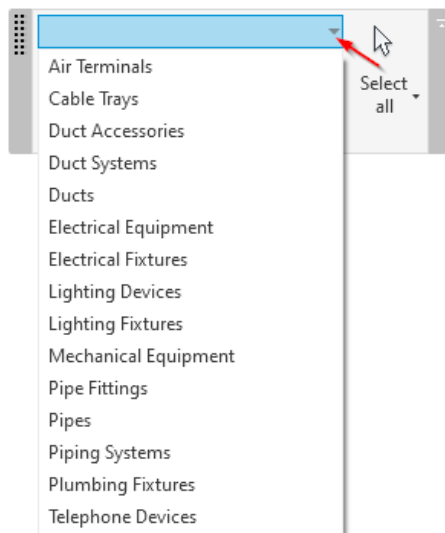


Skillpark MEP > Select by Value

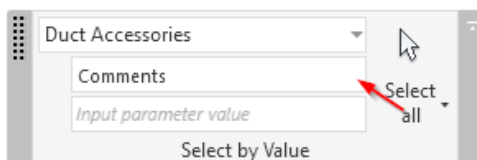
The tool allows selecting model components based on the value of a chosen parameter.

Tool usage scheme:

1. The dropdown list displays the model categories of all elements used in the project. You need to select the category of elements to be included in the selection.



2. In the first text field, enter the name of the parameter by which the selection of elements should be performed. If this field is left empty, all elements from the selected category will be chosen.

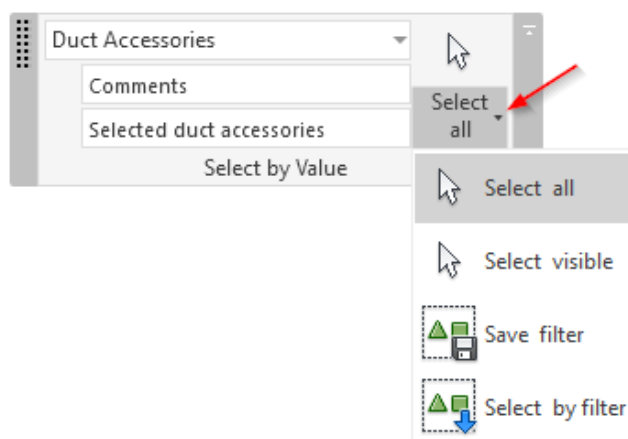


In the second text field, enter the parameter value for selection. If this field is left empty, all elements containing the specified parameter will be selected. Additional available actions:

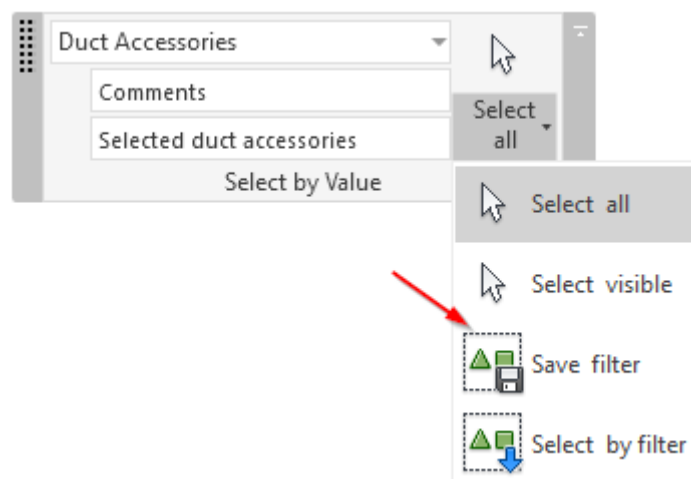
- Any value – all elements with any value assigned to the selected parameter will be selected. Enter the asterisk symbol „*”.
- Multiple values – all elements with any of the specified values will be selected. Enclose values in square brackets [] and separate them with a semicolon („;”) e.g., [18;96].
- Empty value – all elements with no value assigned to the selected parameter will be selected. Enter the symbol „<>”.



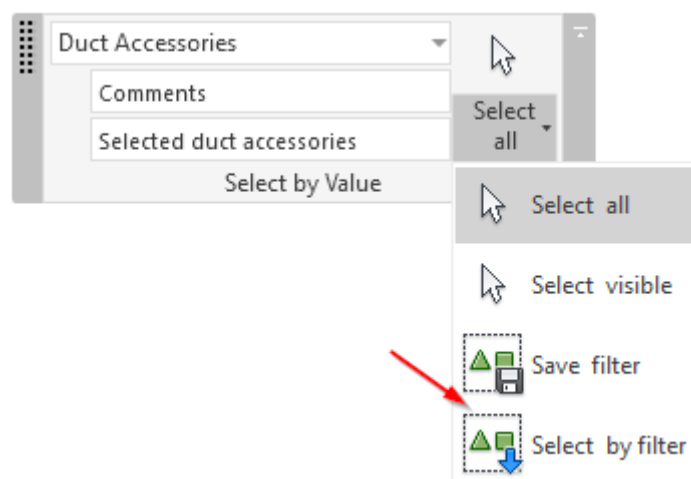
3. The tool allows you to continue the selection from either all elements (*Select All*) or only the currently visible elements (*Select Visible*).



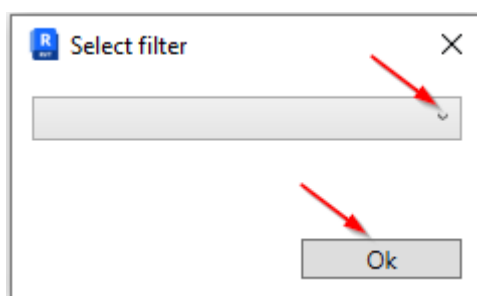
4. The tool allows saving the prepared configuration as a filter (*Save filter*).



5. The tool allows you to load a previously saved selection (*Select by filter*).



After choosing this option from the dropdown list, select the desired filter and then click the *Ok* button.

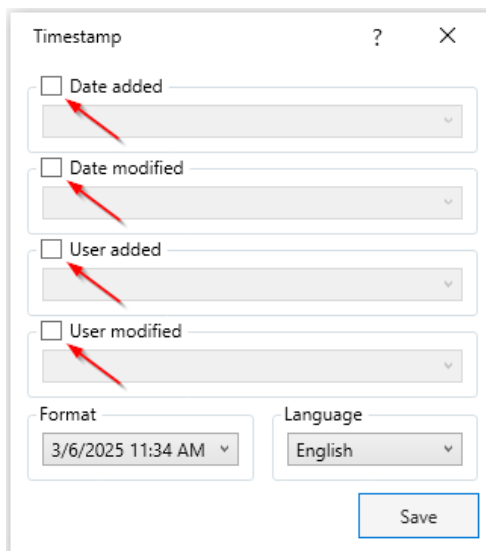


Skillpark MEP > Work in Background > Timestamp

The tool uses predefined text project parameters to store information about the insertion date, modification date, inserting user, and last modifying user of a component.

