not placed on their correct system. The sole exception is for existing conditions modeling where it is not possible to identify the system. In this scenario, set system type to "Unknown."

4.9.3 MEP System Types shall match the exact spelling, casing, and spacing listed below. If incorporating a system type not listed, the project team is free to use an agreed-upon name that is identical across all models. Please notify jake.spasaro@baesystems.us if adding a new system type.

4.9.3.1 If modeling with fabrication elements, add the BAE Systems shared parameter "B_System Type" to the applicable model elements and populate with the system type naming per this section. Please note, "B_System Type" can not be used if the native system type parameter is available.

- Abandoned
- BAS (Low Voltage)
- Boil-off Nitrogen Gas
- Chilled Water Return
- Chilled Water Supply
- Compressed Air
- Condensate
- Cooling Tower Water Return
- Cooling Tower Water Supply
- Deionized Water
- Domestic Cold Water
- Domestic Hot Water
- Dual Temperature Return
- Dual Temperature Supply
- Emergency
- Energy Recovery
- Exhaust Air
- Fire Alarm
- Fire Protection
- Fire Protection - CO2
- Fire Protection - Halon
- Fire Protection - Inert Gas
- Fuel Gas
- Fuel Oil
- Fuel Vent
- Heating Hot Water Return
- Heating Hot Water Supply
- Laboratory Gas
- Lighting
- LN2
- LN2 Vent
- Medical Gas
- Natural Gas
- Nitrogen
- Non-Potable Water
- Outside Air
- Potable Water
- Power Distribution
- Propane
- Refrigerant Liquid
- Refrigerant Suction
- Return Air
- Reverse Osmosis Water
- Sanitary
- Sanitary Vent
- Security
- Steam - High Pressure
- Steam - Low Pressure
- Steam - Medium Pressure
- Storm Drain
- Storm Drain Overflow
- Supply Air
- Telecommunication
- Unknown
- Vacuum
- Vent

4.10 Owner-Provided Equipment and Manufacturing Equipment

4.10.1 The project teams shall model all new facility equipment regardless of provider.

Copyright ©2024 BAE Systems, Inc. All Rights Reserved
The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

4.10.2 If families are available from the manufacturer, use those families.

4.10.3 The project teams only need to model aerospace manufacturing/engineering equipment as a basic shape to the equipment's outer extents.

4.10.3.1 Examples: A cube modeled to the outer extents of a new oven, or a horizontal cylinder modeled to the outer extents of a new chamber.

4.11 Design Model Graphical Requirements

4.11.1 The design model will graphically model all elements included in the project per the notes and exclusions in Section 6.0.

4.11.2 The model elements shall be graphically represented within the model as a specific system, object, or assembly in terms of quantity, size, shape, location, and orientation.

4.12 As-Built Model Graphical Requirements

4.12.1 The as-built model will graphically model all elements included in the project per the notes and exclusions in Section 6.0.

4.12.2 The model elements shall be graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, and orientation.

4.12.3 As-Built model deliverables shall comply with the as-built model dimensional tolerance in column 6.2.3 of the model detail matrix.

4.13 Shared Parameters

4.13.1 BAE Systems has created our own Revit Shared Parameters file that directly correlates with column 6.2.4 in the Model Detail Matrix.

Our shared parameters shall be added to all Revit projects and relevant model elements. The shared parameters shall be filled out for every project to ensure consistency between all of BAE Systems models. All BAE Systems Shared Parameters are designated with a "B_" prefix. An example of a BAE Systems shared parameter would be B_Equipment Name.

4.13.2 Contact jake.spasaro@baesystems.us prior to the start of each new project to obtain the latest Shared Parameter file which can be loaded directly into Revit.

4.13.3 Regarding the Design Model non-graphical information, follow instructions in 6.2.4.3.

4.13.4 All model elements are required to have the shared parameters "B_Project Identifier" and "B_Substantial Completion Date" present and filled out.

4.13.5 Educational link.

4.14 Equipment Naming Standard

4.14.1 The shared parameter "B_Equipment Name" shall be filled out for all relevant model elements correlating to the latest version of the B.02 - Equipment Naming Standard.

4.15 Clearances

4.15.1 Graphically model all code required and maintenance clearances in both the design and as-built models as semi-transparent red boxes for applicable model elements.

Copyright ©2024 BAE Systems, Inc. All Rights Reserved

The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

4.16 Electrical One-Line Requirements

4.16.1 Any modifications to the electrical distribution shall be updated on the one-line within Revit and conform to the latest BAE Facilities Standard: C.69 – Electrical One-Line Documentation Guidelines.

4.16.1.1 All BAE Facilities Standards and Guidelines can be found by clicking HERE.

Section 5.0 – Laser Scanning

5.1 Please reach out to jake.spasaro@baesystems.us before laser scanning on site to discuss security requirements. Recommendations on how to complete the laser scanning process can be provided as well.

