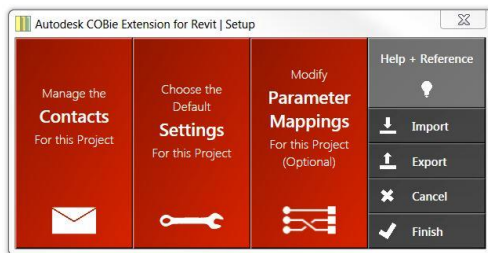


COBie Extension for Revit

The COBie Extension for Revit is organized into three steps: Setup, Modify, and Export. COBie project workflow will follow this basic sequence.



1. Setup



1.1 Manage the Contacts For this Project

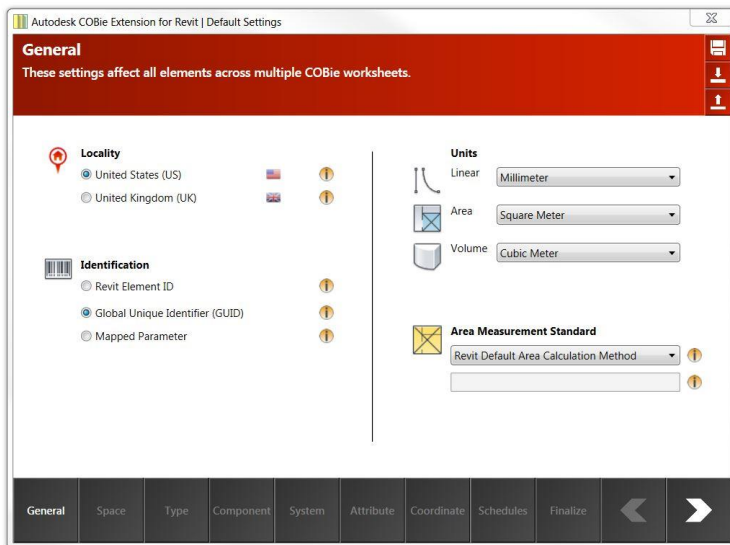
1.1.1

The screenshot shows the 'Autodesk COBie Extension for Revit | Manage Contacts' window. It has a toolbar with buttons for 'New', 'Save Current', 'Save & New', 'Edit', 'Remove', 'Cancel', and 'Finish'. Below the toolbar, there is a 'Contacts:' list on the left. To the right, there are two sections: 'Required:' and 'Optional:'. The 'Required:' section includes fields for 'Created By' (a dropdown menu), 'Email', 'Company', 'Phone', and 'Classification'. The 'Optional:' section includes fields for 'First/Given Name', 'Last/Family Name', 'Department', 'Organization Code', 'Street', 'Post Office (P.O.) Box', 'Town', 'State/Region', 'Zip/Postal Code', and 'Country'. Each field has a yellow warning icon to its right.

- (1) Input the information
- (2) Click "Save Current" and "Finish"

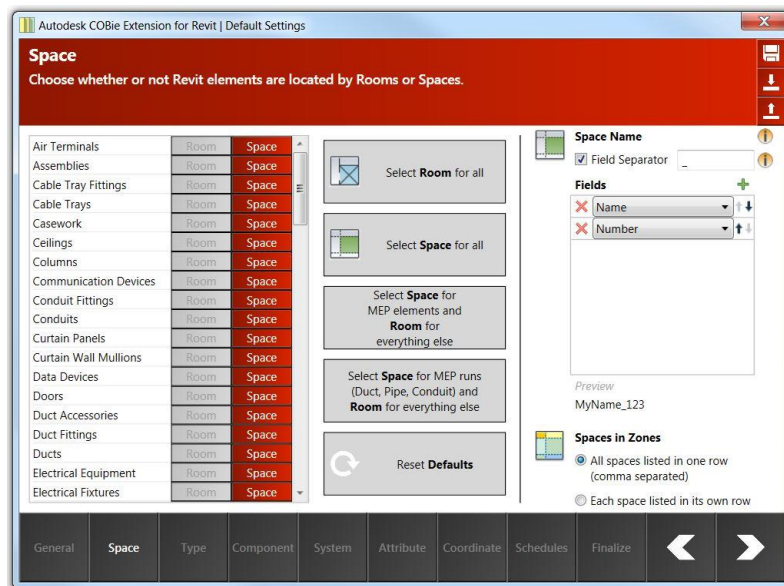
1.2 Choose the Default Settings For this Project

