

BIM interoperability suite



In this session will consider why we use interoperability tools to collaborate with others, and look at the workflow to follow when creating COBie (Construction Operations Building information exchange) data

Why Interoperability Tools

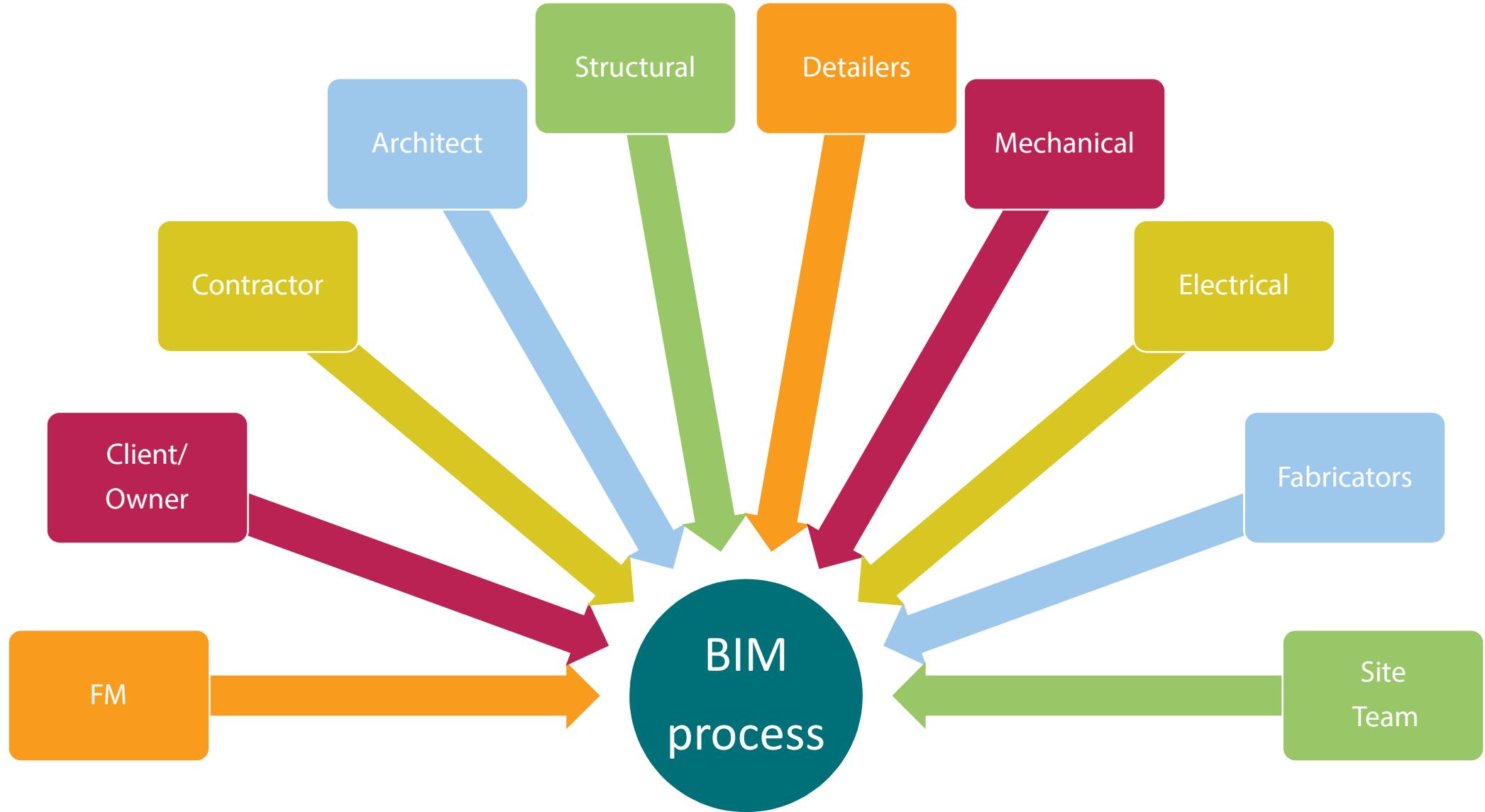
Where to access the tools

Elements of the toolkit

What Is COBie

COBie Workflow

Why Interoperability Tools



Why interoperability is needed

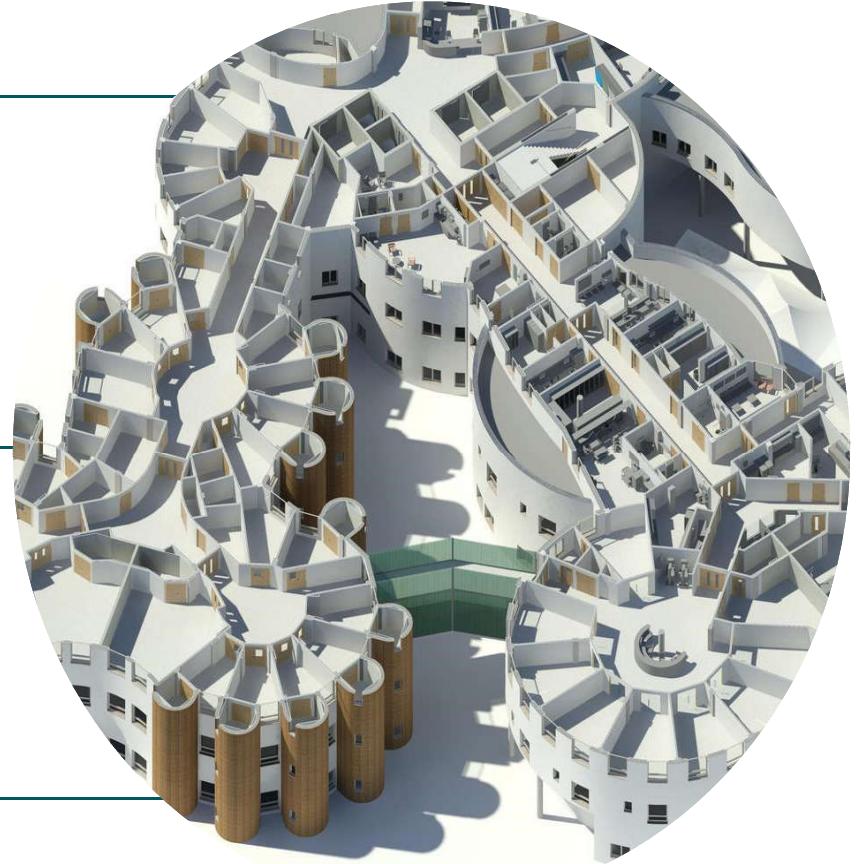
different platforms



Geometry
Modularisation &
Standardisation



Schedules &
Data multiple
formats



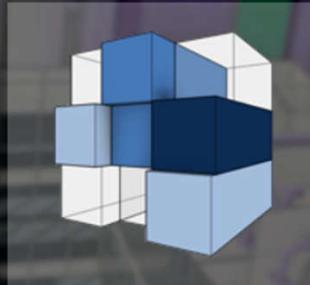
Collaborative Project Information

Why interoperability is needed

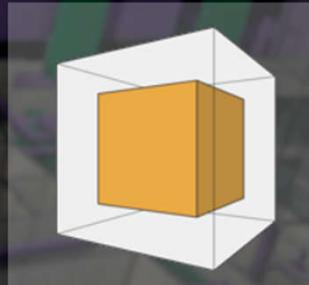
Where to access Autodesk tools



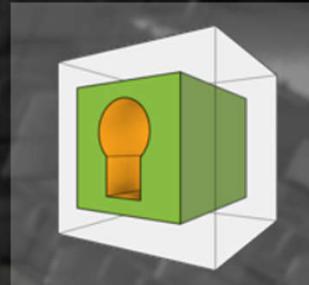
These free Autodesk apps are designed to help architects, engineers, contractors and owners with their Building Information Modeling (BIM) workflows.



Autodesk
Classification
Manager for Revit



Autodesk
Model Checker
for Revit



Autodesk
Model Checker
Configurator



Autodesk
Enhanced DWG
Exporter for Revit



Autodesk
COBie Extension
for Revit



Autodesk
COBie Extension