Tool usage scheme:

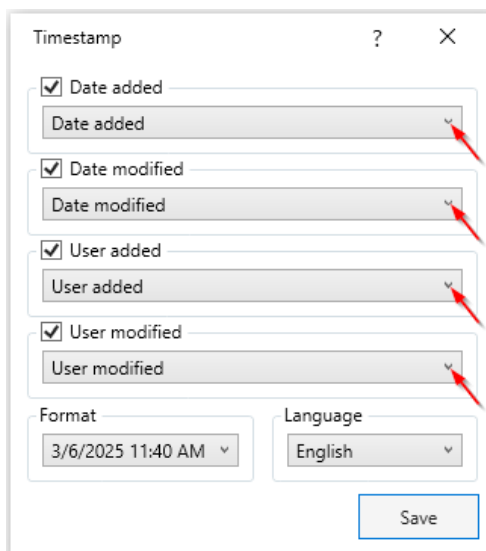
1. Before using the tool, four text project parameters must be defined.
2. In the configuration window, select the checkbox for the conditions under which automatic information completion should occur.



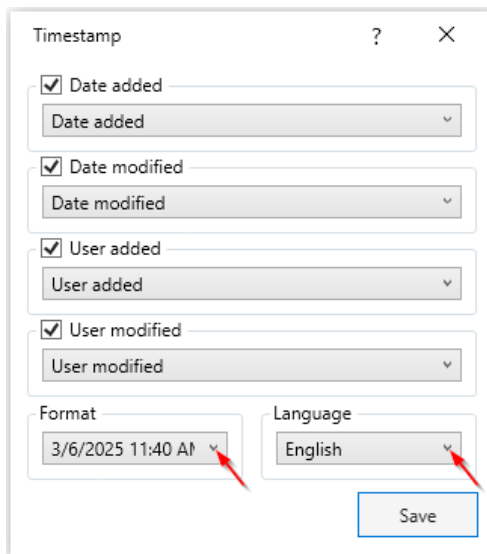
Available actions:

- a. Component insertion (*Date added*)
- b. Component modification (*Date modified*)
- c. User inserting the component (*User added*)
- d. User last modifying component (*User modified*)

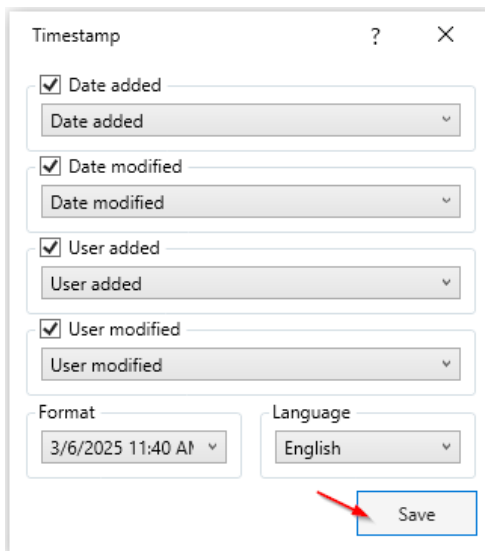
3. For each selected action, specify the corresponding text project parameter that will be automatically filled in.



4. At the bottom of the configuration window, define the Format (*Format*) and Language (*Language*) for the insertion and modification date information. Information about the inserting and modifying user is based on the Autodesk account name of the user working in Autodesk Revit.



5. Confirm the configuration by clicking Save.



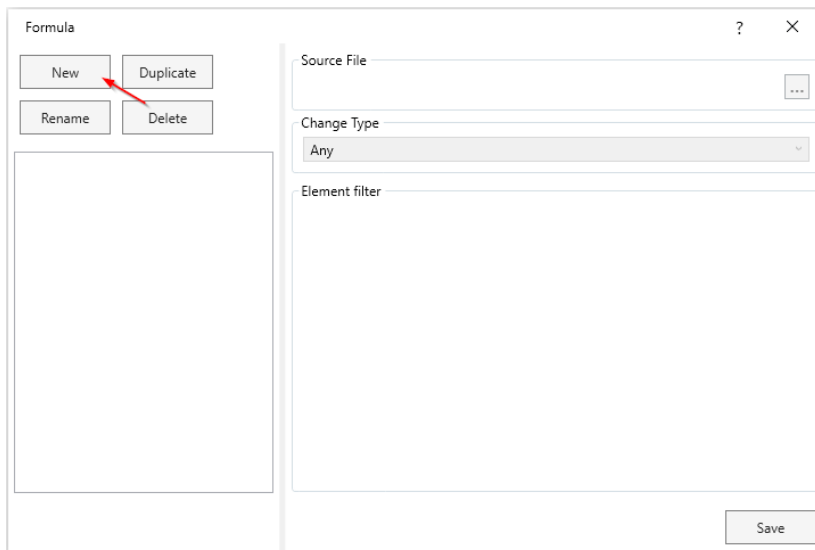
6. The tool is initialized once upon the first launch in a project and remains active throughout the project's duration.

Skillpark MEP > Work in Background > Formula

The tool allows you to configure a set of formulas that continuously influence the values of selected element parameters from specified categories or a filtered selection of components based on defined conditions. The formulas use supported logical and mathematical notations and can be stored in a text file.

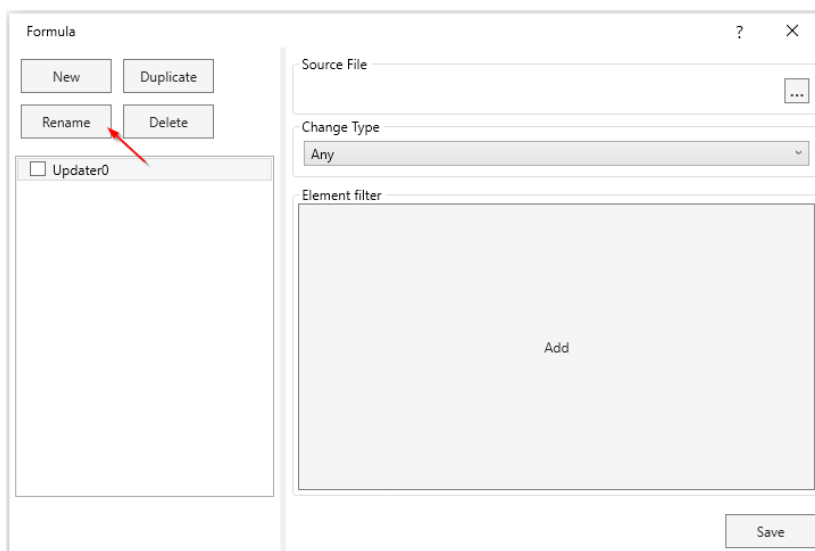
Tool usage scheme:

1. On the left side of the dialog window, there is a section displaying active and inactive formulas that affect the parameter values recorded in the current document.
2. To define a new formula, click the *New* button.



