

BIM Execution Plan

Autodesk School of Design

PRJ001-CON-XX-XX-SP-Z-0002

PRJ001

January 2025



PROJECT DOCUMENT CONTROL

DOCUMENT DETAILS

Project Name	Autodesk School of Design
Project Code	PRJ001
Appointing Party (client)	Autodesk
Lead Appointed Party (LAP)	Contractor Company
Project description	Design and build new education asset
Issue Date (Publish Date)	31/01/25
Project Address	TBC
Site Name	Autodesk Campus
Project Description	The Autodesk School of Design creates a transformative educational environment, fostering an enhanced student experience through state-of-the-art learning and collaboration spaces. Designed to support interdisciplinary engagement, the facility will empower students with innovative design tools and technologies to drive meaningful connections between disciplines, aligning with Autodesk's mission of enabling the next generation to imagine, design, and create a better world. The school will also cultivate industry partnerships, promoting collaboration for advancing sustainable, future-focused design education.

PROJECT DOCUMENT REVISIONS

Rev.	Amendments	Issue Date	Author	Checked By	Approved By	Comment
P01	First Issue	10/09/2024	John Doe	Jane Doe	Jane Doe	Issued for comments
P02	Ongoing Design Development	222/12/2024	John Doe	Jane Doe	Jane Doe	
C01	Contractual Release	31/01/2025				

KEY DOCUMENTS

Document	Name
Organisational information Requirements	PRJ001-CON-XX-XX-SP-Z-0001
BIM Execution plan (BEP)	PRJ001-CON-XX-XX-SP-Z-0002
Asset Information Requirements	PRJ001-CON-XX-XX-SP-Z-0003
Project Information Requirements	PRJ001-CON-XX-XX-SP-Z-0004
Exchange Information Requirements	PRJ001-CON-XX-XX-SP-Z-0005

PROJECT STAKEHOLDER AGREEMENT

The appointed stakeholder representatives listed below have reviewed and approved this BEP. These representatives hold the authority to endorse this document for the specified project and are responsible for notifying the Project Manager of any required updates.

Company Name	Stakeholder Representative	Orig. Code	Position	Date
Autodesk	TBC	ADSK	Client	TBC
Contractor Company	TBC	CON	Project Delivery Manager	TBC
Contractor Company	TBC	CON	Information Manager	TBC
Architecture Company	TBC	ARC	BIM Manager	TBC
Structure Company	TBC	STR	BIM Manager	TBC
Civil Engineering Company	TBC	CIV	BIM Manager	TBC
Building Services Company	TBC	BSC	BIM Manager	TBC
Landscape Design Company	TBC	LAN	BIM Manager	TBC

EXECUTIVE SUMMARY

The BIM Execution Plan (BEP) serves as the cornerstone for ensuring effective collaboration, consistency, and alignment across all project stakeholders. It outlines the strategic approach to meeting the project's information requirements, as defined by the client, and sets clear protocols for workflows, data exchange, and quality assurance. By adhering to this BEP, the project team ensures that deliverables align with the client's objectives, support compliance with industry standards, and facilitate a streamlined, efficient, and coordinated project lifecycle.

FEDERATION STRATEGY

Volume	Facility Name	Facility Type
Volume 1	Workshop	Educational entities
Volume 2	Digital Design Wing	Educational entities
Volume 3	Atrium	Educational entities

PROJECT OBJECTIVES

A summary of the objectives and outputs are summarised below. Refer to TIDP for a full description of all tasks to be completed to realise the project.

Stage	Strategic Objective	Project Activity	Responsible Party
1	Establish a functional Common Data Environment (CDE) for collaboration and data management.	Set up a CDE with appropriate folder structure (WIP, Shared, Published, Archive).	LAP
1		Invite team members with appropriate permissions.	LAP
2	Accurately model architectural elements to deliver COBie-compliant outputs.	Create an architectural model, embedding COBie-compliant data as per AIR.	ARC
3		Create packages and share architectural model and outputs in the appropriate formats.	ARC
2	Supply structural information for the project with COBie compliance.	Create structural model, embedding COBie-compliant data as per AIR.	STR
3		Create packages and share structural model and outputs in the appropriate formats.	STR
2	Deliver comprehensive MEP information with COBie-compliant data for facility management.	Create an MEP model, embedding COBie-compliant data as per AIR.	MEP
3		Create packages and share MEP model and outputs in the appropriate formats.	MEP
2	Supply civil engineering details with compliance to BIM and COBie standards.	Create a civil engineering model, embedding COBie-compliant data as per AIR.	CIV

3		Create packages and share civil engineering model and outputs in the appropriate formats.	CIV
4	Provide integrated project outputs ensuring interdisciplinary coordination.	Conduct clash detection using shared models in the CDE and resolve identified issues.	CON
5		Verify outputs and ensure all COBie data is complete and matches project requirements.	CON
6	Facilitate smooth project handover with complete and accurate documentation.	Organise all finalized deliverables in the 'Published' folder of the CDE for handover.	LAP

SOFTWARE PLATFORMS

Discipline	Software
Architecture Company	Revit 2025
Structure Company	Revit 2025
Building Services Company	Revit 2025
Landscape Company	Revit 2025
Civil Engineering Company	Revit 2025
Clash Detection	ACC: Design Collaboration / Model Coordination
Contractor	Navisworks Manage 2025 for 4D construction sequencing

SCOPE

This BEP outlines the procedures and standards that will guide the successful delivery of the project. It is aligned with the principles and requirements of ISO 19650-1 and ISO 19650-2. The BEP establishes the BIM uses for the project, such as design authoring, cost estimation, and design coordination, while detailing the processes for implementing BIM across the project lifecycle. It further defines roles, responsibilities, the scope of information sharing, business workflows, and the supporting software required for collaboration.

At the start of the project, the BIM strategy is documented and overseen by the BIM Coordinator/Manager. All project teams, including consultants involved in BIM collaboration, are expected to review and apply the defined standards and processes to ensure consistency and efficiency throughout the project.

1.0 PROJECT INFORMATION

1.1 PROJECT RESPONSIBILITIES

Task Team	Responsibility
Architecture	<ul style="list-style-type: none">• Design and produce Architectural model(s)• Ensure spatial coordination with other discipline models• Prepare, validate and issue all data at required gateways (graphical and non-graphical)• Ensure information models, drawings and data is to required Level of Information Need and compliant with BEP• Prepare documentation for information drops/gateways
Structure	<ul style="list-style-type: none">• Design and produce Structural model(s)• Ensure spatial coordination with other discipline models• Prepare, validate and issue all data at required gateways (graphical and non-graphical)• Ensure information models, drawings and data is to required Level of Information Need and compliant with BEP• Prepare documentation for information drops/gateways
MEP	<ul style="list-style-type: none">• Design and produce MEP model(s)• Ensure spatial coordination with other discipline models• Prepare, validate and issue all data at required gateways (graphical and non-graphical)• Ensure information models, drawings and data is to required Level of Information Need and compliant with BEP
Project Delivery Manager	<ul style="list-style-type: none">• Ensure all BIM stakeholders are compliant with the agreed goals
Information Manager	<ul style="list-style-type: none">• Run clash detection at regular intervals and produce clash report• Issue read only clash reports onto CDE (ACC) Shared area• Support Lead Designer on spatial coordination• Negotiate actions to resolve identified clashes• Chair BIM coordination meetings• Review COBie data from all disciplines and report on content to Task Teams• Maintain the BEP

1.2 PROJECT SCHEDULE/PHASES/MILESTONES

All deliverables for this project, must be strictly adhered to. Each Information Exchange is a deliverable assigned to you as per your assignment brief.