5.2 Laser scanning is NOT a required deliverable. However, if requested in the RFP or deemed necessary, complete the laser scan to the following specifications.

5.2.1 Completed scans shall be checked for accuracy with the expectation that any given measurement over a distance of 230' will be within 1/4" of a field measurement.

Section 6.0 – Model Detail Matrix

6.1. Model Detail Matrix Introduction

6.1.1. The following pages contain the Model Detail Matrix. This matrix is not project-specific but instead a comprehensive list of possible building elements. Matrix requirements only apply to elements apart of the project scope.

6.2. Model Detail Matrix Column Definitions

6.2.1. Model Element(s)

6.2.1.1. This column represents the possible elements that could be a part of a project and need to be included in all model deliverables if applicable.

6.2.1.2. Some model elements are listed as categories, such as Mechanical Equipment with examples of mechanical equipment included below the category name. The expectation in these categorical situations is that all mechanical equipment will be modeled. Not just the examples listed.

6.2.2. Graphical Notes and Exclusions

6.2.2.1. Sections 4.0 is expected to be followed for all graphical model elements. The only exceptions to those requirements are listed in this column as Notes and Exclusions.

6.2.2.1.1. Notes are clarifications and modifications to graphical requirements.

6.2.2.1.2. Exclusions are items that do not need to be graphically modeled.

6.2.3. As-Built Model Tolerance

6.2.3.1. These columns define the expected location of model elements to their actual location determined by a field measurement.

6.2.3.2. Approx. means that the model element is shown in approximately the correct location. For example, a receptacle is shown in its approximate location on the correct wall in a building.

6.2.4. Non-Graphical Shared Parameter Requirements

Copyright ©2024 BAE Systems, Inc. All Rights Reserved
The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

6.2.4.1. This column lays out the required shared parameters to be associated with and filled out for the specified model element. The non-graphical shared parameter requirements shall be followed. These are critical data points that will allow BAE Systems to efficiently operate, maintain, and renovate our facilities throughout their lifecycle.

6.2.4.2. Note that these are required if applicable. For example, a solar-powered exterior light would not need to include B_Feeder Panel and B_Circuit because they do not apply to that model element. However, an exterior light that does connect to a panel and circuit would need to include those shared parameters.

6.2.4.3. Regarding the Design Model non-graphical information, note that these are only required if specified without exception.

6.2.4.3.1. Example: If a specific make/model of AHU is specified by the design team, the expectation is that the design team graphically models the specified AHU and includes the required non-graphical information laid out in the matrix.

Section 7.0 – Shared Parameters Definition Matrix

7.1. Starting on page 21 of this standard, you will find the Shared Parameters Definition Matrix. This is not a list of requirements; it is a matrix providing definitions for the non-graphical data required in Section 6.2.4. Here, you will also find the applicable *Revit Categories, Type of Parameter,* and *Group Parameter Under* information needed to correctly import the BAE Systems Shared Parameters into your Revit model.

Revision Log

Version	Date	Notes
BIM Guidelines 1.0	3/26/2020	* Initial release
BIM Guidelines 1.1	5/7/2020	* See 1.1 Revision Table
BIM Guidelines 2021.1	2/1/2021	* See 2021.1 Revision Table
BIM Standard 2022.1	1/26/2022	* See 2022.1 Revision Table
BIM Standard 2023.1	3/31/2023	* See 2023.1 Revision Table
BIM Standard 2024.1	5/15/2024	* See 2024.1 Revision Table
BIM Standard 2025.1	7/14/2025	* See 2025.1 Revision Table
BIM Standard 2025.2	12/1/2025	* See 2025.2 Revision Table
BIM Standard 2026.1	10/1/2026	*Section 6.0: Added new shared parameter requirements for Lighting Fixtures, Mechanical Dry Equipment, Mechanical Hydronic Equipment, Pumps, Domestic Water Equipment, Valves, and Misc..

Copyright ©2024 BAE Systems, Inc. All Rights Reserved

The Facilities Standards & Guidelines and all information contained therein (the "FSGs") are the private property of BAE Systems, Inc. ("BAE Systems") and may not be distributed or reproduced, except as specifically authorized by BAE Systems and with this legend conspicuously attached. The FSGs are provided as guidance and clarification of requirements and shall not be used as construction documents. BAE Systems does not guarantee, represent, warrant, or assure the safety or performance of any service, item, property, product, component, or system tested, installed, or operated in accordance with the FSGs.