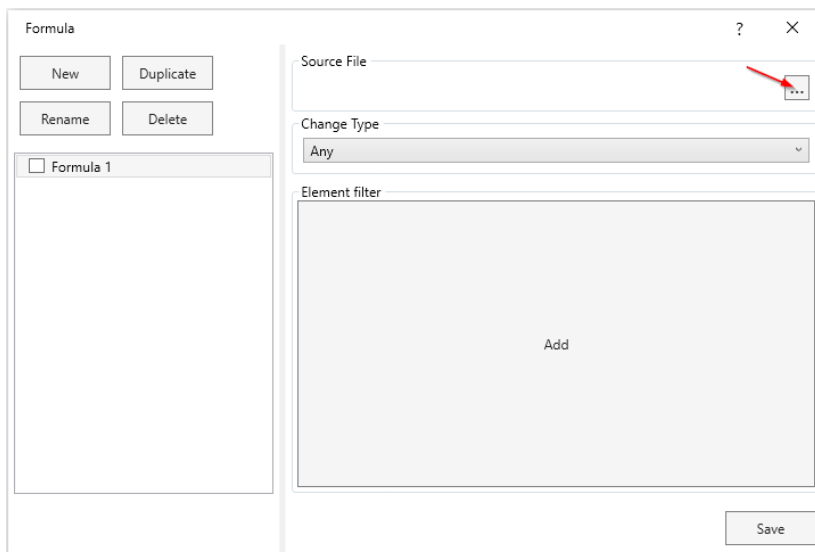
The screenshot shows the 'Formula' dialog window. On the left side, there are four buttons: 'New', 'Duplicate', 'Rename', and 'Delete'. A red arrow points to the 'New' button. Below these buttons is a large empty rectangular area. On the right side, there are three input fields: 'Source File' with a dropdown arrow, 'Change Type' with a dropdown menu showing 'Any', and 'Element filter' with a large empty rectangular area. At the bottom right, there is a 'Save' button.

3. The newly defined formula will appear in the list with a default name. To rename a selected formula, select it from the list on the left, click *Rename*, and enter the new name in the corresponding text field.

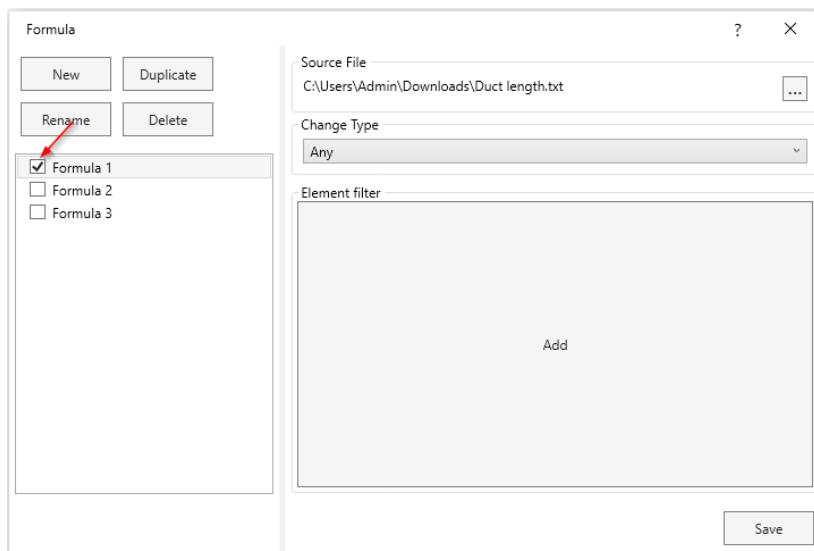


The screenshot shows the 'Formula' dialog window. On the left side, there are four buttons: 'New', 'Duplicate', 'Rename', and 'Delete'. A red arrow points to the 'Rename' button. Below these buttons is a list containing one item: 'Updater0'. On the right side, there are three input fields: 'Source File' with a dropdown arrow, 'Change Type' with a dropdown menu showing 'Any', and 'Element filter' with a large empty rectangular area. At the bottom right, there is a 'Save' button.

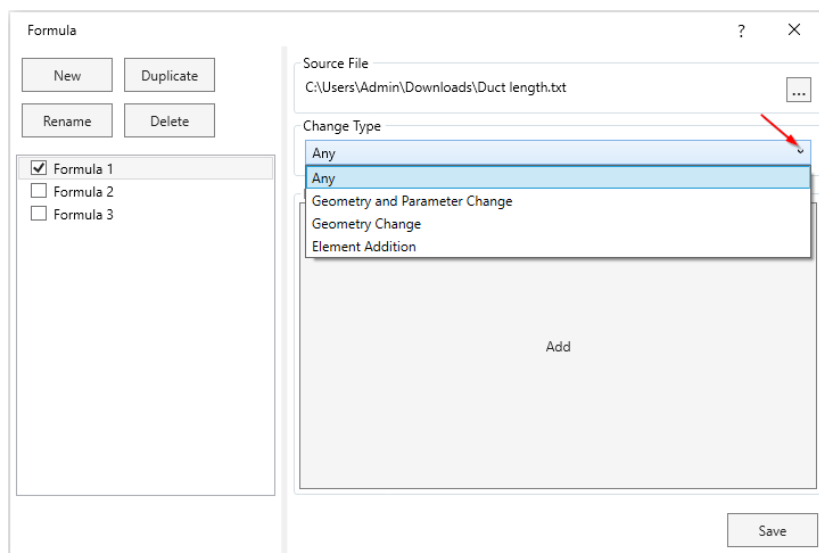
4. Next, load a .txt file with UTF-8 encoding that defines the formula using the notation supported by the tool (see point 11 for details).



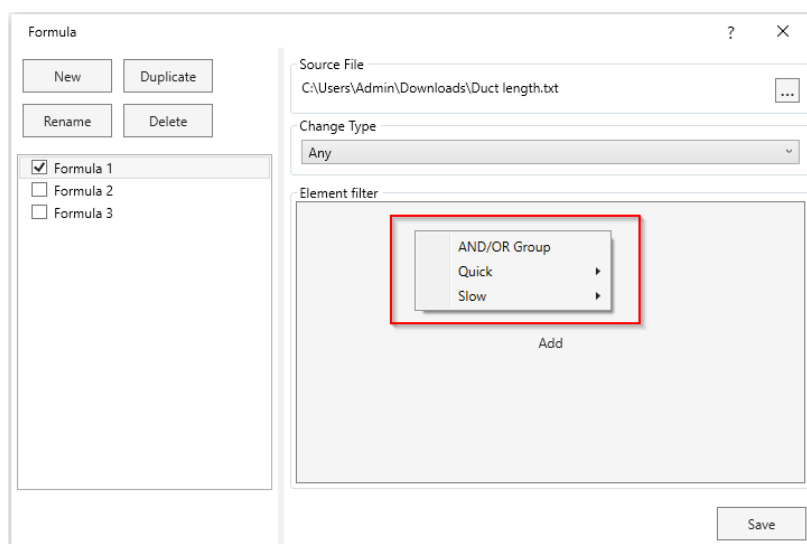
5. The tool is active only for selected formulas. If a formula is not selected, it will not be active.