Inception			
Ref	Task	Responsible	Timescale
	Development of information requirements (OIR, AIR, PIR, EIR, BEP)	IM	
	Work with IM to develop TIDP	All Task Teams	
	Development of MIDP	IM	
	Establish CDE	IM	3 Days
	Define Information Exchange	LAP	
	Task Team Collaborate Blank Revit Project to Work In Progress (WIP) Area For Authorisation (S0)	All Task Teams	
	Task Team Upload Blank Drawing to Shared Area For Authorisation (S4)	All Task Teams	1 day
	Authorise Containers and Access	LAP	1 day
Design			
Ref	Task	Responsible	Timescale
	Design Information Model Package Shared	All Task Teams	See TIDP
	Reduce design conflicts in WIP models	All Task Teams	
Pre-construction			
Ref	Task	Responsible	Timescale
	Clash Analysis	CON	See TIDP
	Coordination Meetings - Assign and resolve clashes within Model Coordination tools	All Task Teams	Every 14 days
	Track and manage identified design issues	All Task Teams	
	Share updated PIM	All Task Teams	
	Clash-Free Federated Model Shared	CON	
	COBie Data for stage completion	All Task Teams	

	Produce 4D Sequencing Model	CON	
Construction			
Ref	Task	Responsible	Timescale
	Construction Information Model / Documentation and Drawings	All Task Teams	
	Clash Analysis	CON	See TIDP
	Coordination Meetings	All Task Teams	Every 14 days
	Response to Coordination Meetings	All Task Teams	
	Produce 4D Sequencing Model	CON	
	Laser Scan As Built	CON	
	Checks Against Design / As Built	All Task Teams	
	Response to As Built Information	All Task Teams	

1.3 TIDP

A Task Information Delivery Plan (TIDP) shall be prepared by each Task Team.

1.4 MIDP

The Master Information Delivery Plan (MIDP) is developed by consolidating the Task Information Delivery Plans (TIDPs) created by each task team involved in the project. Each TIDP outlines the specific information deliverables for its respective discipline or team. The MIDP brings these individual plans together, providing a comprehensive schedule of all model files, deliverables, and Information Exchange files for the entire project. Once complete, the MIDP should be appended to this document and uploaded to the Common Data Environment (CDE) 'Shared' area.

1.5 AUTHORISATION

Inception			
Ref	Company	Authorised Manager	Authority
	Contractor company	TBC	Upload, download, change Access/distribution
	Architecture company	TBC	Upload, download
	Structure company	TBC	Upload, download
	Civil engineering company	TBC	Upload, download
	Building services company	TBC	Upload, download
	Landscape design company	TBC	Upload, download
	Client	TBC	Download

2.0 PROJECT REQUIREMENTS

This section describes how the BIM Model and Facility Data are leveraged to maximize project value (e.g. design alternatives, life-cycle analysis, scheduling, estimating, material selection, pre-fabrication opportunities, site placement, etc).

2.1 INFORMATION EXCHANGE FORMATS

The dates for information exchange are referred to in **Section 1.2**. At each delivery stage, each Student will be required to upload information in the following formats to the CDE.

Agreed formats for model and drawing file exchange are noted below.

Format(s)	IFC	Excel	PDF	Native Format	Other (Add Format)
3D Model File(s)	X			X	
Drawing File(s)			X		
Clash Rendition					HTML Tabular
COBie/Asset Data File(s)		X			
Reports/Specifications			X		
4D Schedule Simulation Files				X	MP4
Point cloud model					RCP
Visualisation					JPG / MP4

3.0 DATA REQUIREMENTS

3.1 AIR (ASSET INFORMATION REQUIREMENTS)

The AIR outlines all the assets that require data and specifically what data is required to be input and when.

COBie schemas shall be issued from each discipline at handover in line with the TIDP and agreed schedules.

3.2 CONSTRUCTION OPERATIONS BUILDING INFORMATION EXCHANGE (COBIE)

This project will produce an output of COBie compliant information deliverables for facilities management use at the agreed Information Exchange stages throughout the life of the project.

It is the responsibility of each Student to ensure the integrity of COBie references (worksheet, column naming and positioning, cell and pick list referencing) prior to upload to the Shared area of the CDE.

3.3 COBIE PARAMETERS

It is the responsibility of each task team to ensure the required COBie fields are populated before issue to the CDE.

3.4 DATA DROP REVIEW & DELIVERY PROCEDURE

3.4.1 PROJECT INFORMATION MODEL SHARING PROCESS

Before issuing / sharing any files with other parties, please follow the process below:

1. Ensure the WIP project is **complete** / ready to be shared
2. Save a local copy of the file to your local computer
3. Open the local copy of the project on your computer
4. Collaborate this project to the **Task Team Shared** directory in CDE
 - **CDE>Architecture company>Shared**
5. Use the Model Issue Validation Checklist provided to **validate** the PIM directly in CDE > task team > Shared directory
6. Once validated, **package all validated model files, information exports and documentation** in the format required to the **CDE > Shared** directory for use by other task teams
7. Issue **completed validation checklists** in the format required to the **Task Team > Admin**

4.0 STANDARD METHOD & PROCEDURE

4.1 APPLICABLE STANDARDS

The use of a common language and standards are necessary to achieve a fully collaborative BIM process. To support consistency of graphical and non-graphical information, models shall be authored to an agreed industry standard. Where this document conflicts with the standards below the BEP will take precedence:

M=Mandatory R=Recommended		Application								
Standards	Guidance	Collaboration	File naming	Object naming	Drawing	Classification	CDE	Security	Asset Management	Contracts
ISO 19650-1	M	M	M	M	M	M	M	M	R	M
ISO 19650-2	M	M	M	M	M	M	M	M	R	M
ISO 19650-3	M	M	R	R	R	R	M	M	M	M
ISO 19650-4	M	R	R	R	R	R	R	M	R	M
ISO 19650-5	M	R	R	R	R	R	R	M	R	M
ISO 22014:2024	R	M	M	M	R	R	R	R	M	R
ISO 16739-1:2024	R	M	M	M	R	R	R	R	M	R
The NBS BIM Toolkit	R	R	R	R	R	R	R	R	R	R
ISO 7817-1:2024	R	M	R	R	M	R	R	R	R	R

4.2 FILE NAMING CONVENTION

Naming shall be based on ISO 19650 container naming. For full compliance, recommended character restrictions must be adopted as per appendix A. Delimiter should be hyphen (-) except between fields 7 and 8 where underscore (_) should be used.

1	2	3	4	5	6	7	8
Project	Originator	Functional Breakdown	Spatial Breakdown	Form	Discipline	Number	(Optional) Description

Field 1: Project Code	An abbreviated code or number identifying the project.
Field 2: Originator Code	An abbreviated code identifying the originator.
Field 3: Functional Breakdown	Identifier of which building, area, phase, volume or work package of the project the model file relates to if the project is sub-divided by zones/volumes.
Field 4: Spatial Breakdown	Identifier of which spatial aspect of the project does the information container relate to. eg. group of levels, region, location, floor etc.
Field 5: Form	Nature of the information container, document type. This will be M3 for 3D model files, as per ISO 19650
Field 6: Discipline	1 character discipline identifier code, as per ISO19650
Field 7: Number	Sequential numbering should be used with a 4 digit numerical identifier. Leading zeros should be used. It should be noted that as the Name is made up by concatenating all fields, the Number part is only unique where other fields are the same.
Field 8: Description	Descriptive field to define the type of data portrayed in the file. Avoid repeating information codified in other fields. Can be used to further clarify any other aspect of the contained data. It is preferred that this description does not change between issues. Optional

When naming any project models such as the native Revit model or an exported IFC etc, Appendix A gives detailed information as to field contents. Only use information listed in the Appendix.

An example of naming is detailed below:

Example: Architectural Project

Functional Breakdown: **01** (volume 1)

Project number: PRJ001

Originator: Architectural Company

Native Architectural Revit Project Information Model would be named:

PRJ001-ARC-01-ZZ-M3-A-0001

Exported IFC Architectural Revit Project Information Model would be named:

PRJ001-ARC-01-ZZ-MR-A-0001

4.3 DOCUMENT NAMING CONVENTION

When naming any documentation such as a validation checklist or COBie Schema etc, the model that is being validated or data extracted from, will be used to supply the **Functional Breakdown** and **Spatial Breakdown** fields as well as the **Discipline** for the document.