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Architectural					
Walls	Notes: Check structural wall sections Exclude: Molding and base	X			B_Project Identifier, B_Sound Rating, B_RF Foil, B_Fire Rating, B_Finish, B_Substantial Completion Date
Windows		X			B_Project Identifier, B_Film Type, B_Glazing Type, B_Substantial Completion Date, B_Sound Rating, B_Fire Rating
Doors		X			B_Project Identifier, B_Equipment Name, B_Make, B_Fire Rating, B_Sound Rating, B_Substantial Completion Date, B_Finish
Floors	Notes: Model different floor types separately	X			B_Project Identifier, B_Finish, B_Substantial Completion Date, B_Fire Rating
Stairs		X			B_Project Identifier, B_Precaster/Erector, B_Substantial Completion Date, B_Finish
Suspended Ceiling Construction		X			B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Finish
Hard Ceiling		X			B_Project Identifier, B_Sound Rating, B_RF Foil, B_Fire Rating, B_Finish, B_Substantial Completion Date
Fire Escapes, Metal Walkways, And Ladders		X			B_Project Identifier, B_Substantial Completion Date, B_Finish
Furnishings: Furniture, Movable Multiple Seating, Other Movable Furnishings		X			B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Finish
Partitions		X			B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Finish
Railings, Bollards		X			B_Project Identifier, B_Substantial Completion Date, B_Precaster/Erector, B_Finish
Raised Floor Construction		X			B_Project Identifier, B_Live Load Capacity, B_ESD, B_Plenum Rating, B_Substantial Completion Date, B_Superimposed Dead Load Capacity, B_Finish

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Ramps		X			B_Project Identifier, B_Substantial Completion Date, B_Finish
Roof Accessories				X	B_Project Identifier, B_Substantial Completion Date
Building Modules: Manufactured/Fabricated Rooms, Modular Mezzanines		X			B_Project Identifier, B_Substantial Completion Date, B_Finish
Structural					
Foundation Elements		X			B_Project Identifier, B_Substantial Completion Date, B_Concrete Compressive Strength, B_Finish
Steel Structural Framing	Notes: Dimensions of actual member elements must be modeled to the accurate dimensions of the member. Width and depth of overall element must be accurate. Include thickness of the web and flange.	X			B_Project Identifier, B_Substantial Completion Date, B_Precaster/Erector, B_Finish

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Concrete Structural Framing	Notes: Dimensions of actual member elements must be modeled to the accurate dimensions of the member. Width and depth of overall element must be accurate.	X			B_Project Identifier, B_Substantial Completion Date, B_Concrete Compressive Strength, B_Finish
Floors	Notes: Model different floor types separately	X			B_Project Identifier, B_Live Load Capacity, B_Substantial Completion Date, B_Material, B_Superimposed Dead Load Capacity, B_Concrete Compressive Strength, B_Finish
Shear Walls	Notes: Model shear walls as separate and designated elements	X			B_Project Identifier, B_Substantial Completion Date, B_Concrete Compressive Strength, B_Finish
Exterior and Load Bearing Walls	Notes: Model CMU structures as separate and designated elements with correct block size and bond pattern	X			B_Project Identifier, B_Substantial Completion Date, B_Is Load Bearing Wall, B_Concrete Compressive Strength, B_Finish
Roofs		X			B_Project Identifier, B_Live Load Capacity, B_Substantial Completion Date, B_Superimposed Dead Load Capacity
Electrical					
Electrical Control Devices	Notes: Graphically model all sensors and devices not integrated/mounted directly into equipment		X		B_Project Identifier, B_Make, B_Model Number, B_Signal Output, B_Calibrated range, B_Feeder Panel, B_Circuit, B_Substantial Completion Date

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Point Of Use Distribution: Cable Bus, Power Bus Way			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_SCCR, B_Amperage, B_Copper or Aluminum, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Substantial Completion Date
Grounding	Notes: Model actual dimensions of ground bars and rods, model schematic location of salt pits and electrodes		X		B_Project Identifier, B_Hole Sizes, B_Substantial Completion Date, B_Copper or Aluminum, B_Hole Spacing
Panels	Notes: Make certain clearances are graphically modeled	X			B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_SCCR, B_Amperage, B_ Copper or Aluminum, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Substantial Completion Date
Conduit	**Exclude: Conduit less than 1.5" in size** Notes: Block model hidden bunches (5+) of less than 1.5" conduit		X		**Visible Conduit Non-Graphical Requirements:** B_Project Identifier, B_Substantial Completion Date, B_Copper or Aluminum **Hidden Conduit Non-Graphical Requirements:** B_Project Identifier, B_Insulation Type, B_Substantial Completion Date, B_Wire Size, B_Copper or Aluminum
Electrical Equipment: Generators, Battery Equipment, Transfer Switches, Photovoltaic Collectors, Power Filtering, Switchgear, Transformers, Electric Vehicle Chargers, Motor Starters, Disconnects, Lighting Control Panels, Contactors			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Voltage, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Power Rating (KW), B_SCCR, B_Amperage, B_Associated Equipment Name