6. In the *Change Type* dropdown list, select the type of project changes for which the parameter value update process will take place:
 - *Any* – includes any of the three supported types of changes
 - *Geometry and Parameter Change* – changes in the data and geometric layer of the component
 - *Geometry Change* – changes in the geometric layer of the component
 - *Element Addition* – adding a new component to the model

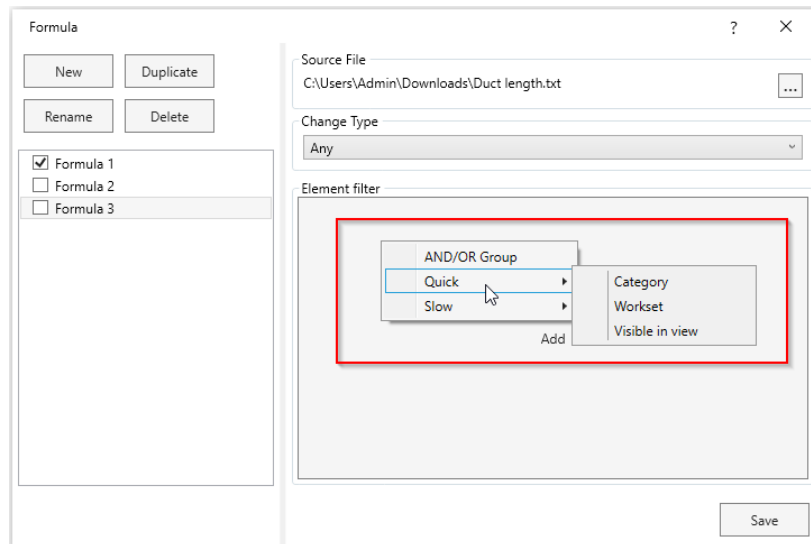


7. In the *Element Filter* section, select the model elements for which the parameter value update will occur. By clicking the *AND/OR GROUP* button, you can use quick filters (*Quick*) or slow filters (*Slow*) to define a custom selection of components.



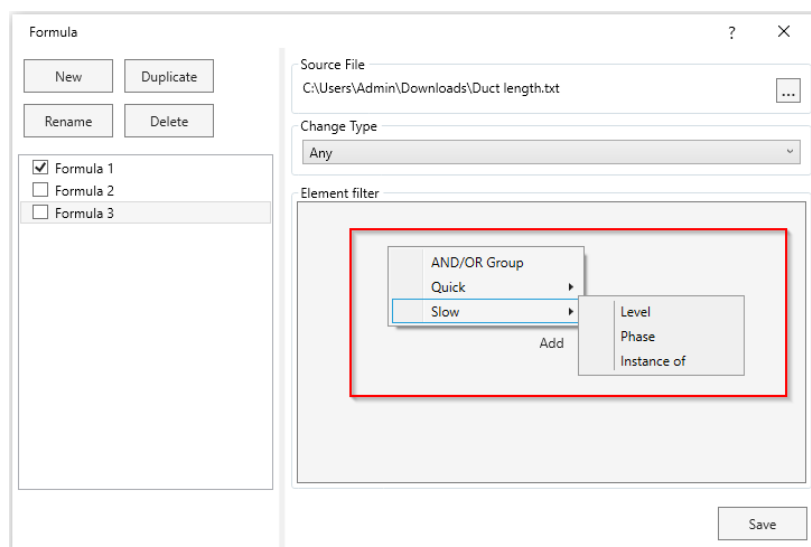
Filters from the *Quick* group allow you to select model components according to assignment to:

- Category – *Category*
- Worksets– *Workset*
- According to visibility in the selected view – *Visible in view*

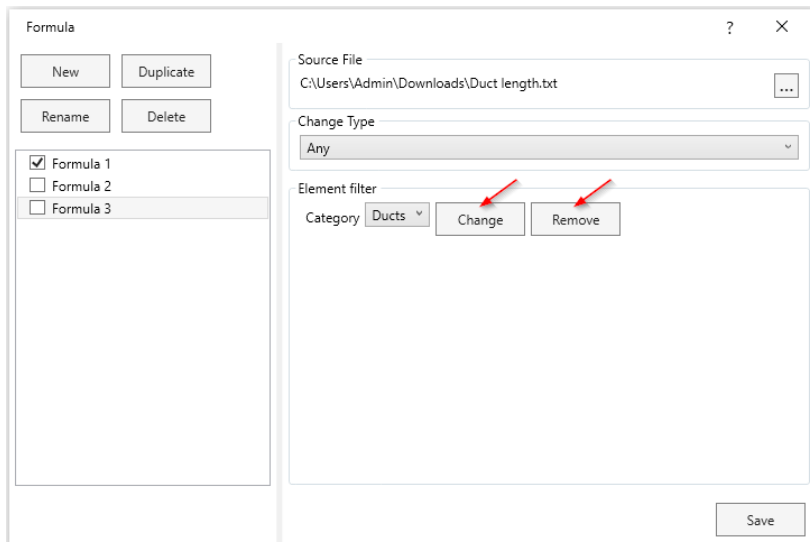


Filters from the *Slow* group allow you to select model components according to assignment to:

- Level – *Level*
- Phase – *Phase*
- Family instance – *Instance of*

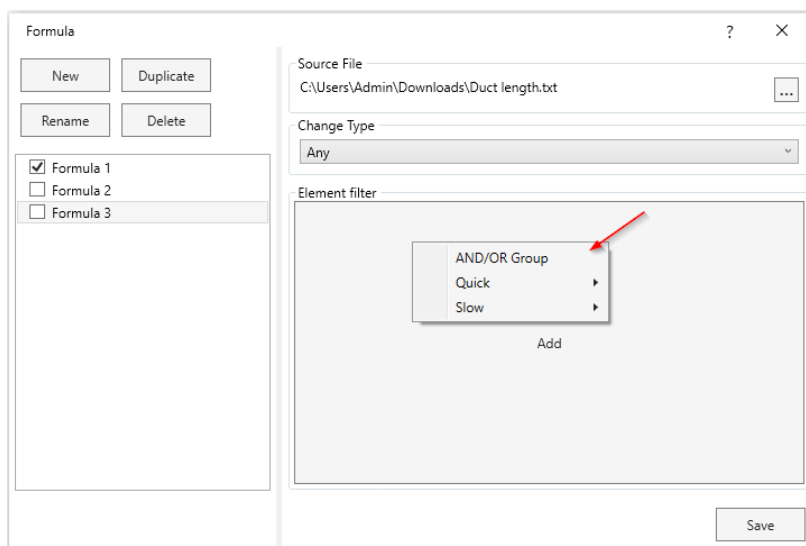


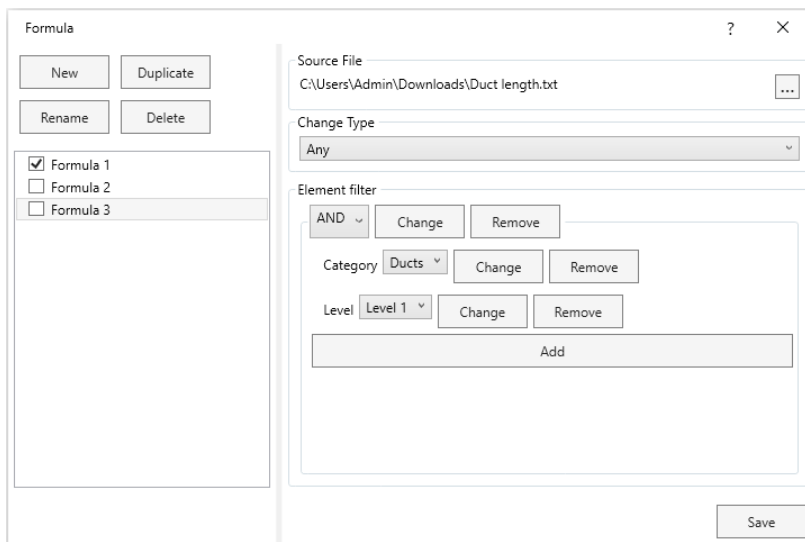
- After selecting the appropriate filter, complete its logic by choosing the relevant values from the dropdown lists available for the selected condition. The *Replace* button allows you to modify the condition within the filter, while the *Delete* button removes the condition from the filter.