Example :

Validation checklist when validating the above project would be named:

PRJ001-ARC -**01-ZZ-TSP-A**-0001

COBie schema for the above project would be named:

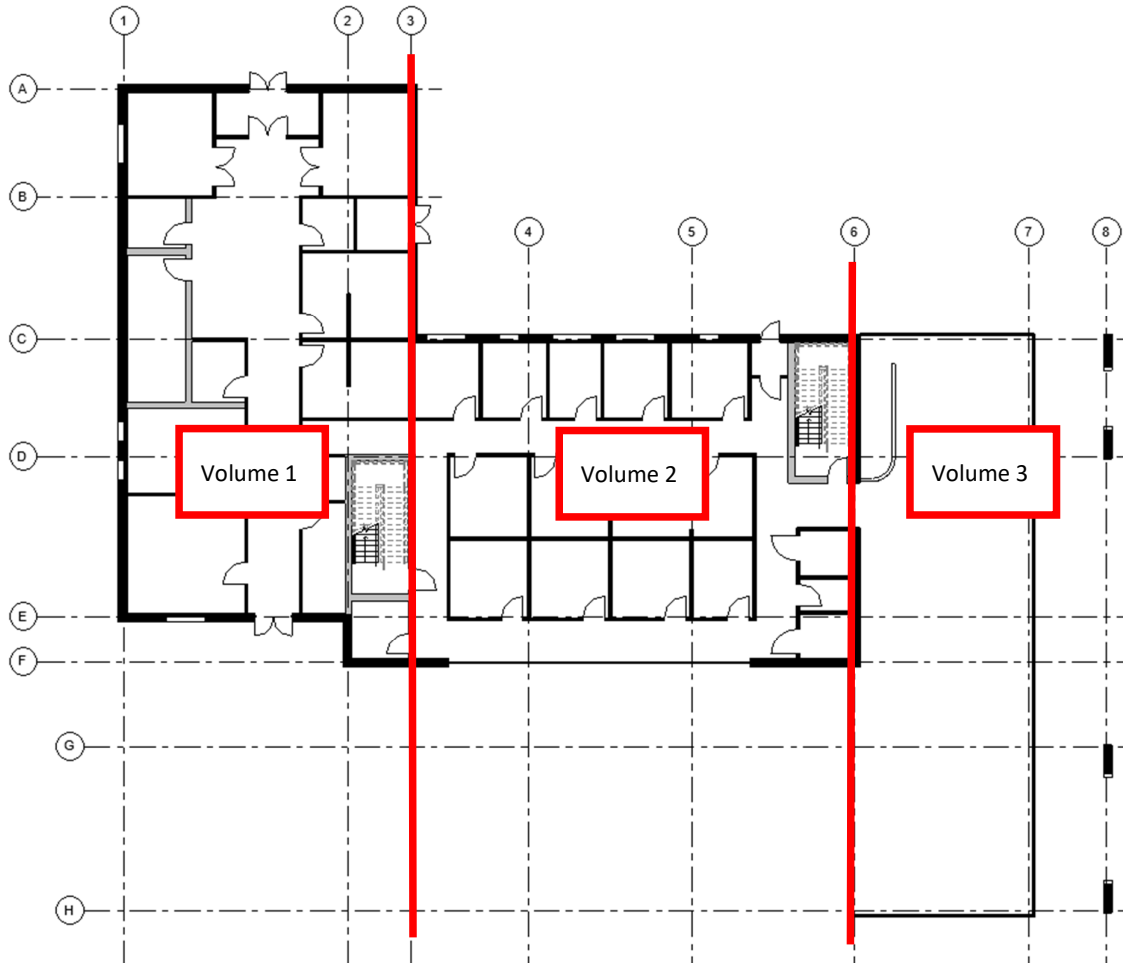
PRJ001-ARC -**01-ZZ-LIE-A**-0001

4.4 FEDERATION STRATEGY

This project is to be split into volumes or zones to facilitate efficient manipulation in the virtual environment. Each discipline will be saved and federated separately such as architecture, structure etc. For use, upload and download when working in a collaborative manner. This process must be managed by the **Lead Designer**. Volume plans and naming conventions to be shared via the CDE.

The volume strategy needs to be defined at project outset, as volume codes are included in the file naming example in **Appendix A**.

All teams must use the Volume Strategy as a foundation for coordination.



4.5 BIM OBJECT/ASSET NAMING

Naming shall be based on ISO 22014:2024. For full compliance, recommended character restrictions should be adopted. Names shall be composed of only alphanumeric characters. The naming fields shall use the underscore character (_) as a delimiter between fields. Information within each field is to be CamelCase (capitalized first letters to words). No spaces or punctuation shall be used before the description.

All newly authored OR EDITED BIM objects will be produced and shared by project team members, therefore it is critical to follow the standard object naming identified below.

1	2	3	4
Source	Type	Subtype / Product	Descriptor
Source	Used to convey the object Author company		
Type	IFC Type		
Subtype / Product	Additional specialist information such as product number		
Descriptor	Plain English description of the element		

Example:

Author : Architecture Company

IFC Type : Door

Product Number : GRP123X

Plain English Description : Single flush GRP Composite Exterior Door

ARC_Door_GRP123X_Single flush GRP Composite Exterior Door

4.6 CLASSIFICATION

The Uniclass 2015 classification system must be used to support COBie and Asset Management requirements. Classification for **all files uploaded to the CDE** should be in accordance with Uniclass 2015, using the PM table where possible.

Examples

PM_40_35_04	Architects Models
PM_40_40_27	Elevation drawings
PM_10_20_27	Environmental reporting information
PM_40_60_39	Information validation
PM_40_35_83	Structural engineering models
PM_60_10_60	Site grid reference

****A dedicated metadata area named 'Classification' has been created in the CDE for this purpose. Classification information should be attached as metadata and not used in the container name.**

4.7 PROJECT SPECIFIC NAMING CONVENTIONS

Project naming conventions must be agreed and observed by all suppliers in order to align with the CAFM system. The following naming conventions are required in this project. Refer to Appendix A for a detailed breakdown of project naming specifics.

4.6.1 SPACE / ROOM NUMBERS

Space / Room Numbers	
Spaces/ Rooms to be numbered as:	LEVELCODE-RM-UNIQUEID
	Example 00-RM-001
	Use the defined Floor numbers only for the Level Code
	Use existing room numbers for the unique ID
	Room within room example 00-RM-001a

4.6.2 LEVEL NAMES

Level Names	
Levels to be named as:	LEVELCODE DISCIPLINEID
	Example 00 SSL
	Use the defined Floor numbers only for the Level Code
	Use one of the following identifiers on every level:
	Structural projects:
	TOF : Top of Foundation
	SSL : Structural Slab Level
	TOS : Top Of Steelwork
	Architectural projects:
	FFL : Finish Floor Level
	Note: All other levels to use LEVELCODE only R1 etc

4.8 STATUS CODES & REVISIONS

Status codes are required for **all files uploaded to the CDE**

See Appendix B.

4.9 REVISION/VERSION EXPLAINED

Revision for Models	
Shared	
P01	1 st version of the shared model
P02	2 nd version of the shared model
P03	3 rd version of the shared model
	Revisions should be numbered sequentially as the design develops
Published	
C01	1 st version of the constructed model
C02	2 nd version of the constructed model
C03	3 rd version of the constructed model
	Revisions should be numbered sequentially as for any changes or updates

4.10 MODEL DIVISION

Each discipline should provide the Information Manager with a full list of all workset names to be used on the project. This list should be published to all members of the project team for information. Worksets are to be named in accordance with the table below. Any changes to model subdivision or workset provision must be agreed by the entire design team. Any changes are to be recorded in the table below and the Project BEP updated on the CDE. Worksets should be created in such a manner to ease substitution of geometry with sub-Contractor's models e.g. curtain walling.

Discipline code	- (hyphen)	Classification (Uniclass 2015)	_ (underscore)	Description
Architecture				
A	-	EF_25_10	_	Walls
A	-	EF_35_10	_	Stairs
A	-	EF_30_10	_	Roofs
Structure				
S	-	EF_20_10	_	Columns
S	-	EF_20_10	_	Framing
S	-	EF_30_20	_	Floors

4.11 PROJECT INFORMATION MODEL (PIM) DELIVERY STRATEGY

Specific requirements of Stakeholders must be considered to enable effective coordination. To ensure that all information is accessible to all parties please follow the guidance detailed below. Any deviation from this table must be agreed with the Information Manager.