for Navisworks



COBie Extension

Features

Download

Videos

Sample Files

Help

Resources

Download the BIM Interoperability Tools for Revit



The BIM Interoperability Tools collection can be downloaded here.

The installer includes the Classification Manager, Model Checker, Model Checker Configurator, and COBie Extension for Revit.

The tools can also be downloaded from manage.autodesk.com, or through the Autodesk Desktop Connector.

The BIM Interoperability Tools for Revit are free to download and use, just select your Revit version and get started.



Revit 2020



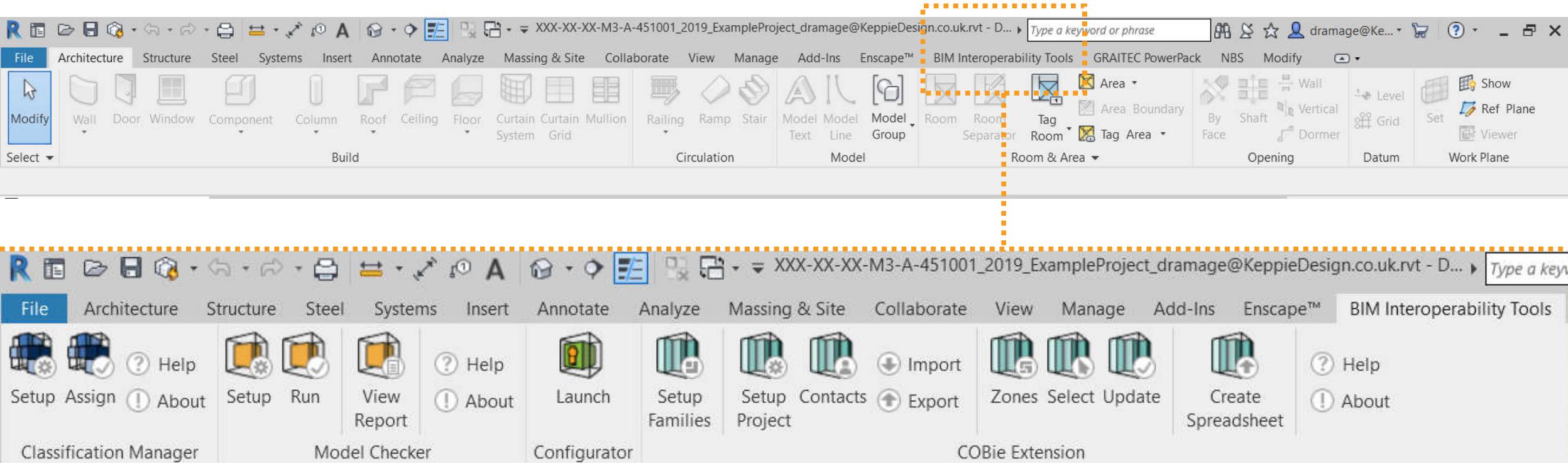
Revit 2019



Revit 2018



Revit 2017



XXXX

Classification Manager

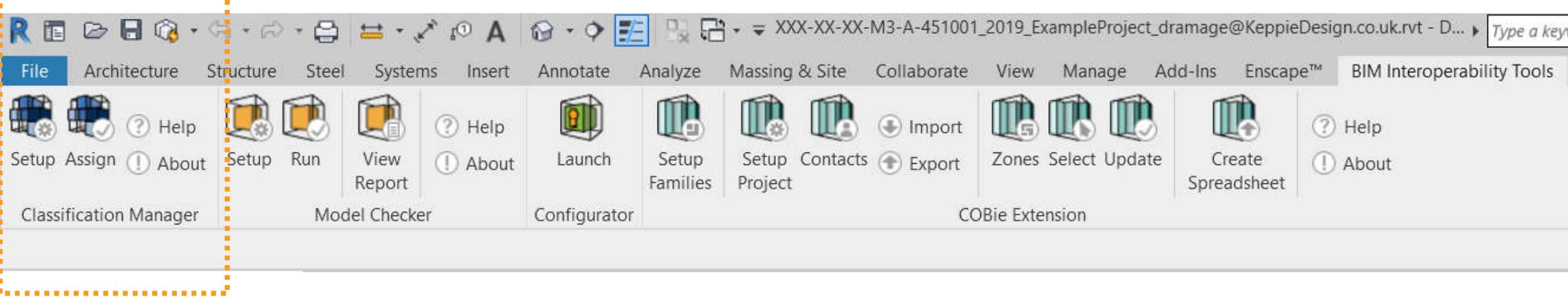
Classification :

the act or process of dividing things into groups according to their types

(Definition of **classification** from the ***Cambridge Advanced Learner's Dictionary & Thesaurus*** © Cambridge University Press)

“Adopting a common language is essential when coordinating construction project information across a project or estate. Classification provides a common language or ‘reference dictionary’ that is used to accurately describe things.”