1.2.1 General



- (1) Locality: United States(US)
- (2) Identification: Global Unique Identifier (GUID)
- (3) Units: Linear: Millimeter
Area: Square Meter
Volume: Cubic Meter
- (4) Area Measurement Standard : Revit Measurement Standard

1.2.2 Space



- (1) Choose "Select Space for all"

1.2.3 Type

Type
Specify properties for the COBie type spreadsheet.

Name
☒ Field Separator: _

Fields
Family
Type

Category
First Priority: Revit 'OmniClass' parameter value
Second Priority: Revit 'Assembly Code' parameter value
Third Priority: Revit 'Keynote' parameter value
Fourth Priority: Use 'n/a'

Description
☒ Family : Type
☐ Description Parameter from Type Properties

Preview
MyFamily_MyType

General Space **Type** Component System Attribute Coordinate Schedules Finalize

- (1) Name: Use "Family" and "Type"
- (2) Category: First Priority: Revit 'OmniClass' parameter value from the family definition (OmniClass Table 23)
Second Priority: Revit 'Assembly Code' parameter value from the type definition (UniFormat)
Third Priority: Revit 'keynote' parameter value from the type definition
- (3) Description: Family : Type

1.2.4 Component

Component
Specify properties for the COBie component spreadsheet.

Name
☒ Field Separator: _

Fields
Family
Type
Element Id

Preview
MyFamily_MyType_12345

General Space Type **Component** System Attribute Coordinate Schedules Finalize

- (1) Name: Use "Family" and "Type" and "Element Id"

1.2.5 System

System
Specify properties for the COBie system spreadsheet.

COBie System Name
☒ Field Separator:
Fields
☒ System Name
☒ <Not Used>
 Preview: MySystemName

Category

Components in Systems
☒ All components listed in one row (comma separated)
☐ Each component listed in its own row

Include Components
☐ Export the Components and their corresponding Types that are part of each system

General | Space | Type | Component | **System** | Attribute | Coordinate | Schedules | Finalize

1.2.6 Attribute

Attribute
Choose other Revit parameters to export to the COBie Attributes worksheet.

☒ EMSD.Boiler.Location ID on Use Permit
☒ EMSD.Boiler.Motor Power (kW)
☒ EMSD.Boiler.Output Capacity (kg/hr.)
☒ EMSD.Boiler.Output Capacity (kW)
☒ EMSD.Boiler.Output Steam Pressure (kPa)
☒ EMSD.Boiler.Pressure (kPa)
☒ EMSD.Boiler.Primary Heat Source
☒ EMSD.Boiler.Pump
☒ EMSD.Boiler.Pump No.
☒ EMSD.Boiler.Secondary Heat Source
☒ EMSD.Boiler.Speed (rpm)
☒ EMSD.Boiler.Territory Heat Source
☒ EMSD.Boiler.Type
☒ EMSD.Boiler.Usage
☒ EMSD.Boiler.Year of Installation
☒ EMSD.HVAC.1st Filter
☒ EMSD.HVAC.2nd Filter
☒ EMSD.HVAC.Air Flow
☒ EMSD.HVAC.AirSide.Head
☒ EMSD.HVAC.AirSide.Motor Power
☒ EMSD.HVAC.Capacity (kW)
☒ EMSD.HVAC.Compressor
☒ EMSD.HVAC.Configuration
☒ EMSD.HVAC.Cooling Capacity