Item	Description
1	No more than one building shall be modelled in a single file and contain only data from one discipline.
2	Model files and information should not exceed 200MB. Should the file size be breached, the model shall be segregated following the Federation Strategy as defined.
3	Placeholder models for key items such as levels, ceilings, under floor voids etc. are to be defined at an early stage. Placeholder models cannot be changed without agreement from all stakeholders. Placeholder models will be subdivided and ownership passed as the design is progressed.

4.12 PROJECT COORDINATES

3D geo-location coordinates to be shown no less accurate than 1mm in all directions.

	Local Intersection		Local Coordinates			
Coordinate	Gridline	Gridline	Easting	Northing	Elevation	True North Rotation
Survey Point	N/A	N/A	0	0	0	0
Project Base Point	H	1	276754.0	65621.0	85600.0	10 degrees (East)

Project coordinates must be used at all stages of the project if you are uncertain as to the status of your model coordinates please check with the task team manager for guidance before sharing models.

4.13 MODEL UNITS

Models shall use consistent units and will be drawn at 1:1 (actual size). Where generic models are superseded by specialist design or the specification of products Task Team Managers are to ensure dimensional accuracy is maintained.

- For building projects: millimetres
- For infrastructure projects: metres with three decimal places
- Area: m2
- Volume: m3
- Weight: Kg
- Angle: Degrees

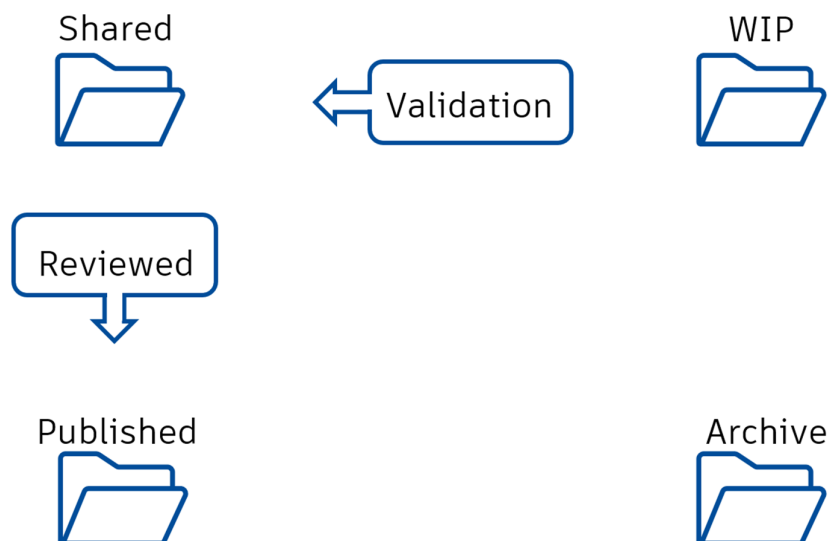
4.14 CDE WORKFLOW

The principle workflow phases of the CDE will need to be aligned with ISO 19650 guidelines:

- Work in Progress – Design WIP models by individual discipline specific stakeholders
- Shared – Validated Design Models Shared (see appendix D)
- Published – Approved Models and Data verified
- Archived – This folder will maintain the project history for knowledge and regulatory and legal requirements. Access to this folder will be read only to all

Types of checks need to be undertaken before uploading to the shared area are:

- Model suitability check
- Technical content check
- COBie completeness check
- Drawings extract checks along with any additional documentation
- Approval by the Task Team Manager (e.g. BIM Manager)



5.0 COLLABORATION PROCEDURES

The process flow indicates the detailed information flow between disciplines and the method for approval and coordination via WIP and Shared process.

5.1 COLLABORATION STRATEGY

The Information Manager shall coordinate the file transfer process via a Common Data Environment at the earliest opportunity. All issued documents must comply with the document management protocols set out in the PEP.

CDE Platform	Autodesk Construction Cloud
CDE Website Address	acc.autodesk.com
Document Controller	Information Manager (TBC)

APPENDIX A – CONTAINER NAMING

Project Code	Originator		Functional Breakdown		Spatial Breakdown		Form		Discipline		Number
Code	Code	Company	Code	Volume	Code	Level	Code	Document Type	Code	Role	Number
PRJ001	ADSK	Autodesk	ZZ	All / multiple volumes	ZZ	Multiple levels	M3	Native 3D Model File (Revit 2025)	A	Architectural	0001
	CON	Contractor Company	XX	No volumes	XX	No level applicable	MR	IFC Model Rendition exported from native model	B	Building Control	0002
	ARC	Architecture Company	01	Volume 1	00	Base floor level (ground floor)	MCR	Model used for Clash detection purposes	C	Civil Engineer	0003
	STR	Structure Company	02	Volume 2	01	Upper floor level	DG	2D Drawing	D	Drainage, Highways Engineer	Etc.
	BSC	Building Services Company	03	Volume 3	R1	Roof level	M2	2D Model File	E	Electrical Engineer	
	LAN	Landscape Company			F1	Foundations	IE	List Information Exchange (COBie data sheet)	F	Facilities Manager	
	MEP	Mechanical Electrical and Plumbing Company					TSP	Text Specification (Validation checklist)	G	Geographical & Land Surveyor	
							LRP	List based Reports (including zipped clash reports)	H	Heating& ventilation	
							LDB	List: Database	K	Client	
							HS	Health and safety	L	Landscape Architect	
							MI	Minutes / action notes	M	Mechanical Engineer	
							TPP	Presentation	P	Public Health Engineer	
							PR	Programme	Q	Quantity Surveyor	
							RD	Room data sheet	S	Structural Engineer	
							RI	Request for information	W	Contractor	
							TRP	Textual : Report	X	Subcontractor	
							SA	Schedule of accommodation	Y	Specialist Designer	
									Z	General	

APPENDIX B – STATUS CODES

Graphical	Data conveyed using shape and arrangement in space i.e. geometrical model only.				
Non-Graphical	Data conveyed using alphanumeric characters.				
Documents	Including but not limited to correspondence, drawings, schedules, specifications, calculations, spreadsheets.				
Status	Description	Revision	Graphical	Non-Graphical	Documents
WORK IN PROGRESS					
S0	Initial Stage or WIP	P01.01 etc to P0n.0n etc	X	X	X
SHARED (NON-CONTRACTUAL)					
S1	For Coordination	P01 to P0n	X	X	X
S2	For Information		X	X	X
S3	For Review and Comment		As Required	X	X
S4	For Stage Approval		X	X	X
PUBLISHED DOCUMENTATION (CONTRACTUAL)					
A1, A2, An	Approved & accepted as stage complete	C01 to C0n	X	X	X
B1, B2, Bn	Partially signed off: With minor comments from the Appointing party	P01.01 etc to P0n.0n etc	X	X	X
PUBLISHED FOR AIM ACCEPTANCE					
CR	As Constructed Record documentation, PDF, Model etc.	C01 to C0n	X	X	X

APPENDIX C - GLOSSARY

AIM	Asset information model
AIR	Asset information requirements
AMS	Asset management system
BASIR	Built asset security information requirements
BASMP	Built asset security management plan
BEP	BIM execution plan
BIM	Building information modelling
CAFM	Computer-aided facilities management
CDE	Common data environment
COBie	Construction Operations Building information exchange
EAMS	Estate's asset management system
EDMS	Electronic document management system
EIR	Exchange information requirements
FM	Facilities management
GUID	Globally unique identifier. It is automatically produced by the software and assigned to each element.
IFC	Industry foundation classes
MIDP	Master information delivery plan
OIR	Organisational information requirements
PIM	Project information model
PIR	Project information requirements
TIDP	Task information delivery plan
USD	Universal scene description
WIP	Work In Progress folder
Federated model	A model containing multidiscipline models, such as architecture and struct
Clash detection	The process of identifying conflicts and issues between discipline models by collaborating in 3D as part of the co-ordination process

APPENDIX D – EXAMPLE VALIDATION

Issue model to **SHARED** directory in each task

This checklist should be used in conjunction with the project BIM Execution Plan 4.14

Model Name	XXX
Date	XXX
Prepared By	Your name here
Approved By	(Leave Blank)
Purpose for issue (Status code and reason, for Information etc.)	