<https://bimportal.scottishfuturestrust.org.uk>



File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Interoperability Tools

Help Help About Launch Configurator Import

AUTODESK CLASSIFICATION MANAGER FOR REVIT

Setup
Select the Excel file containing classification systems.
Press F1 for more help

A-7000_ProjectInformation X COBie.Component(Doors)

Select Database

 Title Uniclass 2015 Database
Date Wednesday, August 28, 2019
Author Autodesk
Description Uniclass 2015 database for the Classification Manager for Revit

Browse
<http://www.biminteroperabilitytools.com/classificationmanager/hosted dbs/Uniclass2015.xlsx>

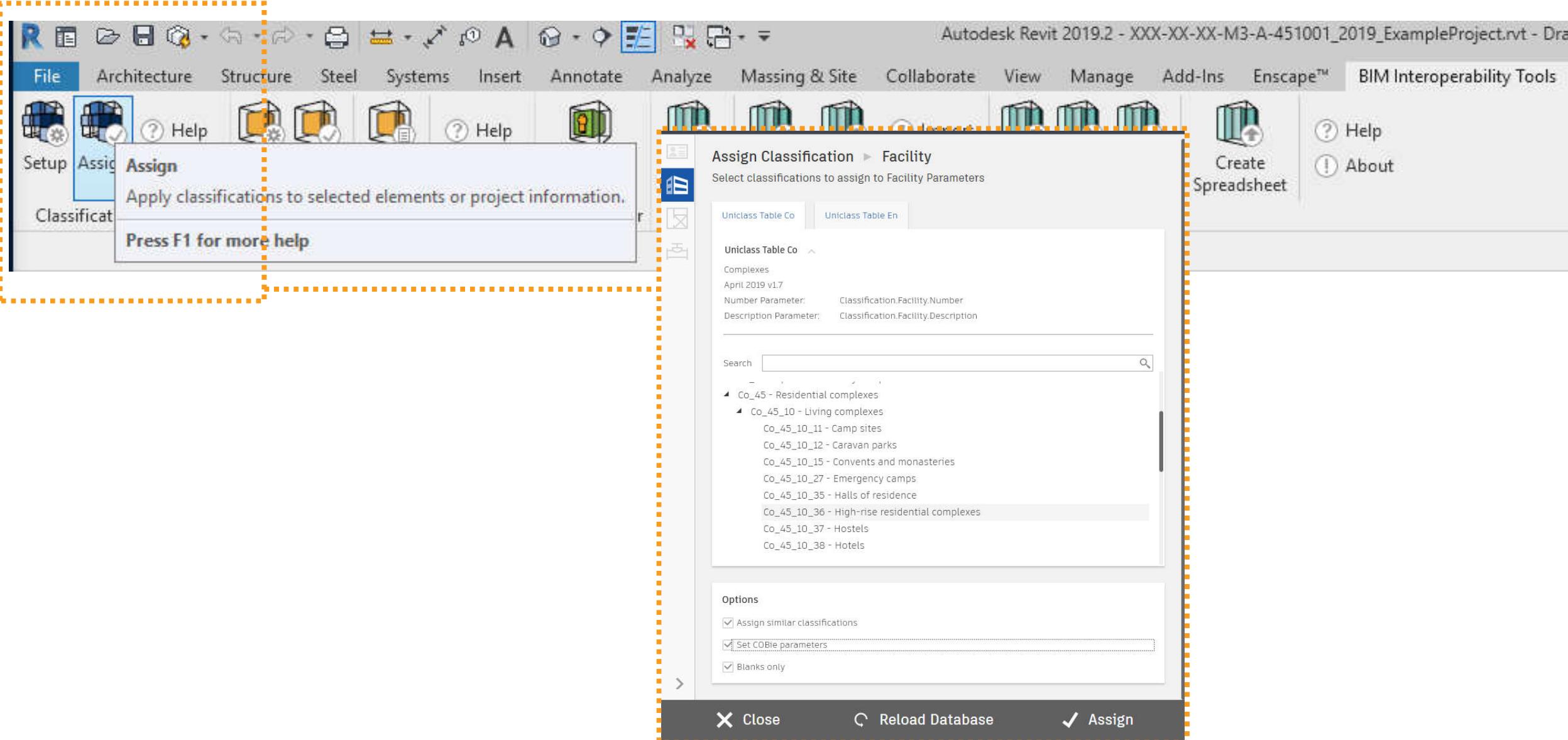
Recent
Uniclass 2015 Database

Public Library

- Uniclass 2015 Database
- OmniClass Database
- UniFormat and MasterFormat Database
- IFC4 Add 1 and IFC2x3 TC1 Database
- ASTM E1557 - UniFormat II Database
- FICM Spaces Database

Cancel Finish

Setup



Assign

AUTODESK CLASSIFICATION MANAGER FOR REVIT

Assign Classification > Element

Select classifications to assign to Revit Types and Components

Uniclass Table EF Uniclass Table Pr Uniclass Table Ss

Uniclass Table Ss

Systems

April 2019 v1.14

Number Parameter: Classification.Uniclass.Ss.Number

Description Parameter: Classification.Uniclass.Ss.Description

Search Filter <Any>

Ss_30_12_15 - Concrete plank floor systems
Ss_30_12_20 - Deck systems
Ss_30_12_30 - Flat roof and floor cassette structural insulated panel (SIP) systems
Ss_30_12_32 - Framed decking systems
Ss_30_12_33 - Framed floor systems
Ss_30_12_34 - Framed mezzanine systems
Ss_30_12_35 - Glass unit masonry floor systems
Ss_30_12_45 - Lift-up concrete plank floor systems
Ss_30_12_50 - Masonry (flat arch) floor systems
Ss_30_12_60 - Pier and jetty structure systems