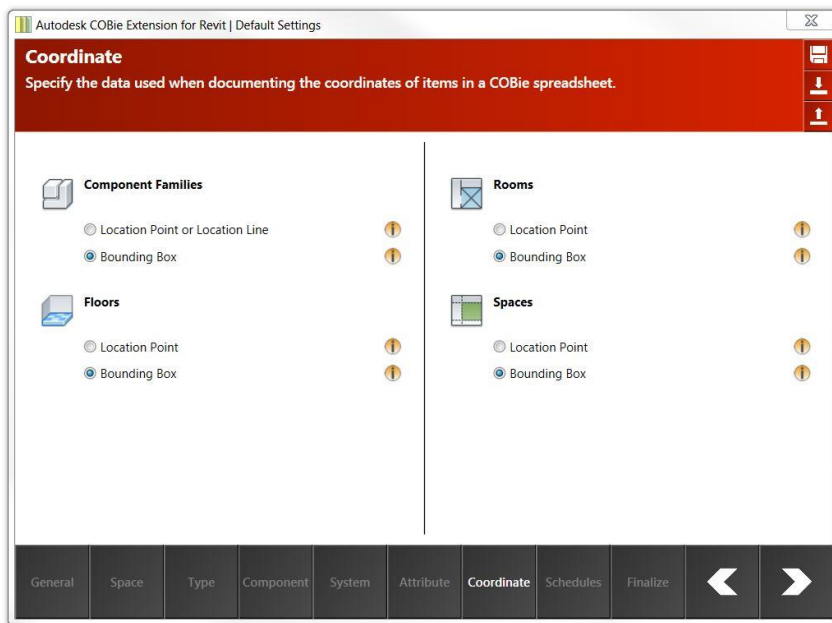
☒ Select All
☒ Select None
☒ Expand All
☒ Collapse All

General | Space | Type | Component | System | **Attribute** | Coordinate | Schedules | Finalize

Check all of the EMSD Type and Instance parameters for following categories:

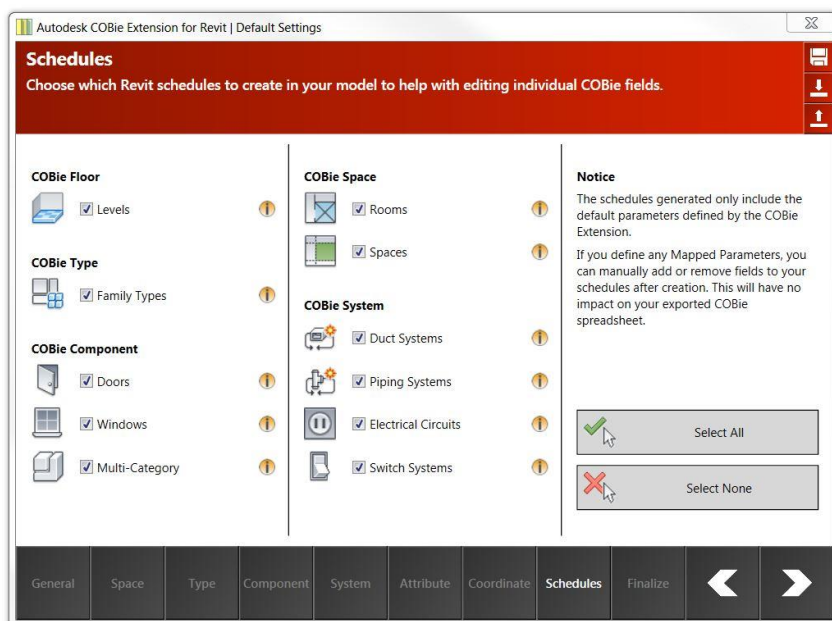
- Mechanical Equipment
- Electrical Equipment
- Pipe accessories
- Electrical Fixtures
- Fire Alarm Devices
- Duct Accessories
- Lighting Fixtures
- Specialty Equipment