Model Preparation provides a guide for preparing the model prior to validation / issuing at the end of each task. **Before continuing, ensure WIP model is complete / ready to be shared**

Model Preparation

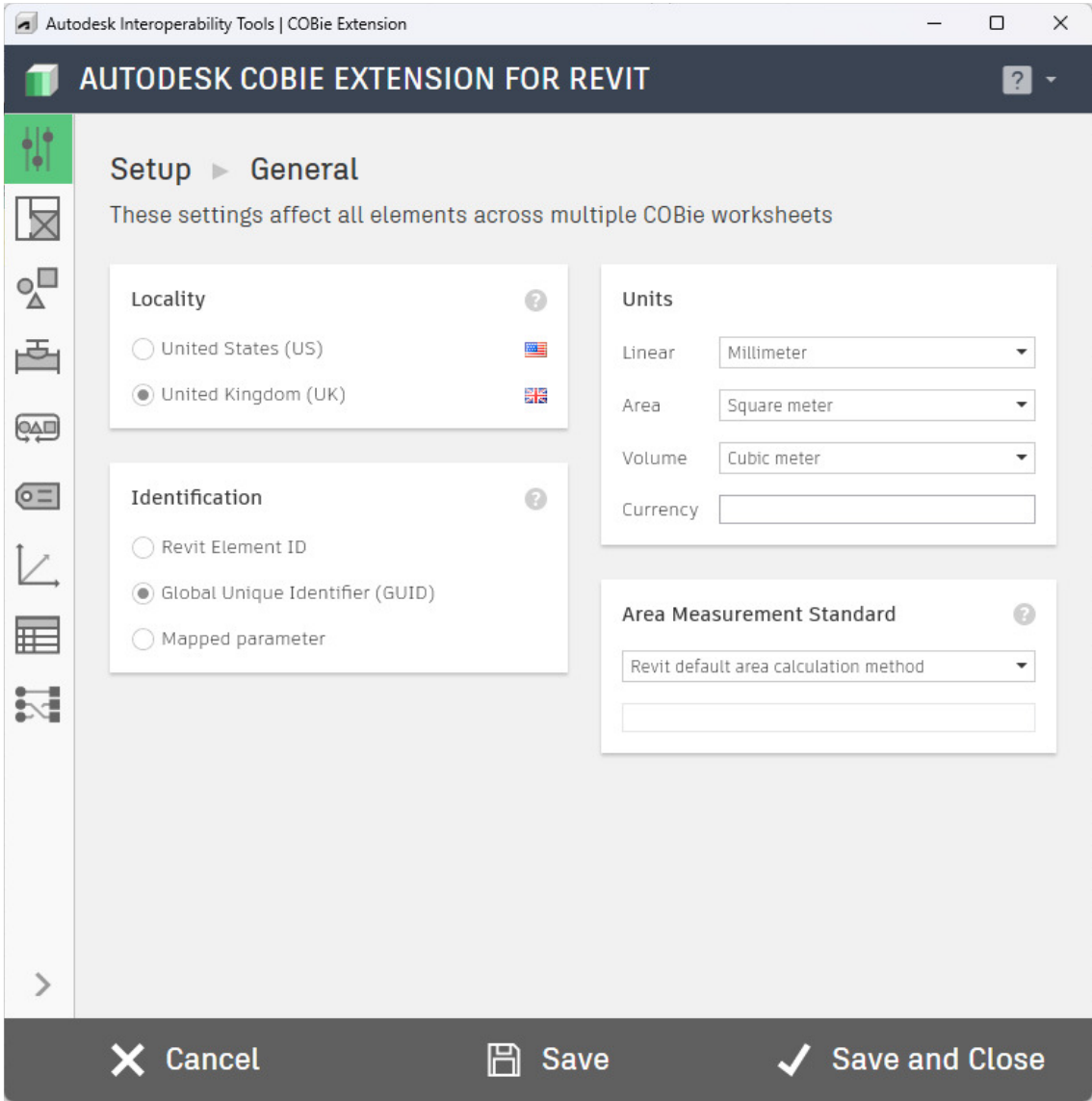
#	Task	y/n
1	Check model file name conforms BEP	
2	Review all warning messages within project information model	
3	Check model data is located to the grid, origin & orientation / elevation within project model	
4	Remove all linked models from the project	
5	Check that all content is in the correct Workset and conforms to project requirements	
6	Assign a StartUp View : set to 'Project Information' Sheet	
7	Update the Status code on the project information sheet to reflect issue status etc	
8	Update the Project coordinate information on the project information sheet	
9	Check that all content follows the agreed Federation Strategy	
10	Remove all concept / mass models and design intent	
11	Check Classification information is applied to the required elements in the model	
12	If requested, check clashes have been resolved within Task Team Models	
13	Check / assign status codes to all files uploaded	
14	Check uniclass 2015 info are correctly applied to all files in space provided in CDE	

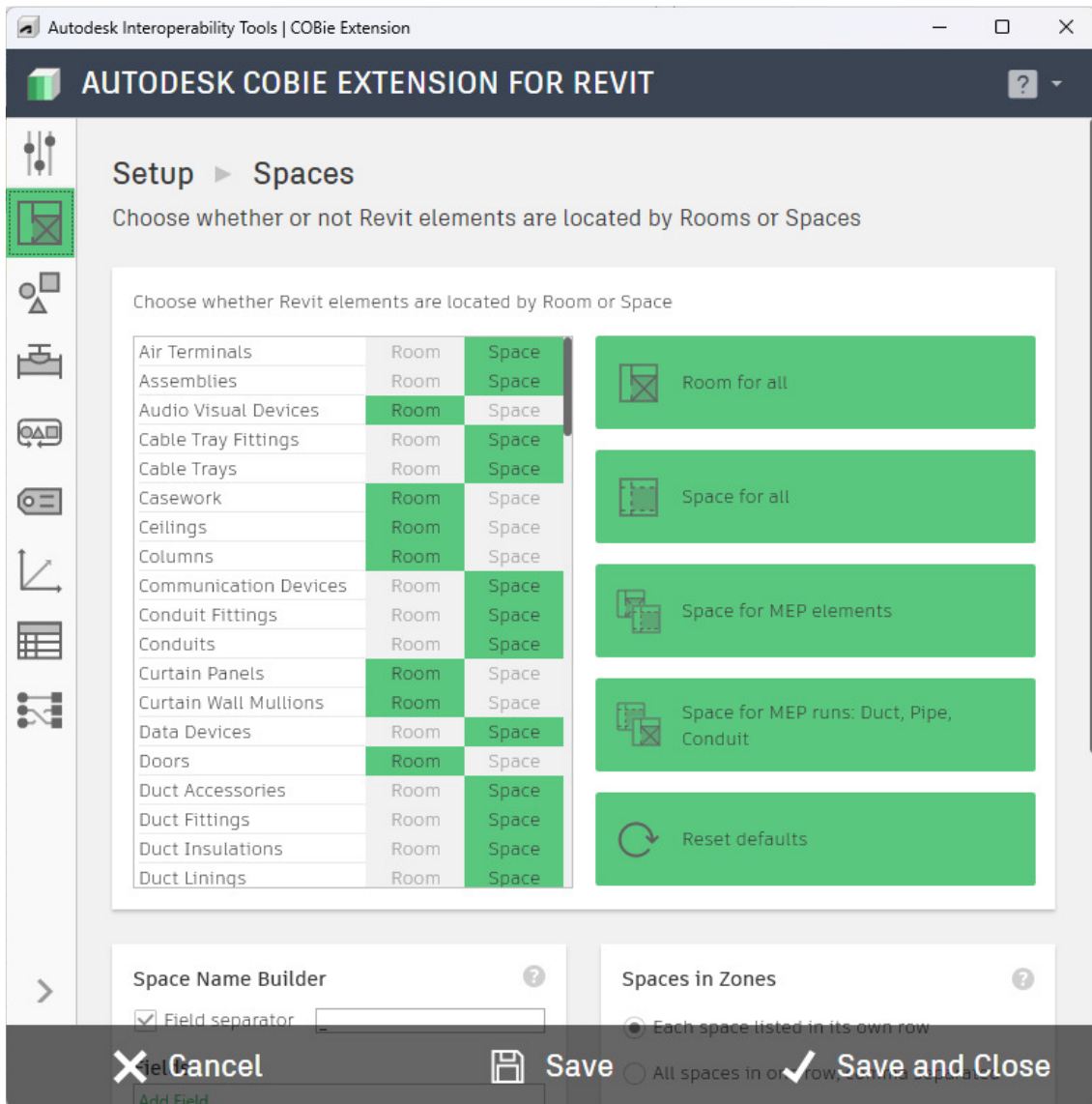
15	Fully purge the project model	
16	Save the validation checklist to the admin directory named as per requirements	