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Lighting Fixtures: Interior Luminaries, Exterior Luminaries, Site Luminaries, Exit Signs			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Lumens at Central Plane, B_Voltage, B_Color Temp, B_Amperage , B_ Feeder Panel, B_ Circuit, B_Lamp Type
Lightning Protection			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date
Receptacles And Switches	Notes: Model as correct type (Example: duplex vs quadplex)			X	B_Project Identifier, B_Feeder Panel, B_Circuit, B_Substantial Completion Date, B_Control Type
Specialty Receptacles and Switches	Notes: Model as correct type			X	B_Project Identifier, B_Feeder Panel, B_Circuit, B_Substantial Completion Date, B_Make, B_Model Number
Site Communications Structures: Site Communications Distribution, Wireless Communications Distribution				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name
Telecom Pathways	**Exclude: Pathways less than 1.5" in size** Notes: Block model hidden bunches (5+) of less than 1.5" pathways		X		B_Project Identifier, B_Substantial Completion Date
Elevators		X			B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name
Valves					
Manual Valves	Notes: Model actual valve type		X		B_Project Identifier, B_Substantial Completion Date, B_Make, B_Model Number
Automated Valves	Notes: Model actual valve type		X		B_Project Identifier, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Make, B_Model Number, B_Actuator Type

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Fire and Life Safety					
Detection: Pull Stations, Detection Devices (Smoke, Heat, Fire Wire), Duct Detectors, Flow Switches, VESDA Systems				X	B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Explosion Rating
Suppression: Fire Protection Pipe, Fire Protection Pipe Accessories (Back Flow Preventor, Shut-Off Valve), Fire Protection Heads, Pumps, Tanks, Compressors (Pre-Action), Valves (Pre-Action)			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Design Pressure, B_MAWP, B_Material, B_Max Temp, B_Feeder Panel, B_Circuit, B_Equipment Name, B_ Tank Capacity, B_Substantial Completion Date, B_Head Type
Notification: Horns and Strobes, Door Hold Opens				X	B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Explosion Rating
Fire Alarm Panels				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Explosion Rating
Fire Extinguishers: Cabinet Or Mount, Fire Extinguishers				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date
Hose Cabinets				X	B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date
Life Safety Alarms: Oxygen Detection Systems				X	B_Project Identifier, B_Substantial Completion Date
Breathing Air Replenishment Systems				X	B_Project Identifier, B_Substantial Completion Date
Mechanical					
Ductwork	Notes: Model duct to actual size and model insulation and linings separate		X		B_Project Identifier, B_Substantial Completion Date, B_Material

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Grilles, Registers, And Diffusers	Notes: Ensure connection size is modeled to the correct dimension		X		B_Project Identifier, B_Substantial Completion Date, B_CFM, B_Make, B_Model Number, B_Free Area
Louvers			X		B_Project Identifier, B_Substantial Completion Date, B_CFM, B_Free Area, B_Pressure Drop, B_Make, B_Model Number
Valves: Manual, Actuated, Balance	Notes: Model as actual valve type (Example: Butterfly, Gate, Ball)		X		B_Project Identifier, B_Feeder Panel, B_Circuit, B_Substantial Completion Date, B_Make, B_Model Number, B_CV, B_Associated Equipment Name
Mechanical Fire Devices: Fire Dampers, Smoke Dampers, Fire/Smoke Dampers	Notes: Model as actuated or manual		X		B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Equipment Name, B_Feeder Panel, B_Circuit, B_Associated Equipment Name
Mechanical Control Devices: VFD			X		B_Project Identifier, B_Make, B_Model Number , B_Feeder Panel, B_Circuit, B_Equipment Name, B_Substantial Completion Date, B_Associated Equipment Name, B_Voltage, B_Amperage, B_Horsepower, B_Bypass
Mechanical Hydronic Equipment: Chillers, Cooling Towers, Boilers			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Design Pressure, B_Cooling load (BTU/HR), B_Heating load (BTU/HR), B_Flow Rate, B_Pressure Drop, B_Steam Load (LBS/HR), B_Boiler Input Rating, B_EWT, B_LWT, B_Refrigerant Type, B_Glycol Percentage and Type, B_Number of Cells, B_Horsepower, B_VFD or Not

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Mechanical Dry Equipment: AHU, MAU, RAH, VAV (Fan Powered or Not), FCU, Exhaust Fans, General Supply Fans, Condensers, Relief Hood, Intake Hood, Relief Hood, Transfer Fans, Closed Loop Coils			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Design Pressure, B_Supply CFM, B_Exhaust CFM, B_External Static Pressure, B_Percentage of Outside Air, B_Area Servicing, B_Cooling Load (BTU/HR), B_Cooling load (BTU/HR), B_Heating Load (BTU/HR), B_Pressure Drop, B_Steam Boiler Load (LBS/HR), B_EAT, B_LAT, B_Flow Rate, B_EWT, B_LWT, B_Glycol Percentage and Type, B_Gas Consumption, B_Motor Type, B_Motor Quantity, B_Horsepower, B_VFD or Not, B_Condensing Unit Size, B_Heater Energy Source
Heat Exchangers: Hydronic Plate and Frame			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Equipment Name, B_Hot Side GPM, B_Cold Side GPM, B_Hot Side EWT, B_Hot Side LWT, B_Cold Side EWT, B_Cold Side LWT, B_Glycol Percentage and Type, B_Number Of Plates, B_Hot Side Pressure Drop, B_Cold Side Pressure Drop
Electric Coils			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Voltage, B_Amperage, B_Wattage, B_Minimum Air Flow Rate, B_Stages, B_SCCR
Steam Dispersion Grid			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Equipment Name, B_Inlet Pressure