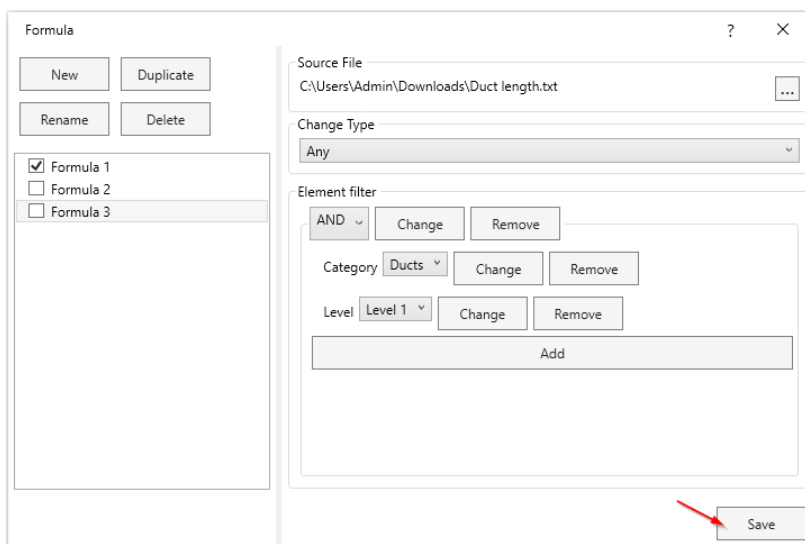
9. To create a more advanced filter in the *Element Filter* section, select the *AND/OR Group* filter type, which allows combining conditions using a logical operator, where:

- *AND* – all defined logical conditions must be met for a component to be selected
- *OR* – at least one of the defined logical conditions must be met for a component to be selected





10. Click the Save button to confirm the configuration.



11. For the tool to function correctly, the .txt file containing the formula must be structured based on supported logical and mathematical notations. The parameter that will receive the value must be preceded by the "@" symbol, and the formula must end with the ";" symbol.

Example formula:

```
#Reading and assigning parameter values
@Comments = "Lenght: " + string (@Lenght);
```

Example of recording other formulas:

```
#Assigning a value
a = 2;
b = 3;
c = a + b;
text = "Hello";
real = 0.314;

#Logarithmizing
log(text, " world!");

#Comparisons (score 1 or 0)
lessThan = a < b;

#Defining functions
increment = (x) -> x + 1;
seventy = increment(69);

#Adding strings
log("Hello" + "world");
```

Supported Data Types:

- *int (integer)* – integer number
- *real* – real number
- *string* – text (character string)

Each variable can change the type of value it contains. In the instruction, “any” means any type, and “num” means int or real.

List of Supported Logical and Mathematical Functions:

- *type_name(any)* – returns a string containing the type name of the given value
- *int(any)* – converts the given value to an integer
- *real(any)* – converts the given value to a real number
- *string(any)* – converts the given value to a string
- *if(int condition, any true, any false)* – returns (*true*) if the condition is met, otherwise returns (*false*)
- *or(int condition, int condition)* – returns (*true*) if the condition is met, otherwise returns (*false*)
- *and(int condition, int condition)* – returns (*true*) if at least one condition is met, otherwise (*false*)
- *mod(num x, num y)* – returns (*true*) if all conditions are met, otherwise (*false*)
- *pow(num x, num y)* – returns x raised to the power of y
- *sqrt(num x)* – returns the square root of x
- *sign(num x)* – returns 1 if x is positive, -1 if negative
- *abs(num x)* – returns the absolute value of x
- *min(num x, num y)* – returns the smaller value

- *max(num x, num y)* – returns the larger value
- *round(real x, int y)* – rounds x to y decimal places
- *to_units(num x, string units)* – converts a value from Autodesk Revit's internal unit to the specified unit
- *from_units(num x, string units)* – converts a value from the specified unit to Autodesk Revit's internal unit
- *convert(num x, string from, string to)* – converts a value from one unit to another

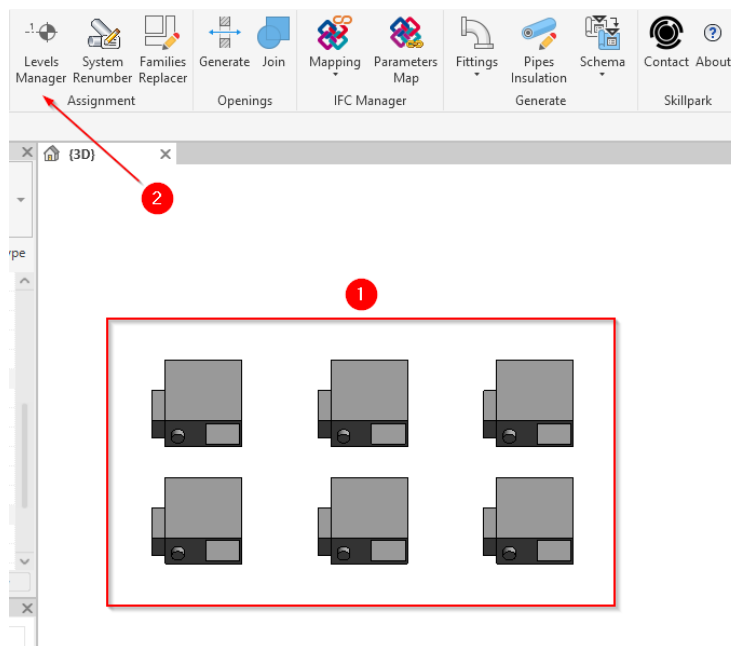
[List](#) of supported units.

Skillpark MEP > Assignment > Levels Manager

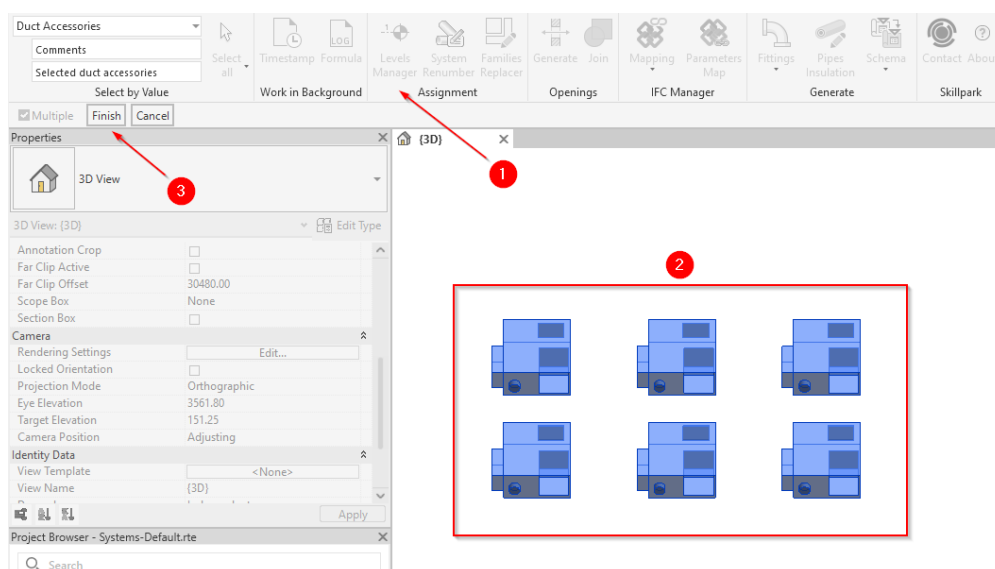
The tool assigns selected elements to a specified level without changing their absolute location within the model space.