APPENDIX E – CLASH AVOIDANCE

Structural Model (all volumes) vs MEP Model (all volumes)	
Structural vs MEP	
Level 02 Structural Framing vs Level 1 Cable Trays	Hard 10mm
Level Roof Structural Framing vs Level Roof Ducts	Hard 50mm
Level 02 Floors vs Level 1 Ducts	Hard 50mm
Architectural Model (all volumes) vs Structural Model (all volumes)	

APPENDIX F – COBie PROJECT SETTINGS





Autodesk Interoperability Tools | COBie Extension

AUTODESK COBIE EXTENSION FOR REVIT

?

Setup

Types

Specify properties for the COBie type spreadsheet

Types

Name Builder

?

☒ Field separator

Fields

Add Field...

Revit Category

X

Family

X

Type Mark

X

Preview

MyCategory_MyFamily_123

Category

?

First Priority

Classification Manager 'Uniclass Pr' parameter v

Second Priority

Revit 'Assembly Code' parameter value from the

Third Priority

Revit 'Keynote' parameter value from the type di

Fourth Priority

Use 'n/a'

Description

?

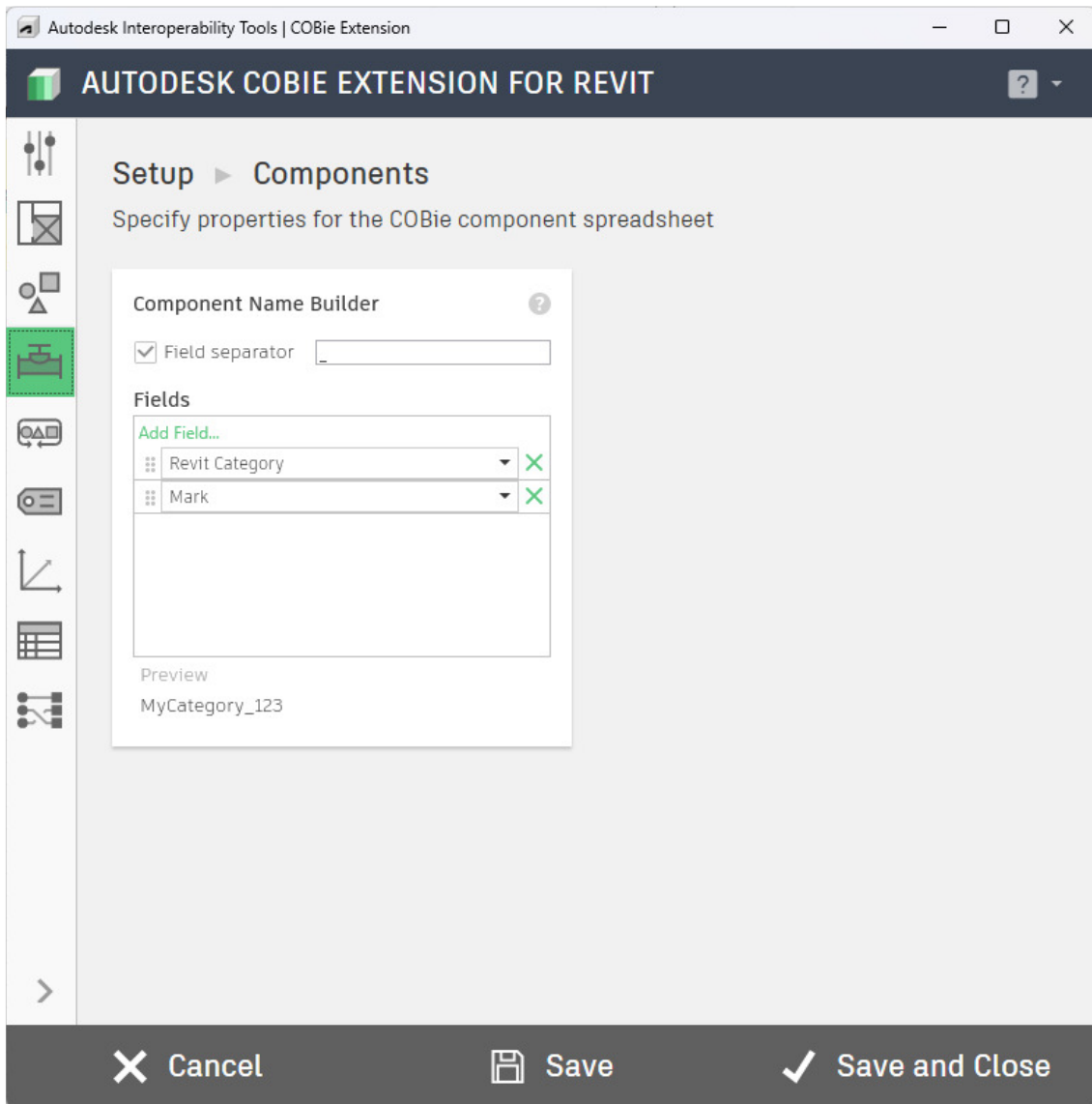
☐ Family : Type

☒ Description parameter from Type Properties

X Cancel

Save

✓ Save and Close



?