1.2.7 Coordinate



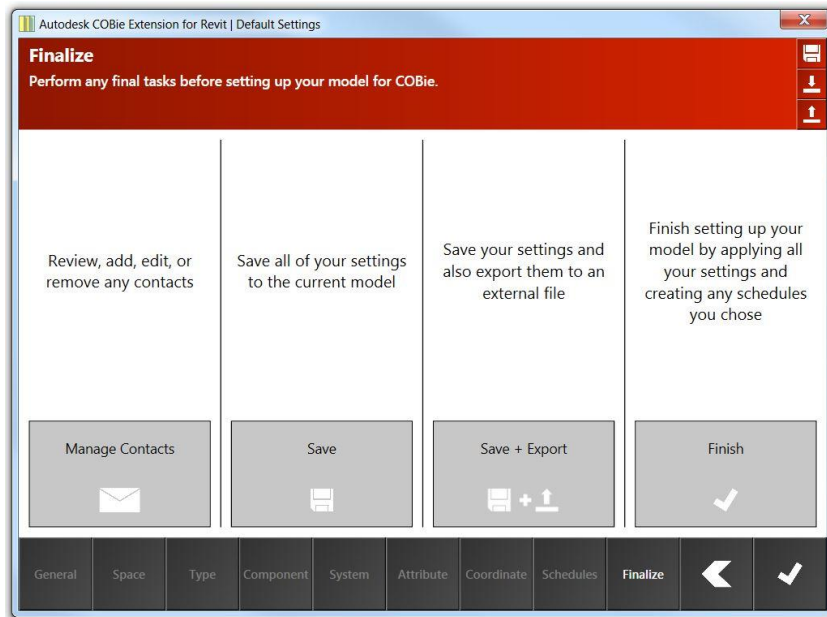
- (1) Choose "Bounding Box" for all options

1.2.8 Schedules



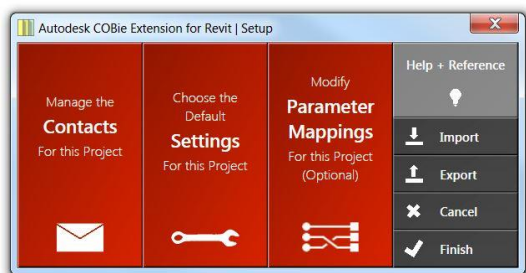
- (1) Select All

1.2.9 Finalize

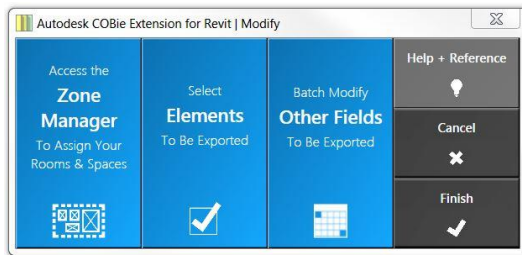


- (1) Click "save"
- (2) Click "Finish"

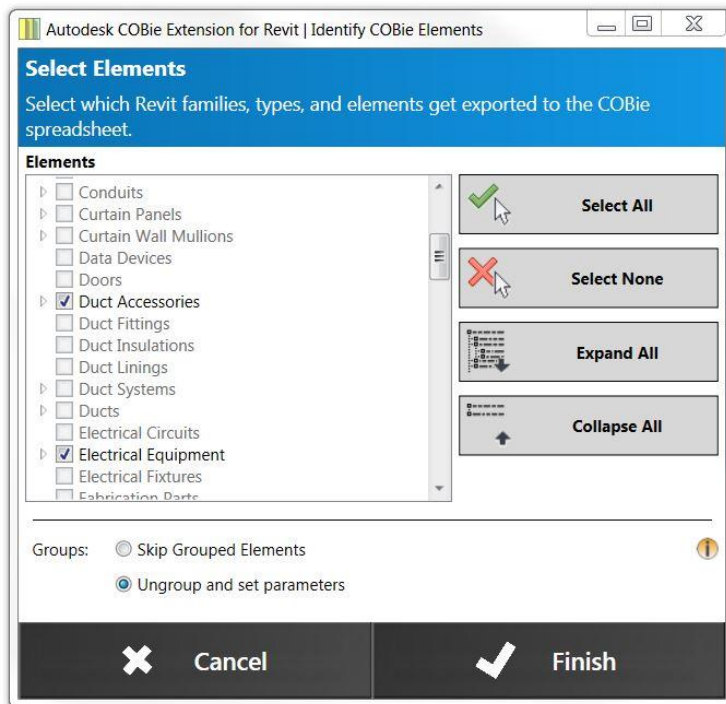
1.2.10 Finish



2. Modify



2.1 Select Elements To Be Exported



(1) Check the following categories in “Elements”