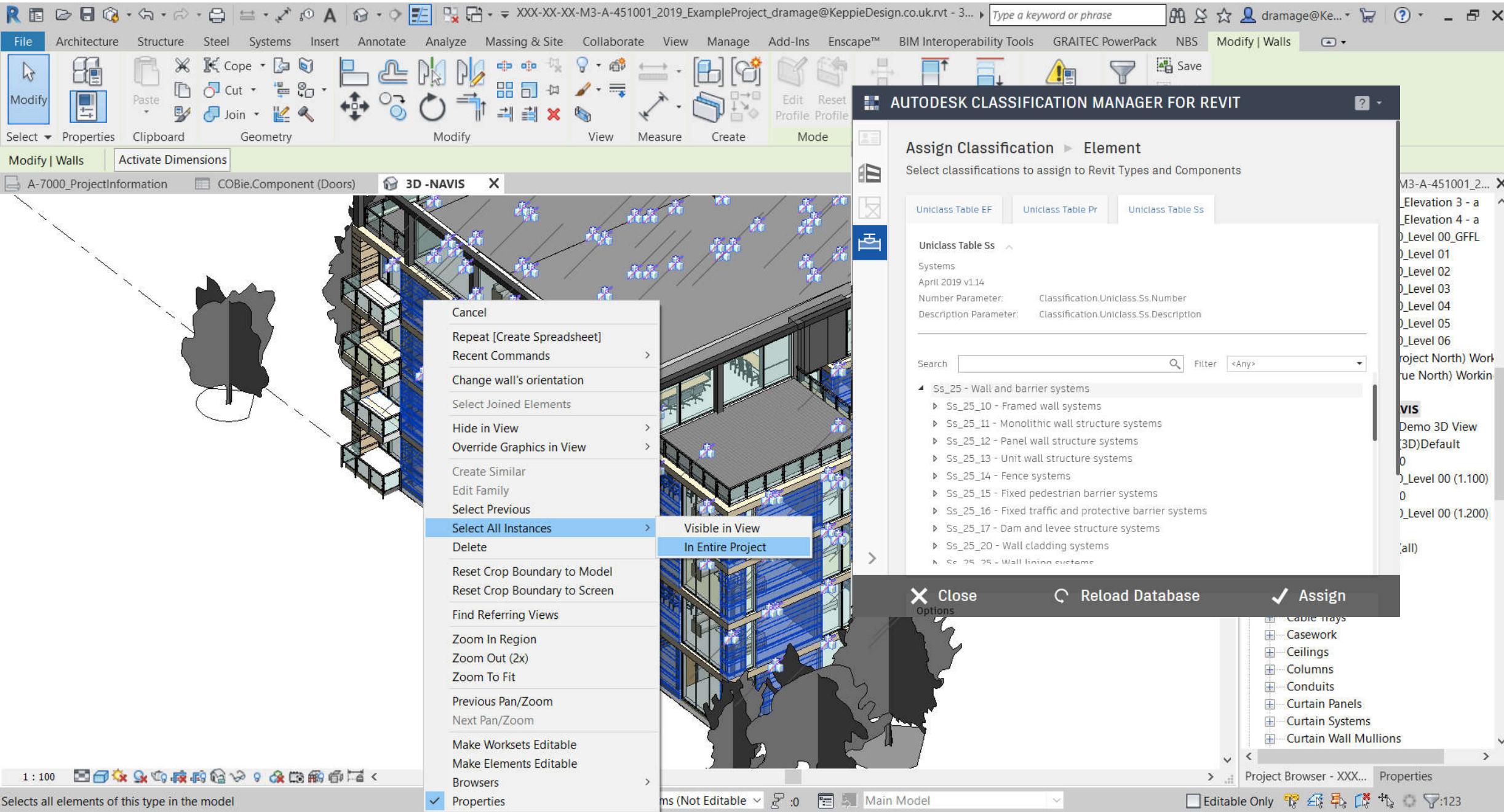
X Close Reload Database ✓ Assign

Project Browser - XXX-XX-XX-M3-A-451001_2...
Elevation: A-7030_Elevation 3 - a
Elevation: A-7030_Elevation 4 - a
Floor Plan: A-7000_Level 00_GFLL
Floor Plan: A-7000_Level 01
Floor Plan: A-7000_Level 02
Floor Plan: A-7000_Level 03
Floor Plan: A-7000_Level 04
Floor Plan: A-7000_Level 05
Floor Plan: A-7000_Level 06
Floor Plan: Site (Project North) Workin
Floor Plan: Site (True North) Workin
A-7005_3D
3D View: 3D - NAVIS
3D View: A-7005_Demo 3D View
3D View: Z-7005_(3D)Default
A-7060_GAPlans 1-100
Floor Plan: A-7060_Level 00 (1.100)
A-7060_GAPlans 1-200
Floor Plan: A-7060_Level 00 (1.200)
Legends
Schedules/Quantities (all)
Sheets (View Purpose)
Families
Annotation Symbols
Cable Trays
Casework
Ceilings
Columns
Conduits
Curtain Panels
Curtain Systems
Curtain Wall Mullions

Project Browser - XXX... Properties

1 : 100 A-3010_Roofs : Roofs : Basic Roof : Flat - Warm - Single Ply on Metsec : R4 A-2040_AreasRooms (Not Editable) Main Model Editable Only

Element Assign



Multi Element Assign

Screenshot of a BIM software interface showing a multi-story building model with blue structural frames and glass windows. The software is in 'Modify | Walls' mode.

The top menu bar includes: File, Architecture, Structure, Steel, Systems, Insert, Annotate, Massing & Site, Collaborate, View, Manage, Add-Ins, Enscape™, BIM Interoperability Tools, GRAITEC PowerPack, NBS, Modify | Walls, and a search bar.

The toolbar below the menu bar includes: Modify, Select, Properties, Clipboard, Geometry, Modify, View, Measure, Create, Mode, Modify Wall, Warning, and Selection.

The 'Modify | Walls' tab is selected in the ribbon bar.

The 3D view shows a building with a complex steel frame structure. A callout points to a specific wall section labeled 'RIGHT'.

The 'Properties' panel on the right lists the following data:

- Basic Wall: Ext - 100 65 75 100 25 38 30_Stone and Metal Frame_Coursed
- Walls (123)
- Structural Usage: Non-bearing
- Dimensions:
 - Length
 - Area
 - Volume
- Identity Data:
 - Image
 - Comments
 - Mark
 - Workset: A-2510_ExternalWalls
 - Edited by
- Phasing:
 - Phase Created: New Construction
 - Phase Demolished: None
- Data:
 - COBie
 - COBie.ExternalIdent...
 - COBie.CreatedBy
 - COBie.CreatedOn
 - COBie.Component...
 - COBie.Component...
 - COBie.Component...
 - COBie.Component...
 - COBie.Component...

Buttons in the bottom right of the properties panel include: Properties help, Apply, Project Browser - XXX..., and Properties.

The bottom status bar includes: Click to select, TAB for alternates, CTRL adds, SHIFT unselects., A-2040_AreasRooms (Not Editable), Main Model, Editable Only, and a filter icon.

COBie enable

COBie Overview

The COBie standard was developed as a **testable, contractable alternative to document-based construction handover documents**. COBie began with a detailed review of the contents of handover documents and all prior efforts to capture such information. Three related sets of information were found in the banker boxes and binders [East 2007]. The first was maintenance information. **Maintenance information** is required to keep each piece of equipment in a functional condition. The second was operational information. **Operational information** is required to keep a system of building components performing its intended function. The third was asset management information. **Asset management information** is the physical and fiscal information needed to transfer ownership of a building from the contractor to the owner. Based on that study, COBie was designed to include information supporting building maintenance, operation, and asset management. While other building information would be needed for other purposes, only these three sets of information are needed to capture COBie data.