Tool usage scheme:

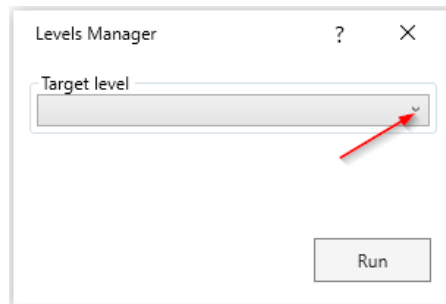
1. In the workspace, select the 3D model components whose level you want to change (1), then click the *Levels Manager* icon (2).



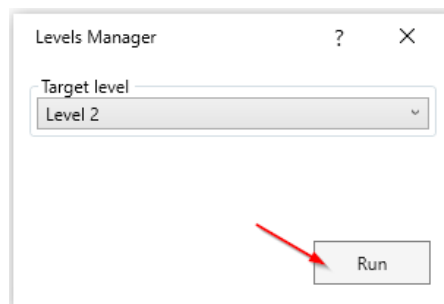
Optional: If you have not selected 3D model components beforehand, first launch the tool (1), then select the 3D model components in the workspace which level needs to be changed (2), and click *Finish* button (3) located on the *Options Bar*.



2. From the dropdown list, select the target level to which the previously selected 3D model components should be assigned.



3. To start the process, click the *Run* button.

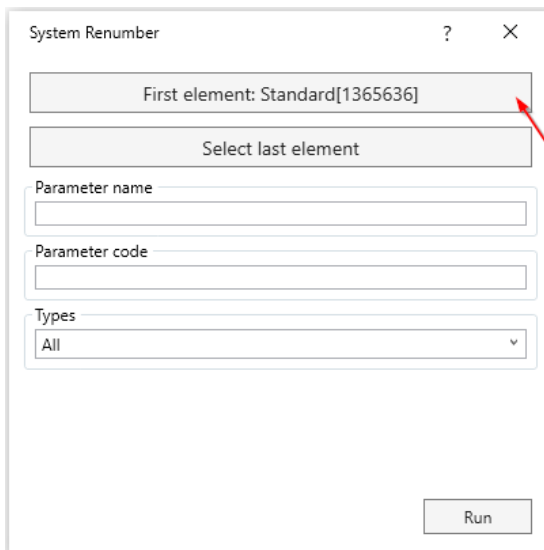


Skillpark MEP > Assignment > System Renumber

The tool assigns sequential numbers to system elements according to a user-defined coding scheme within a specified section of the installation.

Tool usage scheme:

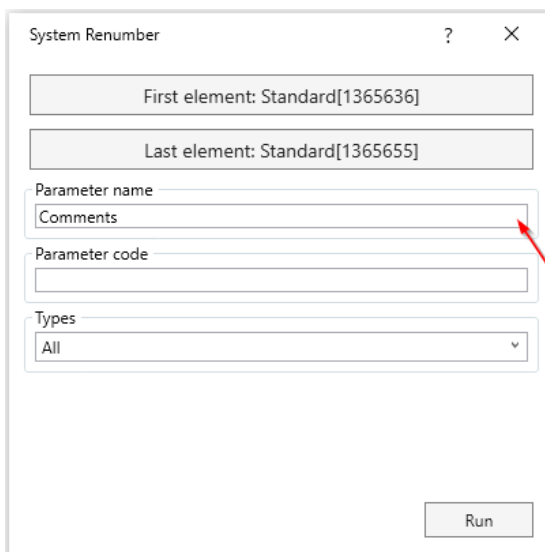
1. Click the *Select first element* button and choose the first element of the installation section to be numbered in the model workspace.



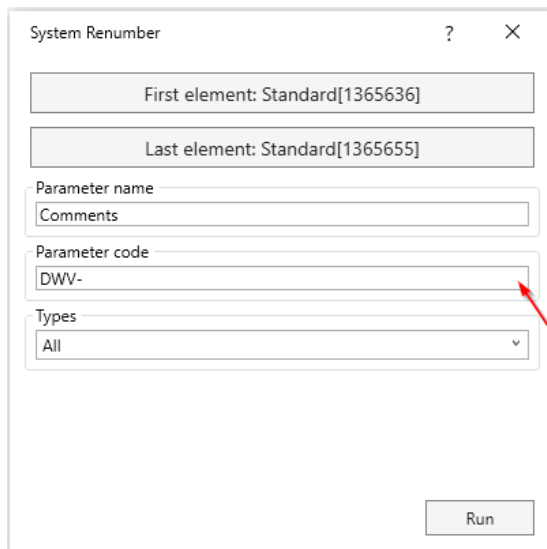
2. Click the *Select last element* button and choose the last element of the system section to be numbered in the model workspace.

screen

3. In the *Parameter name* text field, specify the name of the target text parameter in which the assigned sequential number of the element will be recorded.



4. In the *Parameter Code* text field, you can define the numbering code for the first element. The tool assigns each subsequent component in the system a sequential number that is incremented by 1 from the previous one, modifying the last recorded integer in the coding scheme.



System Renumber

First element: Standard[1365636]

Last element: Standard[1365655]

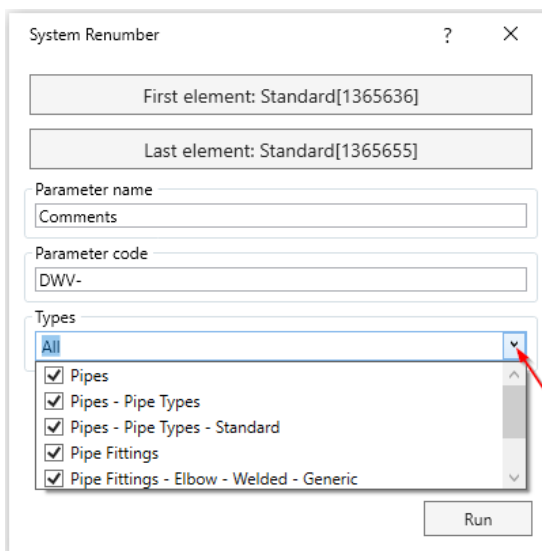
Parameter name
Comments

Parameter code
DWV-

Types
All

Run

5. The *Types* field displays all component types within the selected installation section. From the dropdown list, select the types to be included in the numbering. Selection is made by checking (included) or unchecking (excluded) the checkbox next to the type name.