- (a) Mechanical Equipment
- (b) Electrical Equipment
- (c) Pipe accessories
- (d) Electrical Fixtures
- (e) Fire Alarm Devices
- (f) Duct Accessories
- (g) Lighting Fixtures
- (h) Specialty Equipment

(2) Check “Ungroup and set parameters”

(3) Click “Finish”

2.2 Batch Modify Other Fields To Be Exported

Autodesk COBie Extension for Revit | Modify Fields

Other Fields
Batch update other Revit parameters that are mapped to COBie fields.

COBie Sheet	Field	Update only Blank Parameters	Update All Parameters	Do Not Update Parameters
All	CreatedBy	Blank	All	None
All	CreatedOn	Blank	All	None
Facility	Name	Blank	All	None
Facility	ProjectName	Blank	All	None
Floor	Elevation	Blank	All	None
Floor	Name	Blank	All	None
Space	Name	Blank	All	None
Space	GrossArea	Blank	All	None
Space	NetArea	Blank	All	None
Type	Name	Blank	All	None
Type	Category	Blank	All	None
Type	Description	Blank	All	None
Type	Manufacturer	Blank	All	None

☒ Apply only to elements marked for COBie export

Groups: ☐ Skip Grouped Elements ☒ Ungroup and set parameters

- (1) Click "Select 'All' for All Fields"
- (2) Select the contact from the List
- (3) Check "Apply only to elements marked for COBie export"
- (4) Select "Ungroup and set parameters"
- (5) Click "Finish"

2.3 Finish

Autodesk COBie Extension for Revit | Modify

Access the **Zone Manager**
To Assign Your Rooms & Spaces

Select **Elements**
To Be Exported

Batch Modify **Other Fields**
To Be Exported

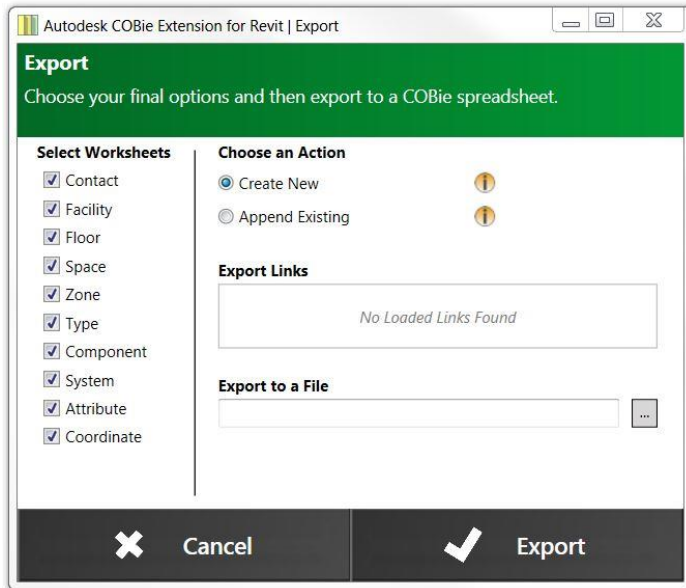
- (1) Click "Finish"

3. Enter COBie and EMSD Shared Parameters Values

Contractors are responsible for all of the required COBie and EMSD shared parameters. All values entered in COBie and EMSD shared parameter must be updated to latest information at any time.

4. Export COBie

Once COBie is setup, modified, and parameters entered, COBie can be exported.



- (1) Select all worksheets
- (2) Select "Create New" in Choose an Action
- (3) Select a file location and input a file name.
- (4) Click "Export"