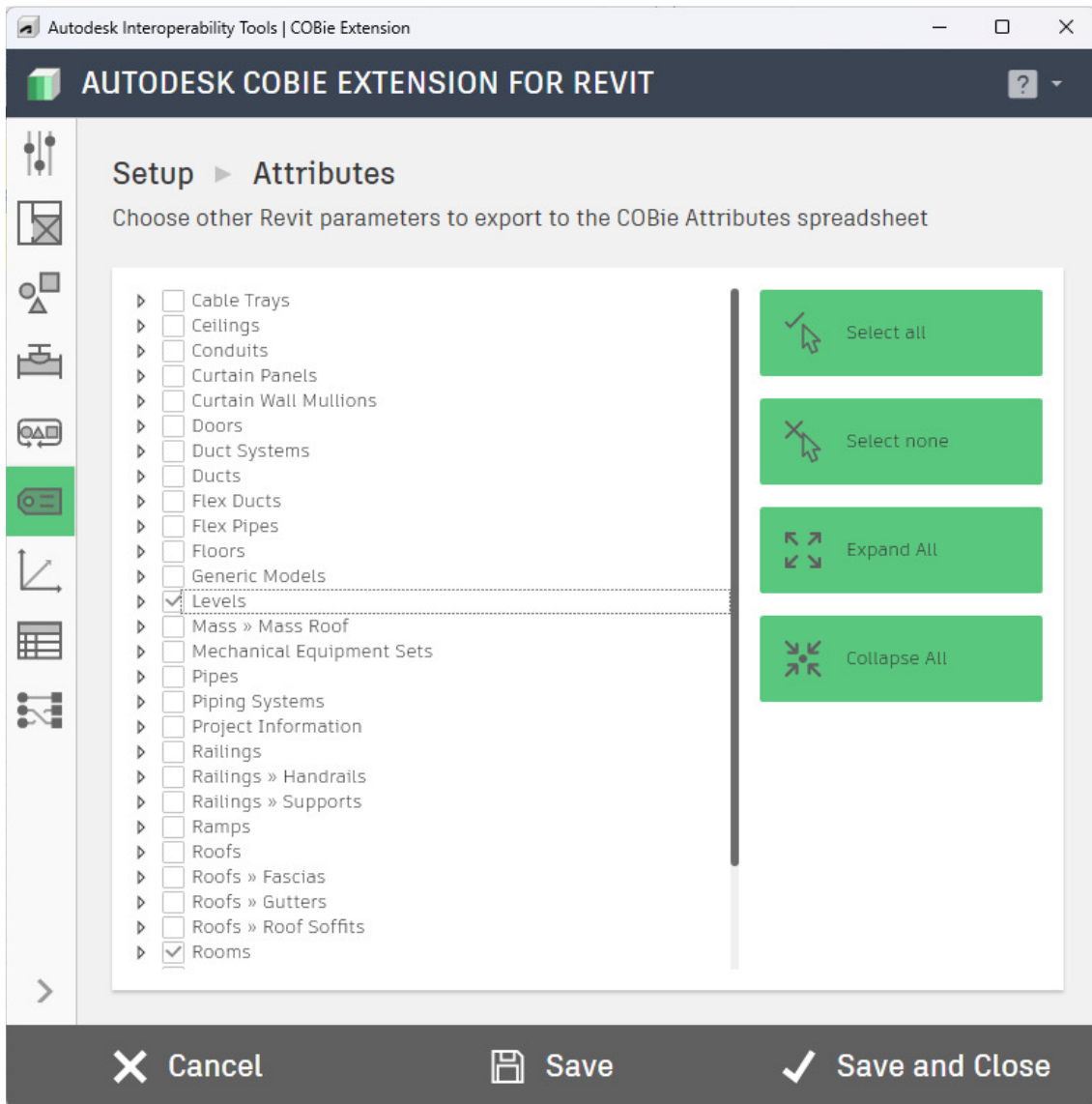
>

?

?

Export each system's associated Components and Types to the appropriate spreadsheet

✓ Save and Close



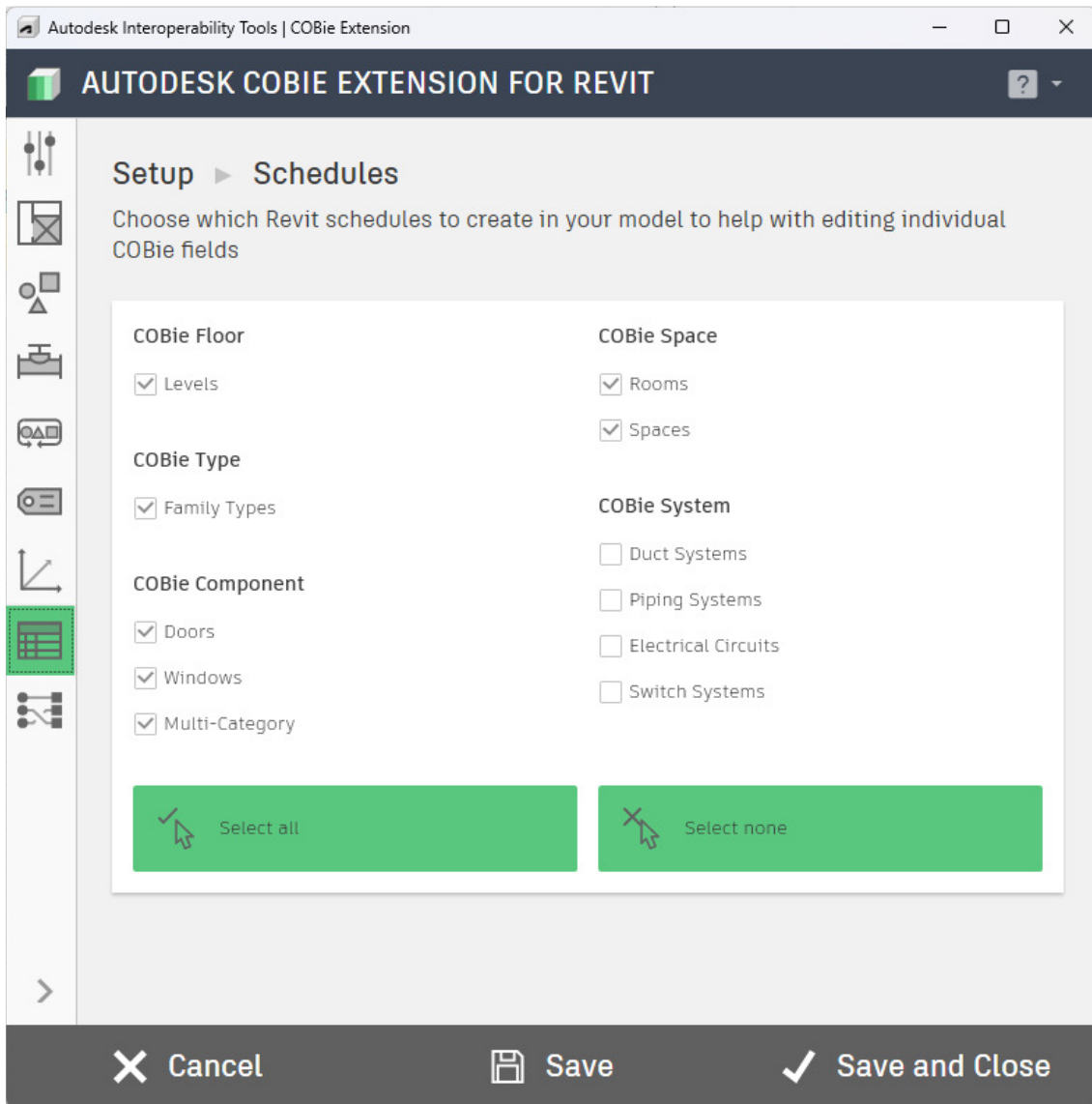
?



☐ Location point

☒ Bounding box

✓ Save and Close



?

>

 Cancel  Save  Save and Close

APPENDIX G – IFC EXPORT SETTINGS

Modify Setup

<In-Session Setup>

<IFC 2x3 Coordination View 2.0 Setup>

<IFC 2x3 Coordination View Setup>

<IFC 2x3 GSA Concept Design BIM 2010 Setup>

<IFC 2x3 Basic FM Handover View Setup>

<IFC 2x2 Coordination View Setup>

<IFC2x3 COBie 2.4 Design Deliverable View Setup>

<IFC4 Reference View [Architecture] Setup>

<IFC4 Reference View [Structural] Setup>

<IFC4 Reference View [BuildingService] Setup>

<IFC4 Design Transfer View [Unofficial] Setup>

<IFC4x3 Setup>

<IFC-SG Regulatory Requirements View Setup>

General

Additional Content

Property Sets

Level of Detail

Advanced

Geographic Reference

IFC version

IFC 2x3 Coordination View 2.0

Exchange Requirement

Category Mapping

<In-Session Setup>

...

File type

IFC

Phase to export

Default phase to export

Space boundaries

None

☐ Split Walls, Columns, Ducts by Level

File Header Information...

Project Address...