System Renumber

First element: Standard[1365636]

Last element: Standard[1365655]

Parameter name
Comments

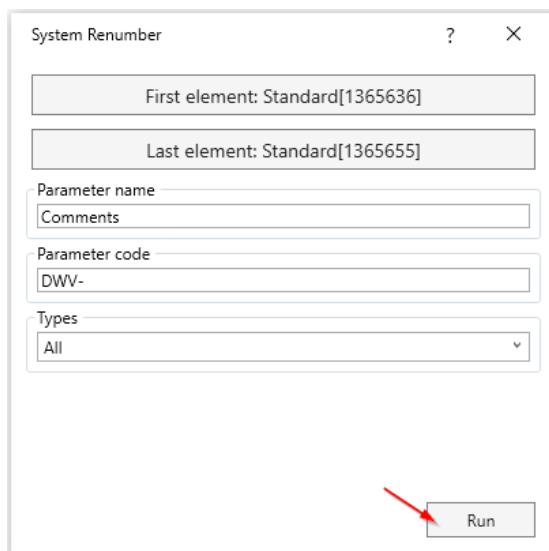
Parameter code
DWV-

Types

- ☒ All
- ☒ Pipes
- ☒ Pipes - Pipe Types
- ☒ Pipes - Pipe Types - Standard
- ☒ Pipe Fittings
- ☒ Pipe Fittings - Elbow - Welded - Generic

Run

6. To start the process, click the *Run* button.



System Renumber

First element: Standard[1365636]

Last element: Standard[1365655]

Parameter name

Comments

Parameter code

DWV-

Types

All

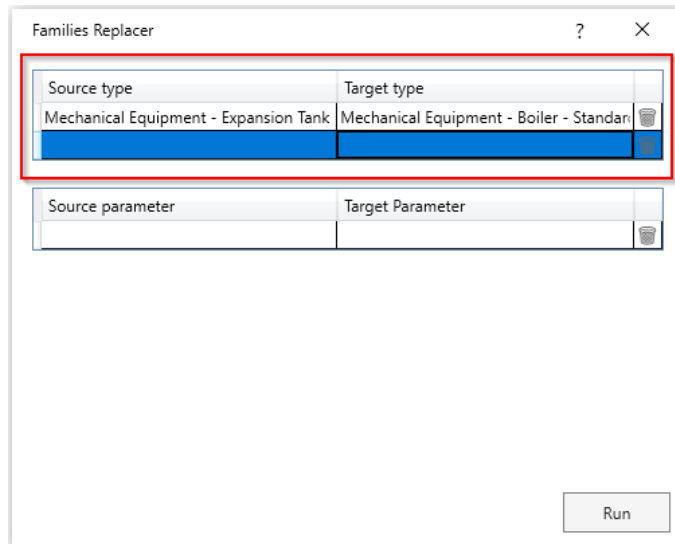
Run

Skillpark MEP > Assignment > Families Replacer

The tool replaces instances of selected types while simultaneously transferring the values of specified parameters.

Tool usage scheme:

1. In the *Source Type* column, define the family types in the project that should be replaced. In the *Target type* column, define the target family types.

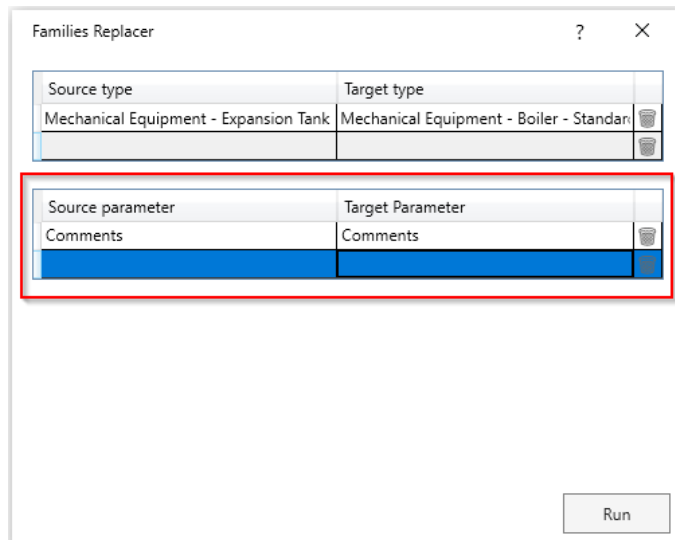


Source type	Target type
Mechanical Equipment - Expansion Tank	Mechanical Equipment - Boiler - Standan

Source parameter	Target Parameter

Run

2. To add a new data row, press *ENTER*.
3. Optional: In the *Source parameter* column, you can define the source parameter of the component types involved in the replacement, from which information should be transferred. In the *Target parameter* column, you can define the target parameter for the component types, to which the information should be transferred. Information from instance parameters is automatically transferred if the same parameters are defined in both components.

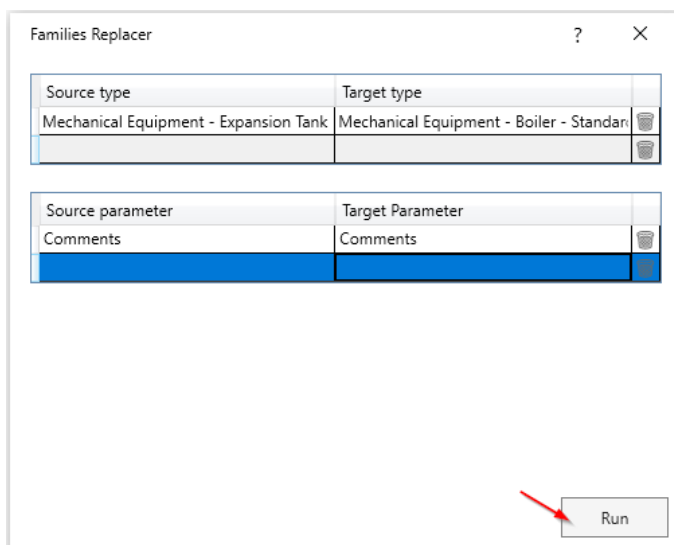


Source type	Target type
Mechanical Equipment - Expansion Tank	Mechanical Equipment - Boiler - Standan

Source parameter	Target Parameter
Comments	Comments

Run

4. To start the process of replacing instances by type while transferring parameter values, click the *Run* button.



Source type	Target type
Mechanical Equipment - Expansion Tank	Mechanical Equipment - Boiler - Standan