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Standalone Humidification Equipment	Notes: Equipment that includes steam generation and distribution within one unit		X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Equipment Name, B_Feeder Panel, B_Circuit, B_Steam Load
Mechanical Piping or Tubing	Notes: Model to nominal size and model insulation separate to correct size		X		B_Project Identifier, B_Substantial Completion Date, B_System Type, B_Material, B_Material Grade, B_Design Pressure
Pumps: Floor Mounted, Inline Pumps, Condensate Pumps, Coil Pumps	Notes: Model and name as correct type of pump (Example: Sump)		X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_GPM, B_Design Pressure, B_Feet of Head, B_Substantial Completion Date, B_Associated Equipment Name, B_VFD or Not, B_Horsepower
Site Steam And Condensate Equipment: Steam Traps, Clean Steam Generators, Steam Condensate Return Units, Boiler Feed Water System, Pressure Reducing Valves	Notes: Model steam traps as correct type. Examples: Inverted Bucket, Float and Thermostatic		X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Design Pressure, B_Steam Load (LBS/HR), B_Flow Rate, B_Feeder Panel, B_Circuit, B_Inlet Pressure, B_Outlet Pressure, B_Gas Consumption
Plumbing					
Process Waste (Chemical and Solvent): Filter Presess, Filters, Rectifiers, Pumps, Tanks, Mastering Pumps				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Tank Capacity
Domestic Water Equipment: Tanks, Pumps, Valves, Low Voltage Pipe Accessories, Water Heaters, Pressure Reducing Valves, Back-Flow Preventer, Expansion Tanks, Circulating Pumps	Notes: Model valves as correct type. Examples: Ball and gate.		X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Design Pressure, B_Material, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Gas Consumption, B_Inlet Pressure, B_Outlet Pressure, B_Heater Energy Source, B_Power Rating (KW), B_Tank Capacity

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Sanitary Equipment: Septic Tanks, Sump Pumps, Sewage Ejector, Tanks, Lift Station, Manholes, Monitoring Equipment			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Design Pressure, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Flow Rate, B_Tank Capacity
Storm Equipment: Culverts, Storm Ponds, Reservoirs, Drains and Ditches, Clean-outs, Manholes, Monitoring Equipment			X		B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Design Pressure, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Flow Rate, B_Tank Capacity
Plumbing Fixtures and Domestic Water Filters		X			B_Project Identifier, B_Make, B_Model Number, B_Substantial Completion Date, B_Design Pressure, B_Material, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Flow Rate, B_Supply Fixture Units, B_Drainage Fixture Units, B_Flush Type
Plumbing Pipe	Notes: Model all pipe regardless of size, model to actual pipe diameter not outside diameter of insulation Exclude: Traps, nipples, couplings, etc.		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade, B_Material Type, B_Design Pressure
Compressed Air	Notes: Model all pipe regardless of size		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade, B_Material Type, B_Design Pressure
Natural Gas And Metering Devices	Notes: Model all pipe regardless of size		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade, B_Material Type, B_Design Pressure
Gaseous Nitrogen (GN2)	Notes: Model all pipe regardless of size		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade, B_Material Type, B_Design Pressure

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Liquid Nitrogen (LN2)	Notes: Model all pipe regardless of size		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade or Schedule, B_Material Type, B_Design Pressure
Argon	Notes: Model all pipe regardless of size		X		B_Project Identifier, B_Substantial Completion Date, B_Material Grade, B_Material Type, B_Design Pressure
Site					
Pedestrian Pavement, Curbs, Gutters, Appurtenances, Exterior Steps And Ramps, Plaza And Walkway Lighting, Exterior Pedestrian Control Equipment			X		B_Project Identifier, B_Substantial Completion Date
Planting Irrigation				X	B_Project Identifier, B_Substantial Completion Date
Retaining Walls, Site Bridges, Site Screening Devices, Site Specialties		X			B_Project Identifier, B_Live Load Capacity, B_Substantial Completion Date
Roadway Pavement, Roadway Curbs And Gutters, Roadway Appurtenances, Roadway Lighting, Vehicle Fare Collection, Parking Lot Pavement, Parking Lot Curbs And Gutters, Exterior Parking Control Equipment, Gates, Arms			X		B_Project Identifier, B_Substantial Completion Date
Vehicular Tunnels, Pedestrian Tunnels, Service Tunnels, Tunnel Construction Related Activities			X		B_Project Identifier, B_Substantial Completion Date
Misc.					
AV Equipment				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit

Model Element(s) (See 6.2.1)	Graphical Notes and Exclusions (See 6.2.2)	As-Built Model Tolerance (See 6.2.3)			Non-Graphical Shared Parameter Requirements (If Applicable, See 6.2.4)
		1.5"	4"	Approx.	
Commercial Laundry And Dry Cleaning Equipment				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit
Misc. Equipment				X	B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Connected Load
Cranes, Hoists	Entirety of crane clearance must be modeled as a semi-transparent red clearance box. Entirety of crane travel path must be modeled as a semi-transparent green clearance box. Crane bus rails must be modeled in their in entirety to their exact dimensions.	X			B_Project Identifier, B_Make, B_Model Number, B_Serial Number, B_Substantial Completion Date, B_Feeder Panel, B_Circuit, B_Equipment Name, B_Crane Hook Height, B_Crane Capacity

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_3D Text	Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Multiline Text	Identity Data	Internal parameter used to populate 3D text on families.
B_Abbreiviated Name	Electrical Equipment, Electrical Fixtures	Text	Identity Data	Input abbreviated name derived from the B.02 Equipment Naming standard here.
B_Amperage	Electrical Equipment, Electrical Fixtures, Lighting Fixtures, Lighting Devices	Text	Identity Data	Electrical current.
B_Area Servicing	Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Text	Identity Data	Which area of the building is this piece of equipment servicing? (Examples: Room 123, East Hallway, Cleanroom 1)

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Associated Equipment Name	Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Text	Identity Data	Equipment name for the downstream piece of equipment this model element is associated with. (Example: Chilled Water Coil 1's B_Associated Equipment Name is AHU 1)
B_Actuator Type	Plumbing Accessories	Text	Identity Data	Electric or Pneumatic
B_Boiler Input Rating	Mechanical Equipment	Text	Identity Data	Boiler input rating in BTU/HR at sea level.
B_Building Name	All Categories	Text	Identity Data	BAE building name.
B_Bypass	Electrical Equipment, Mechanical Equipment	Yes/No	Identity Data	Does this equipment have a bypass? If applicable.
B_Calibrated range	Electrical Equipment, Electrical Fixtures	Text	Identity Data	Calibrated range examples: 4 to 20 MA, 0 to 10 VDC.
B_CFM	Air Terminals, Mechanical Equipment	Text	Identity Data	Cubic feet of airflow per minute.
B_Circuit	Duct Accessories, Electrical Equipment, Electrical Fixtures, Fire Alarm Devices, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Pipe Accessories, Plumbing Fixtures, Fire Protection, Plumbing Equipment	Text	Identity Data	Electrical circuits the model element is connected to. Example: 1, 3, 5.
B_Cold Side EWT	Mechanical Equipment	Text	Identity Data	Cold side entering water temperature.
B_Cold Side GPM	Mechanical Equipment	Text	Identity Data	Cold side gallons per minute.
B_Cold Side LWT	Mechanical Equipment	Text	Identity Data	Cold side leaving water temperature
B_Cold Side Pressure Drop	Mechanical Equipment	Text	Identity Data	Cold side pressure drop in feet of head.
B_Color Temp	Lighting Devices, Lighting Fixtures	Text	Identity Data	Measurement of warmth or coolness of light in Kelvin.
B_Concrete Compressive Strength	All Structural Categories	Text	Identity Data	How many pounds per square inch (psi) the element can handle when force is applied.

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Condensing Unit Size	Mechanical Equipment	Text	Identity Data	If apart of the unit, include the size of the condensing unit.
B_Connected Load	As Needed due to this falling under Misc.	Text	Identity Data	Regarding power (FLA, Volts, watts, etc.)
B_Control Type	Electrical Fixtures, Lighting Devices	Text	Identity Data	Wall switches, vacancy sensors, etc.
B_Cooling Load (BTU/HR)	Mechanical Equipment	Text	Identity Data	Cooling load of equipment in BTU/HR.
B_Cooling Type	Mechanical Equipment	Text	Identity Data	What type of cooling does this equipment utilize? (Examples: Chilled Water, DX)
B_Copper or Aluminum	Electrical Equipment, Electrical Fixtures	Text	Identity Data	Is the wire made of copper or aluminum?
B_Crane Hook Height	Generic Models, Specialty Equipment	Text	Identity Data	The hook height of the crane.
B_CRI	Lighting Devices, Lighting Fixtures	Text	Identity Data	Color rendering index measurement.
B_CV	Pipe Accessories, Mechanical Equipment	Text	Identity Data	Flow coefficient.
B_Delta Temp	Mechanical Equipment	Text	Identity Data	Difference in temperature between entering water/air and leaving water/air in Farenheight.
B_Design Pressure	Duct Accessories, Duct Fittings, Ducts, Mechanical Equipment, Pipe Accessories, Pipe Fittings, Pipes, Plumbing Fixtures, Fire Protection	Text	Identity Data	Design pressure in PSI.
B_Door Hardware	Doors	Text	Identity Data	Description of installed door hardware.
B_Drainage Fixture Units	Plumbing Fixtures, Plumbing Equipment	Text	Identity Data	Unit of measure indicating drainage flow from plumbing fixtures. Measured in DFU.
B_Drawing Tag	All Categories	Text	Identity Data	Internal parameter used to indicate the name for the Revit element used in historical drawings.
B_EAT	Mechanical Equipment	Text	Identity Data	Entering air temperature.