Delivering Construction Operations Building information exchange (COBie) Using Autodesk Revit

E. William East, Shawn O'Keeffe, Richard Kenna, and Emma Hooper

COBie data is populated in the project information model, but is delivered in Excel spreadsheet format

A	B	C	D	E	F	G	H	I	J	K	L
Name	CreatedBy	CreatedOn	Category	FloorName	Description	ExtSystem	ExtObject	ExtIdentifier	RoomTag	UsableHeight	GrossArea
2 CHS-18-Simulated Nursery	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Simulated Nursery	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	4ef1e4dc-3e1c-449d-b820-78773d4442a8	Simulated Nursery	3000	50.1027
3 CHS-14-Health Care Suite	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Health Care Suite	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Health Care Suite	3000	73.7814
4 CHS-12-Social Care Suite	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Social Care Suite	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Social Care Suite	3000	50.216
5 CHS-15-Health Care Store	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Health Care Store	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Health Care Store	3000	20.3278
6 CHS-04-Fitness Testing Area (Classroom)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Fitness Testing Area (Classroom)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Fitness Testing Area (C	3000	50.9032
7 CHS-11-Sports Studies Suite	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Sports Studies Suite	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Sports Studies Suite	3000	51.5931
8 CHS-03-Gymnasium	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Gymnasium	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Gymnasium	3000	101.9446
9 CHS-02-Fitness Suite	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Fitness Suite	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Fitness Suite	3000	140.0044
10 CHS-05-Gym Store	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Gym Store	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Gym Store	3000	72.8114
11 CHS-01-Games Hall	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Games Hall	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Games Hall	3000	466.9997
12 CHS-09-Staff Change (M)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Staff Change (M)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Staff Change (M)	3000	12.8749
13 CHS-10-Staff Change (F)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Staff Change (F)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Staff Change (F)	3000	12.7427
14 CHS-06-Change (M)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Change (M)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Change (M)	3000	44.6431
15 CHS-07-Change (F)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Change (F)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Change (F)	3000	44.7466
16 CHS-08-Change (Acc)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Change (Acc)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Change (Acc)	3000	9.9098
17 CHS-17-Care Store	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Care Store	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Care Store	3000	9.4664
18 ANC-47-Female WCs	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Female WCs	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Female WCs	3000	14.4513
19 ANC-57-Male WCs	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Male WCs	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ffa6ac44-6aaf-479b-b1a4-4d4ae67b4579-0	Male WCs	3000	14.0111
20 CHS-13-Social Science Suite	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Social Science Suite	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	ce05e0e7-1045-42d0-bcd5-ead075d36be	Social Science Suite	3000	54.0269
21 CIR-04-Stair 4 L0	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Stair 4 L0	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	644bd80-52a9-44e9-ba2f-51899d7a0a45	Stair 4 L0	3000	35.3081
22 CIR-35-Stair 4 L1	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Stair 4 L1	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	195105f3-9491-4293-b16a-89efe64f4b7-0	Stair 4 L1	3000	28.5936
23 SAL-01-Makeup Artistry Salon	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Makeup Artistry Salon	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Makeup Artistry Salon	3000	83.1212
24 SAL-03-Hair & Beauty Store	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Hair & Beauty Store	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Hair & Beauty Store	3000	29.0087
25 SAL-07-Hair & Beauty Reception	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Hair & Beauty Reception / Waiting	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Hair & Beauty Reception	3000	34.3829
26 SAL-08-Tea Prep	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Tea Prep	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Tea Prep	3000	4.9437
27 SAL-02-Beauty Therapy Salon 2	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Beauty Therapy Salon 2	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Beauty Therapy Salon 2	3000	84.0486
28 SAL-04-Hairdressing Salon 1	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Hairdressing Salon 1	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Hairdressing Salon 1	3000	68.3089
29 SAL-05-Hairdressing Salon 2	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Hairdressing Salon 2	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Hairdressing Salon 2	3000	72.1217
30 SAL-06-Head Wash	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Head Wash	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f9086542-6e09-434b-9b03-0b1253eacd49	Head Wash	3000	22.3132
31 ANC-75-HW Cylinders (System 6)	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	HW Cylinders (System 6)	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	f5d03517-7ad9-4789-b726-38ef3dec3d88-	HW Cylinders (System	3000	17.6389
32 ANC-15-DSR / Floor Washer	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	DSR / Floor Washer	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	a7f1c116-7ea0-4fd7-b4e7-5c392576d146-	DSR / Floor Washer	3000	10.9874
33 ANC-62-Comms Room	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Comms Room	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	2b265870-e783-4712-ac5e-e71e2ef892df-	Comms Room	3000	7.7299
34 ANC-108-Comms Room	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 01 FFL	Comms Room	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	41f3491a-51a3-4755-9114-886f27e8b8d-0	Comms Room	3000	9.832
35 CIR-56-Circulation	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Circulation	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	bd0db5c4-8215-498e-9095-beb8fd7416e9	Circulation	3000	39.9153
36 COM-02-Print Room	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Print Room	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	4159c45a-030d-4493-bea3-5a592fc064fc-	Print Room	3000	54.5362
37 COM-01-Print Unit Office/Store	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Print Unit Office/Store	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	4159c45a-030d-4493-bea3-5a592fc064fc-	Print Unit Office/Store	3000	63.7824
38 ANC-95-Uncovered Refuse	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Uncovered Refuse	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	a12f1230-ef43-4f8c-ac0f-6418eca56c68-0	Uncovered Refuse	3000	64.6886
39 ANC-90-Energy Centre	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Energy Centre	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	a12f1230-ef43-4f8c-ac0f-6418eca56c68-0	Energy Centre	3000	139.5472
40 ANC-94-Cold Water Storage	bimsupport@keppiedesign.co.uk	2018-05-17T15:41:43	SL 25_10_28	Level 0 FFL	Cold Water Storage	Autodesk Revit 2017, Build: 20181011_1645(x64)	Rooms	a12f1230-ef43-4f8c-ac0f-6418eca56c68-0	Cold Water Storage	3000	58.1818

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Interoperability Tools

AUTODESK COBIE EXTENSION FOR REVIT

Contacts

Create and edit COBie contacts in this Revit model

Contact List

Add Contact... BIMsupport@keppiedesign.co.uk X

	Required	Optional
CreatedBy	BIMsupport@keppiedesign.co.uk	GivenName
Email	BIMsupport@keppiedesign.co.uk	FamilyName
Company	Keppie Design	Department
Phone	01412040066	OrganizationCode
Category	PM_10_55_03 : Architect	Street
		PostalBox
		Town
		StateRegion
		PostalCode
		Country

Cancel Save ✓ Save and Close

Setup Project Contacts Create, edit, and delete COBie contacts in the current model. Press F1 for more help

Contacts

XXX-XX-XX-M3-A-45 001_2019_ExampleProject_dramage@KeppieDesign.co.uk.rvt - D... Type a keyw

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Interoperability Tools

Help Help Help Import Export COBie Zones

AUTODESK COBIE EXTENSION FOR REVIT

Zone Manager

Create zones, edit their properties, and assign Revit Rooms and Spaces to them

Zones

Add Zone...