Reset

OK

Cancel

Modify Setup

<In-Session Setup>

<IFC 2x3 Coordination View 2.0 Setup>

<IFC 2x3 Coordination View Setup>

<IFC 2x3 GSA Concept Design BIM 2010 Setup>

<IFC 2x3 Basic FM Handover View Setup>

<IFC 2x2 Coordination View Setup>

<IFC2x3 COBie 2.4 Design Deliverable View Setup>

<IFC4 Reference View [Architecture] Setup>

<IFC4 Reference View [Structural] Setup>

<IFC4 Reference View [BuildingService] Setup>

<IFC4 Design Transfer View [Unofficial] Setup>

<IFC4x3 Setup>

<IFC-SG Regulatory Requirements View Setup>

General

Additional Content

Property Sets

Level of Detail

Advanced

Geographic Reference

Linked files

Do not export

☐ Export only elements visible in view

☐ Export rooms, areas and spaces in 3D views

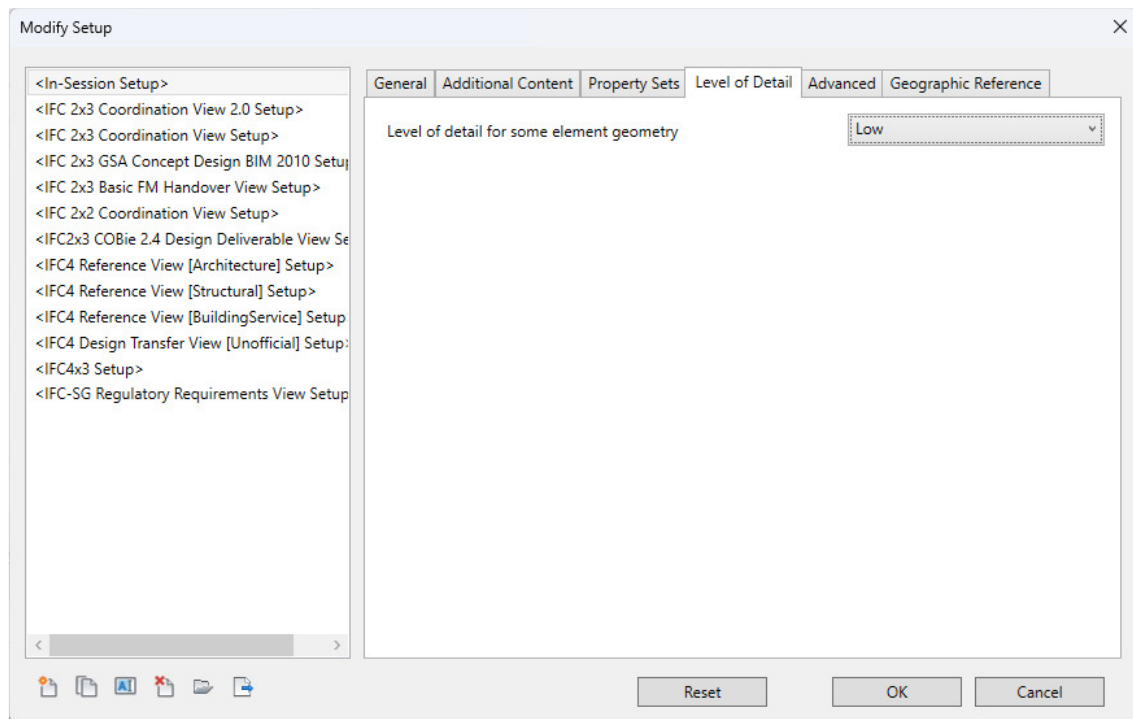
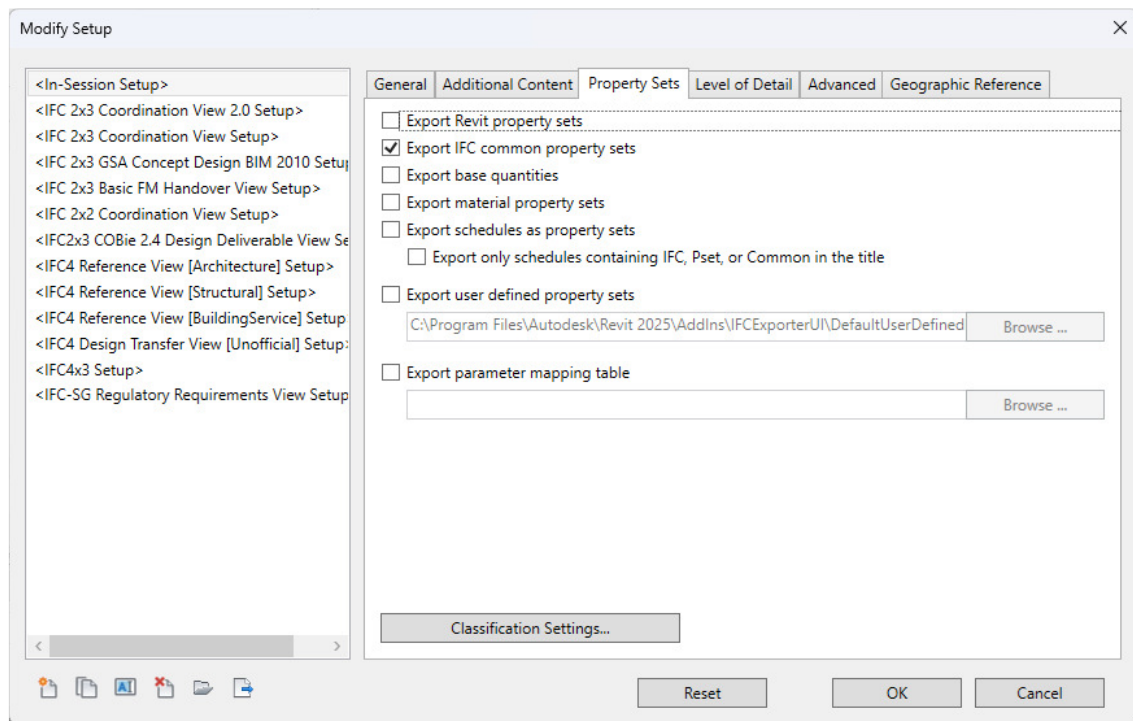
☒ Include Steel Elements

☐ Export 2D plan view elements

Reset

OK

Cancel



Modify Setup

<In-Session Setup>

- <IFC 2x3 Coordination View 2.0 Setup>
- <IFC 2x3 Coordination View Setup>
- <IFC 2x3 GSA Concept Design BIM 2010 Setup>
- <IFC 2x3 Basic FM Handover View Setup>
- <IFC 2x2 Coordination View Setup>
- <IFC2x3 COBie 2.4 Design Deliverable View Setup>
- <IFC4 Reference View [Architecture] Setup>
- <IFC4 Reference View [Structural] Setup>
- <IFC4 Reference View [BuildingService] Setup>
- <IFC4 Design Transfer View [Unofficial] Setup>
- <IFC4x3 Setup>
- <IFC-SG Regulatory Requirements View Setup>

General Additional Content Property Sets Level of Detail Advanced Geographic Reference

- ☐ Export parts as building elements
- ☐ Allow use of mixed "Solid Model" representation
- ☐ Use active view when creating geometry
- ☐ Use family and type name for reference
- ☐ Use 2D room boundaries for room volume
- ☐ Include IFCsite elevation in the site local placement origin
- ☐ Store the IFC GUID in an element parameter after export
- ☐ Export bounding box
- ☐ Keep Tessellated Geometry as Triangulation
- ☐ Use Type name only for IFCType name
- ☐ Use visible Revit name as the IFCentity name
- ☐ Always export faceted floors and roofs as a single IFC entity
- ☐ Set "Last Modified" user to the Author in Project Information

Entities to Export ...

Reset OK Cancel

Modify Setup

<In-Session Setup>

- <IFC 2x3 Coordination View 2.0 Setup>
- <IFC 2x3 Coordination View Setup>
- <IFC 2x3 GSA Concept Design BIM 2010 Setup>
- <IFC 2x3 Basic FM Handover View Setup>
- <IFC 2x2 Coordination View Setup>
- <IFC2x3 COBie 2.4 Design Deliverable View Setup>
- <IFC4 Reference View [Architecture] Setup>
- <IFC4 Reference View [Structural] Setup>
- <IFC4 Reference View [BuildingService] Setup>
- <IFC4 Design Transfer View [Unofficial] Setup>
- <IFC4x3 Setup>
- <IFC-SG Regulatory Requirements View Setup>

General Additional Content Property Sets Level of Detail Advanced Geographic Reference

Project Site Internal

Coordinate Base Shared Coordinates

Projected Coordinate System Reference

EPSG Code

Name

Description

Geodetic Datum

Eastings

Northings

Elevation

Angle from True North

Override Reset

Reset OK Cancel