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Equipment Name	Duct Accessories, Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Pipe Accessories, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Multiline Text	Identity Data	Equipment name of the model element in compliance with the BAE Systems Naming Standard.
B_ESD	Analytical Floors, Floors	Text	Identity Data	What is the ESD (Electrostatic discharge) rating for the floor. Examples: Not rated, dissipative, or conductive.
B_EWT	Mechanical Equipment	Text	Identity Data	Entering water temperature.
B_Exhaust CFM	Mechanical Equipment	Text	Identity Data	Exhaust cubic feet per minute rating.
B_Explosion Rating	Fire Alarm Devices, Fire Protection	Text	Identity Data	Explosion rating of model element.
B_External Static Pressure	Mechanical Equipment	Text	Identity Data	Input external static pressure in inches of water (IN. W.C.)
B_Feeder Panel	Duct Accessories, Electrical Equipment, Electrical Fixtures, Fire Alarm Devices, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Pipe Accessories, Plumbing Fixtures, Fire Protection, Plumbing Equipment	Text	Identity Data	Name of the electrical panel that provides power to the model element.
B_Feet of Head	Mechanical Equipment	Text	Identity Data	Measure of pressure in feet of head.
B_Film Type	Windows	Text	Identity Data	Type of film applied to windows.
B_Filter Size	Mechanical Equipment	Text	Identity Data	Indicate filter size for the equipment.

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Finish	Casework, Ceilings, Columns, Curtain Panels, Curtain Systems, Curtain Wall Mullions, Doors, Floors, Railings, Roofs, Stairs, Structural Area Reinforcement, Structural Beam Systems, Structural Columns, Structural Connections, Structural Fabric Areas, Structural Fabric Reinforcement, Structural Foundations, Structural Framing, Structural Internal Loads, Structural Loads, Structural Path Reinforcement, Structural Rebar, Structural Rebar Couplers, Structural Stiffeners, Structural Trusses, Walls, Windows	Text	Identity Data	Type of finish applied.
B_Fire Rating	Ceilings, Doors, Floors, Walls, Windows	Text	Identity Data	Fire rating of model element in hours.
B_Flow Rate	Mechanical Equipment	Text	Identity Data	Flow rate in GPM (Gallons per minute).
B_Flush Type	Plumbing Fixtures, Plumbing Equipment	Text	Identity Data	Type of flushing system used by this model element.
B_Free Area	Air Terminals	Text	Identity Data	Free area for louvers only.
B_Gas Consumption	Mechanical Equipment	Text	Identity Data	Gas consumption in BTU/HR.
B_Glazing Type	Windows	Text	Identity Data	Type of glass. Examples: Double pane, quarter inch, etc.
B_Glycol Percentage and Type	Mechanical Equipment	Text	Identity Data	Glycol percentage and type.
B_GPM	Mechanical Equipment	Text	Identity Data	Gallons per minute flow rate.
B_Head Type	Fire Protection	Text	Identity Data	Type of head installed.
B_Heater Energy Source	Plumbing Equipment, Mechanical Equipment	Text	Identity Data	Is the heaters energy source electric, hot water, or natural gas?
B_Heating Load (BTU/HR)	Mechanical Equipment	Text	Identity Data	Heating load in BTU/HR
B_Hole Sizes	Electrical Equipment	Text	Identity Data	Hole Sizes for grounding bars.
B_Hook Travel	Generic Models, Specialty Equipment	Text	Identity Data	Hook travel for the crane.