OA

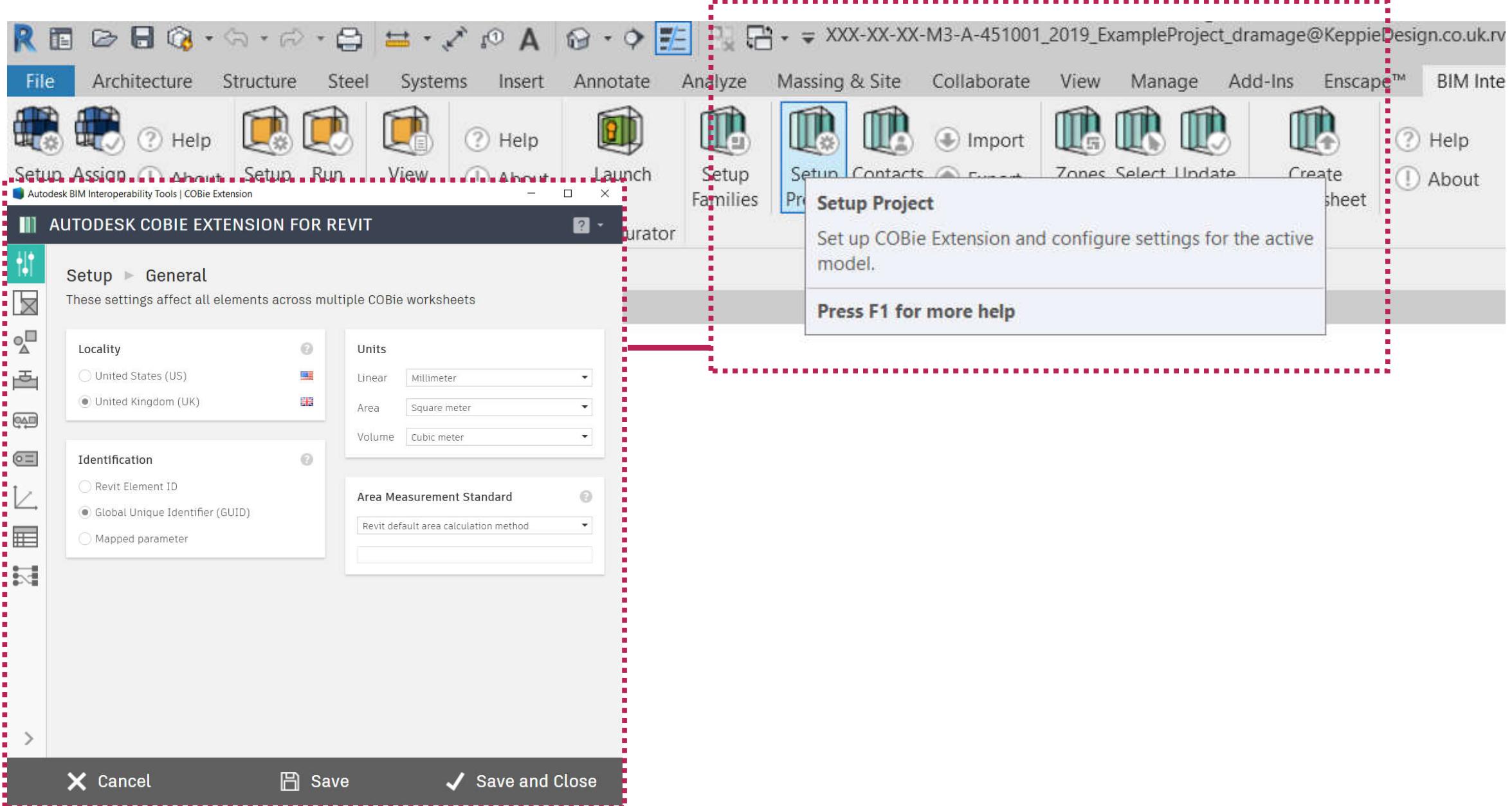
- O-A-01 Hall
- O-A-02 Living/Dining/Kitchen
- O-A-03 Bath
- O-A-04 Bed 2
- O-A-05 W'robe
- O-A-06 Tank
- O-A-07 Bed 1
- O-A-08 W'robe
- O-A-09 W'robe
- O-A-10 En-suite
- O-A-11 Store
- O-A-12 Store
- O-A-13 Patio
- O-A-14 Hall
- O-A-15 Bath
- O-A-16 Bed
- O-A-17 Living/Dining/Kitchen
- O-A-18 Store

Rooms/Spaces

- U-A-17 Living/Dining/Kitchen
- O-A-18 Store
- O-A-19 W'robe
- O-A-20 Hall
- O-A-21 Bath
- O-A-22 Bed
- O-A-23 Living/Dining/Kitchen
- O-A-24 Store
- O-A-25 W'robe
- O-A-26 Patio
- O-B-01 Hall
- O-B-02 Living/Dining/Kitchen
- O-B-03 Bath
- O-B-04 Bed 2
- O-B-05 W'robe
- O-B-06 Boiler
- O-B-07 Bed 1
- O-B-08 W'robe
- O-B-09 W'robe

Cancel Save Save and Close

Zones



General

The screenshot shows the Autodesk Revit ribbon interface with a red dashed box highlighting the 'Analyze' tab. A secondary red dashed box highlights the 'Setup Families' button under the 'Analyze' tab, which is part of the Autodesk COBIE Extension for Revit. The main window displays the 'Setup Project' dialog for the Autodesk COBIE Extension.

AUTODESK COBIE EXTENSION FOR REVIT

Choose whether or not Revit elements are located by Rooms or Spaces

Choose whether Revit elements are located by Room or Space

	Room	Space
Air Terminals	Room	Space
Assemblies	Room	Space
Cable Tray Fittings	Room	Space
Cable Trays	Room	Space
Casework	Room	Space
Ceilings	Room	Space
Columns	Room	Space
Communication Devices	Room	Space
Conduit Fittings	Room	Space
Conduits	Room	Space
Curtain Panels	Room	Space
Curtain Wall Mullions	Room	Space
Data Devices	Room	Space
Doors	Room	Space
Duct Accessories	Room	Space
Duct Fittings	Room	Space
Duct Insulations	Room	Space
Duct Linings	Room	Space
Duct Placeholders	Room	Space

Room for all

Space for all

Space for MEP elements

Space for MEP runs: Duct, Pipe, Conduit

Reset defaults

Space Name Builder

Spaces in Zones

Cancel Save Save and Close

Spaces

The screenshot shows the Autodesk Revit ribbon interface with a red dashed box highlighting the 'Analyze' tab. A secondary red dashed box highlights the 'Setup Project' button in the 'Analyze' tab's dropdown menu. The main window displays the 'AUTODESK COBIE EXTENSION FOR REVIT' setup dialog for 'Types'. The dialog includes fields for 'Category', 'Fields' (with 'Type Mark' selected), and 'Description' (with 'Description parameter from Type Properties' selected). The status bar at the bottom shows 'Cancel', 'Save', and 'Save and Close' buttons.

AUTODESK COBIE EXTENSION FOR REVIT

Setup > Types

Specify properties for the COBie type spreadsheet

Types

Category

First Priority

Classification Manager 'Uniclass Pr' parameter v...

Second Priority

n/a

Third Priority

n/a

Fourth Priority

Use 'n/a'

Description

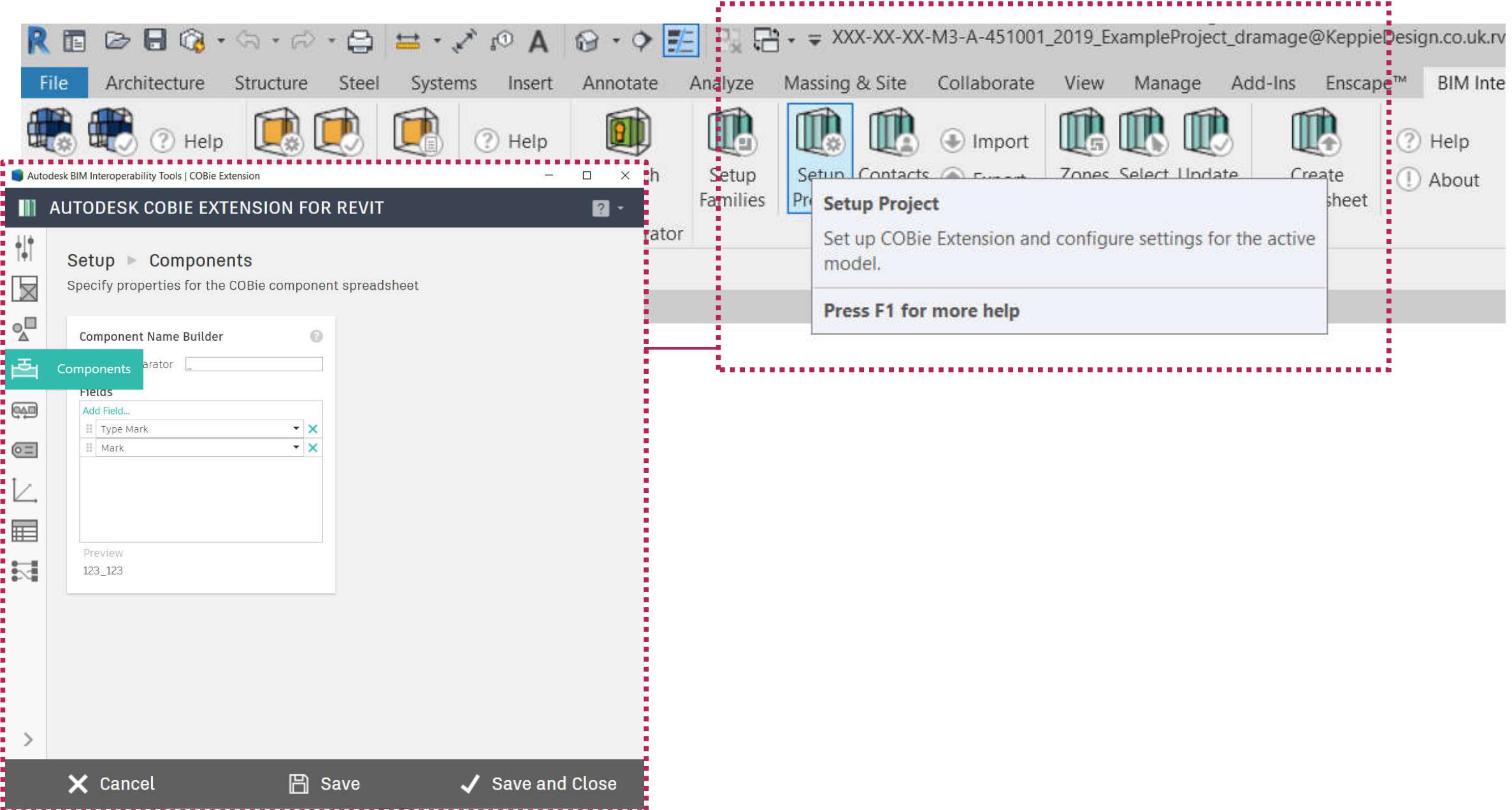
Family : Type

Description parameter from Type Properties

Press F1 for more help

Cancel Save Save and Close

Types



Components

XXX-XX-XX-M3-A-451001_2019_ExampleProject_dramage@KeppieDesign.co.uk.rvt

AUTODESK COBIE EXTENSION FOR REVIT

Setup > Systems

Specify properties for the COBie system spreadsheet

System Name Builder

Field separator:

Category

Classification Manager 'Uniclass Table Ss' param

Components in Systems

Each component listed in its own row
 All components in one row, comma separated

Include Components

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

Press F1 for more help

Cancel Save Save and Close

Systems

XXX-XX-XX-M3-A-451001_2019_ExampleProject_dramage@KeppieDesign.co.uk.rvt

AUTODESK COBIE EXTENSION FOR REVIT

Setup > Systems

Specify properties for the COBie system spreadsheet

System Name Builder

Field separator:

Systems

Revit Category
System Name
Element Id

Category

Classification Manager 'Uniclass Table Ss' param

Components in Systems

Each component listed in its own row
 All components in one row, comma separated

Include Components

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

Setup Project

Set up COBie Extension and configure settings for the active model.