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Horsepower	Electrical Equipment, Mechanical Equipment	Text	Identity Data	Horsepower rating.
B_Hot Side EWT	Mechanical Equipment	Text	Identity Data	Hot side entering water temperature.
B_Hot Side GPM	Mechanical Equipment	Text	Identity Data	Hot side gallons per minute.
B_Hot Side LWT	Mechanical Equipment	Text	Identity Data	Hot side leaving water temperature
B_Hot Side Pressure Drop	Mechanical Equipment	Text	Identity Data	Hot side pressure drop in feet of head.
B_Inlet Duct Size	Mechanical Equipment	Text	Identity Data	Inlet duct size for the equipment.
B_Inlet Pressure	Mechanical Equipment	Text	Identity Data	Inlet pressure in feet of head.
B_Inlet Steam Load (LBS/HR)	Mechanical Equipment	Text	Identity Data	Inlet Steam Load in LBS/HR.
B_Insulation Type	Duct Insulations, MEP Fabrication Ductwork, MEP Fabrication Pipework, Pipe Insulations	Text	Identity Data	Insulation type installed.
B_Is Load Bearing Wall	Walls	Yes/No	Identity Data	Is this a load bearing wall? (Yes or No)
B_LAT	Mechanical Equipment	Text	Identity Data	Leaving air temperature.
B_Lamp Type	Lighting Fixtures	Text	Identity Data	LED, Fluorescent, Incandescent or HID
B_Live Load Capacity	Floors, Roofs	Text	Identity Data	Measured in PSF (Pounds per square foot), describing the weight that a structure can support under a moving or variable load.
B_Lumens at Central Plane	Lighting Devices, Lighting Fixtures	Text	Identity Data	Lumens at a central plane.
B_LWT	Mechanical Equipment	Text	Identity Data	Leaving water temperature.
B_Make	Duct Accessories, Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Pipe Accessories, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Text	Identity Data	The manufacturer or make of the model element. (Examples: Trane, Carrier, Square D)
B_Material	Duct Fittings, Ducts, Pipe Fittings, Pipes, Fire Protection	Text	Identity Data	What is the physical material the model element is constructed of? (Examples: Stainless Steel, PVC, Copper)

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_MAWP	Mechanical Equipment, Pipe Fittings, Pipes, Fire Protection	Text	Identity Data	Maximum allowable working pressure.
B_Max Temp	Fire Protection	Text	Identity Data	Maximum temperature rating.
B_Minimum Air Flow Rate	Mechanical Equipment	Text	Identity Data	Minimum air flow rate in CFM.
B_Model Number	Duct Accessories, Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Pipe Accessories, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Text	Identity Data	Specific model number of model element.
B_Motor Type	Mechanical Equipment	Text	Identity Data	Type(s) of motors present. Example: a supply fan and return fan in the same AHU.
B_Motor Quantity	Mechanical Equipment	Text	Identity Data	How many motors are present within this piece of equipment.
B_Modeling Source	All Categories	Text	Identity Data	Internal parameter used to indicate where the model element was derived from. Examples: Contactor as-built, laser scan data, blueprints, etc..
B_Number of Cells	Mechanical Equipment	Text	Identity Data	Number of cooling tower cells.
B_Number of Wires	Conduit Fittings, Conduit Runs, Conduits	Text	Identity Data	Number of wires in conduit.
B_Outlet Pressure	Mechanical Equipment	Text	Identity Data	Inlet pressure in feet of head.
B_Percentage of Outside Air	Mechanical Equipment	Text	Identity Data	Actual percentage of outside air (not damper position).
B_Plenum Rating	Floors	Text	Identity Data	
B_Power Rating (KW)	Electrical Equipment, Electrical Fixtures	Text	Identity Data	If applicable list power rating in KW.
B_Precaster/Erector	All Structural Categories	Text	Identity Data	Fabricator or erector of the model element.
B_Pressure Drop	Mechanical Equipment, Air Terminals	Text	Identity Data	Inches of water column for air, feet of head for water.

Shared Parameter	Revit Categories	Type of Parameter	Group Parameter Under	Definition
B_Product URL	Duct Accessories, Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Pipe Accessories, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	URL	Identity Data	Manufacturer URL link for the model element.
B_Project Identifier	All	Text	Identity Data	Name of the project all submitted model elements are associated with. (Examples: FI AHU Replacement, AHQ Bathroom Remodel)
B_Refridgerant Type	Mechanical Equipment	Text	Identity Data	Examples: 134A
B_RF Foil	Floors, Roofs, Walls	Yes/No	Identity Data	Is there RF Foil on this building element?
B_Room Code	All Categories	Text	Identity Data	BAE room code the model element is located in.
B_SCCR	Electrical Equipment	Text	Identity Data	Short circuit current rating in KAIC.
B_Serial Number	Duct Accessories, Electrical Equipment, Electrical Fixtures, Furniture, Furniture Systems, Generic Models, Lighting Devices, Lighting Fixtures, Mechanical Equipment, Mechanical Equipment Sets, Pipe Accessories, Plumbing Fixtures, Rooms, Specialty Equipment, Food Service Equipment, Medical Equipment, Mechanical Control Devices, Plumbing Equipment	Text	Identity Data	Specific serial number of model element.
B_Signal Output	Electrical Equipment, Electrical Fixtures	Text	Identity Data	Analog or digital.
B_Snow Load	Roofs	Text	Identity Data	Rated snow load for the model element.
B_Sound Rating	Ceilings, Doors, Floors, Walls	Text	Identity Data	STC (Sound transmission coefficient).
B_Stages	Mechanical Equipment	Text	Identity Data	Number of discrete stages of heat.