Press F1 for more help

Cancel Save Save and Close

Systems

XXX-XX-XX-M3-A-451001_2019_ExampleProject_dramage@KeppieDesign.co.uk.rvt

BIM Inte

AUTODESK COBIE EXTENSION FOR REVIT

Setup ▶ Attributes

Choose other Revit parameters to export to the COBie Attributes spreadsheet

Attributes

- ▶ Cable Trays
- ▶ Casework
- ▶ Ceilings
- ▶ Columns
- ▶ Conduits
- ▶ Curtain Panels
- ▶ Curtain Wall Mullions
- ▶ Doors
- ▶ Furniture
- ▶ Generic Models
- ▶ Levels
- ▶ Mass » Mass Roof
- ▶ Mechanical Equipment
- ▶ Pipes
- ▶ Piping Systems
- ▶ Planting
- ▶ Plumbing Fixtures
- ▶ Project Information
- ▶ Railings
- ▶ Railings » Handrails
- ▶ Ramps
- ▶ Roofs

Select all

Select none

Expand all

Collapse all

Cancel

Save

✓ Save and Close

Setup Project

Set up COBie Extension and configure settings for the active model.

Press F1 for more help

Attributes

The screenshot shows the Autodesk Revit ribbon interface with a red dashed box highlighting the 'Analyze' tab. A secondary red dashed box highlights the 'Setup Project' button in the 'Analyze' tab's dropdown menu. The main window displays the 'AUTODESK COBIE EXTENSION FOR REVIT' setup dialog for 'Coordinates'. The dialog includes sections for 'Component Families', 'Rooms', 'Floors', and 'Spaces', each with options for 'Location point or location line' and 'Bounding box'. The 'Coordinates' tab is selected. At the bottom are 'Cancel', 'Save', and 'Save and Close' buttons.

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Inte

Setup Assign Help Setup Run View Help About Launch Setup Families Setup Contacts Import Zones Select Update Create

AUTODESK COBIE EXTENSION FOR REVIT ?

Setup ▶ Coordinates

Specify the data used when documenting the coordinates of items in a COBie spreadsheet

Component Families

Location point or location line
 Bounding box

Rooms

Location point
 Bounding box

Floors

point
 bounding box

Spaces

Location point
 Bounding box

Press F1 for more help

X Cancel Save ✓ Save and Close

Coordinates

The screenshot shows the Autodesk Revit ribbon interface with a red dashed box highlighting the 'Analyze' tab. A secondary red dashed box highlights the 'Setup Project' button in the 'Analyze' tab's dropdown menu. The main window displays the 'AUTODESK COBIE EXTENSION FOR REVIT' setup dialog for 'Schedules'. The dialog lists categories: COBie Floor, COBie Space, COBie Type, COBie System, and COBie Component. Under 'Schedules', checkboxes are shown for Windows (checked) and Multi-Category (checked). At the bottom are 'Select all' and 'Select none' buttons, and standard dialog buttons: Cancel, Save, and Save and Close.

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Inte

Setup Assign Help About Setup Run View Help About Launch Setup Families Setup Project Set up COBie Extension and configure settings for the active model. Press F1 for more help

AUTODESK COBIE EXTENSION FOR REVIT ? -

Setup > Schedules

Choose which Revit schedules to create in your model to help with editing individual COBie fields

COBie Floor

Levels

COBie Type

Family Types

COBie Component

Schedules

Windows

Multi-Category

Select all Select none

X Cancel Save ✓ Save and Close

Schedules

The screenshot shows the Autodesk Revit ribbon interface with a red dashed box highlighting the 'Analyze' tab. A secondary red dashed box highlights the 'Setup Project' button in the 'Setup' group of the ribbon. The main window displays the 'Parameter Mappings' dialog box for the Autodesk COBie Extension.

Autodesk COBie Extension for Revit

Setup > Parameter Mappings

Change which parameters are used for setting and exporting various COBie fields

Parameters

SHEET	FIELD	PARAMETER MAPPING	APPLIED TO
-	Export	COBie	Instance
-	Export (Type)	COBie.Type	Type
-	ExternalIdentifier	COBie.ExternalIdentifier	Instance
-	ExternalIdentifier (Type)	COBie.Type.ExternalIdentifier	Type
All	CreatedBy	COBie.CreatedBy	Instance
All	CreatedBy (Type)	COBie.Type.CreatedBy	Type
All	CreatedOn	COBie.CreatedOn	Instance
All	CreatedOn (Type)	COBie.Type.CreatedOn	Type
Component	Area	COBie.Component.Area	Instance
Component	AssetIdentifier	COBie.Component.AssetIdentifier	Instance
Component	BarCode	COBie.Component.BarCode	Instance
Component	Description	COBie.Component.Description	Instance
Component	InstallationDate	COBie.Component.InstallationDate	Instance

Parameter Mappings

X Cancel Save ✓ Save and Close

Setup Project

Set up COBie Extension and configure settings for the active model.

Press F1 for more help

Parameter Mapping

AUTODESK COBIE EXTENSION FOR REVIT

Select which Revit families, types, and elements get exported to the COBie spreadsheet

Elements

- Air Terminals
- Assemblies
- Cable Tray Fittings
- Cable Tray Runs
- Cable Trays
- Casework
- Ceilings
- Columns
- Communication Devices
- Conduit Fittings
- Conduit Runs
- Conduits
- Curtain Panels
- Curtain Wall Mullions
- Data Devices
- Doors
- Duct Accessories
- Duct Fittings

Groups

Skip grouped elements

Ungroup and set parameters

Select

Select elements for COBie export.

Press F1 for more help

Cancel **Apply and Close**

Select Elements to Export

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Enscape™ BIM Interoperability Tools GRAITEC PowerPack

Setup Assign ? Help Setup Run View Report ? Help ! About Launch Setup Families Setup Project Contacts Import Export Zones Select Update Create Spreadsheet ? Help

Classification Manager Model Checker Configurator COBie Extension

AUTODESK COBIE EXTENSION FOR REVIT

Create Spreadsheet

Choose your final options and then export to a COBie spreadsheet

Sheets

Contact
 Facility
 Floor
 Space
 Zone
 Type
 Component
 System
 Attribute
 Coordinate

Select Links to Export

No loaded links found

File

C:\Projects\XXX-XX-XX-M3-A-451001_2019_ExampleProject_drama\

New file Append

X Cancel **✓ Create Spreadsheet**

Export Data Schedule

Workflow for COBie



keppie

THANK YOU