Source parameter	Target Parameter
Comments	Comments

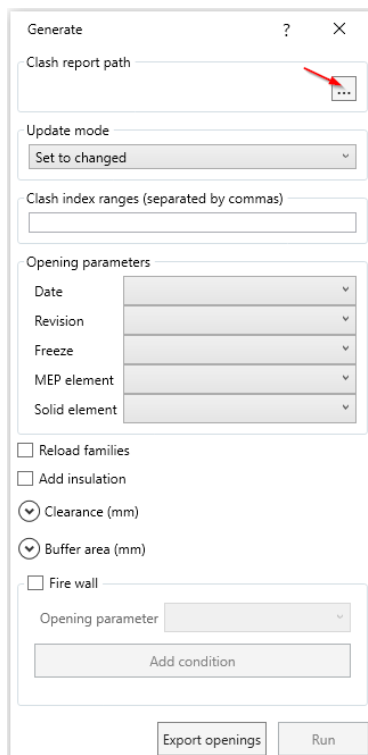
Run

Skillpark MEP > Openings > **Generate**

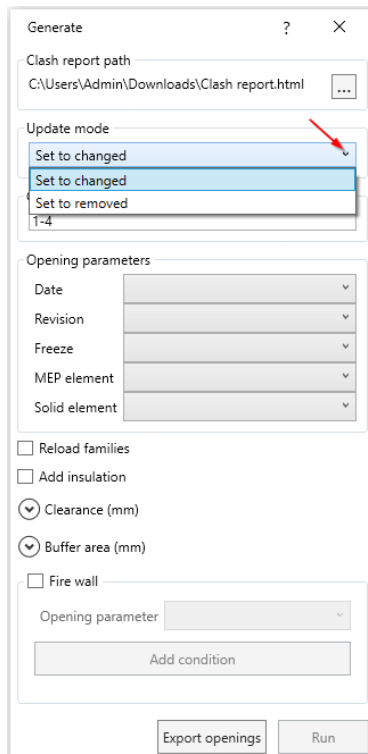
The tool places opening families in the project based on a previously prepared clash report from Autodesk Revit. It uses a predefined family type for insertion depending on the shape of the opening and the type of partition. It adds buffer space and the minimum required distance between inserted openings. It allows updating and changing the status of openings that have undergone significant modifications during the design process.

Tool usage scheme:

1. The tool requires a collision report file *.html generated in Autodesk Revit (*Collaborate > Clash Detection*) between linear installation segments and building partitions. To use the tool correctly, one of the projects included in the clash report must be opened, while the other must be linked.
2. Before using the tool, project parameters must be defined (parameter descriptions in section 6).
3. The path to the clash report file must be specified.



4. During the insertion of a new instance of the opening family, the tool checks whether an opening corresponding to the given clash already exists in the model (based on the ID numbers of the colliding components). From the drop-down list *Update mode* for existing openings, the update mode must be selected in case automatic changes are needed for an existing opening, where:
 - *Set to changed* – applies the update and changes the status of the existing opening to *Changed*
 - *Set to removed* – does not apply the update, changes the status of the existing opening to *Deleted*, and inserts a new opening



Generate

Clash report path
C:\Users\Admin\Downloads\Clash report.html

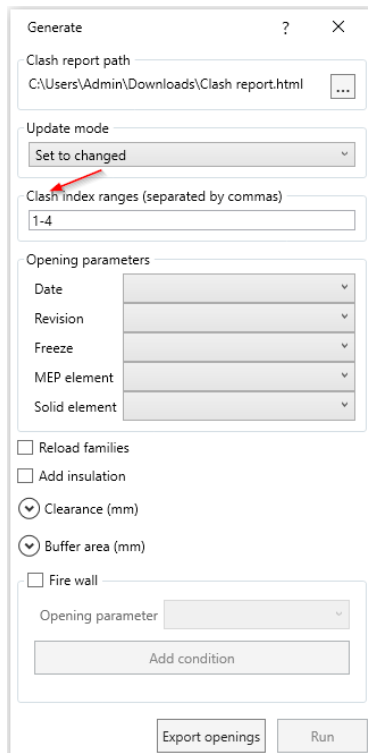
Update mode
Set to changed
Set to changed
Set to removed
1-4

Opening parameters
Date
Revision
Freeze
MEP element
Solid element

☐ Reload families
☐ Add insulation
☒ Clearance (mm)
☒ Buffer area (mm)
☐ Fire wall
Opening parameter
Add condition

Export openings Run

- In the *Clash index ranges* text field, the set of clashes to be considered in the current tool run must be specified numerically, according to the sequential numbers assigned to collisions in the report. The range must be entered in the format "x-y" (from x to y, inclusive) or "x" for a single clash. To define multiple separate ranges, they must be separated by commas.



Generate

Clash report path
C:\Users\Admin\Downloads\Clash report.html

Update mode
Set to changed

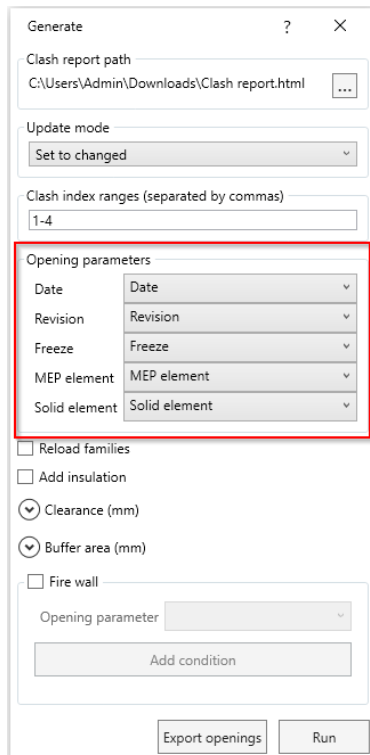
Clash index ranges (separated by commas)
1-4

Opening parameters
Date
Revision
Freeze
MEP element
Solid element

☐ Reload families
☐ Add insulation
☒ Clearance (mm)
☒ Buffer area (mm)
☐ Fire wall
Opening parameter
Add condition

Export openings Run

6. Using the drop-down lists *Date*, *Revision*, *Freeze*, *MEP Element*, *Solid Element*, the parameters must be specified where information will be entered:
- *Date* – a text parameter containing the insertion or last update date of the opening
 - *Revision* – a text parameter containing the current status of the opening, with possible values: New, Changed, Deleted, Joined
 - *Freeze* – a Yes/No parameter; if set to Yes, the opening will be skipped during the tool run
 - *MEP Element* – a text parameter containing the ID number, name, and source model of the installation element passing through the opening
 - *Solid Element* – a text parameter containing the ID number, name, and source model of the partition element containing the opening



Generate

Clash report path
C:\Users\Admin\Downloads\Clash report.html

Update mode
Set to changed

Clash index ranges (separated by commas)
1-4

Opening parameters

Date	Date
Revision	Revision
Freeze	Freeze
MEP element	MEP element
Solid element	Solid element

☐ Reload families

☐ Add insulation

☒ Clearance (mm)

☒ Buffer area (mm)

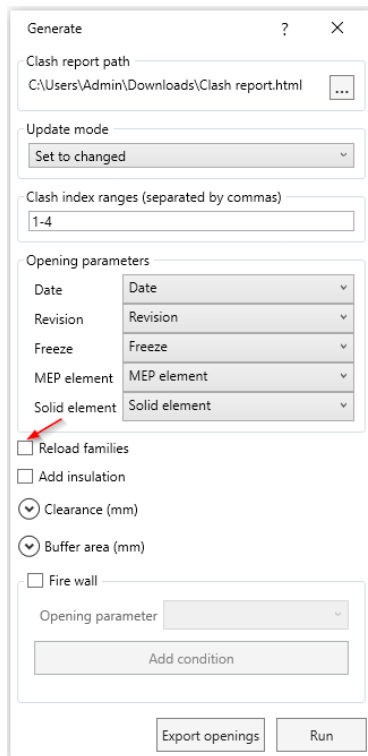
☐ Fire wall

Opening parameter

Add condition

Export openings Run

7. If the current situation requires reloading the original families provided with the add-on, this can be done during the current tool run by selecting the *Reload families* in model checkbox.



The screenshot shows the 'Generate' dialog box with the following settings:

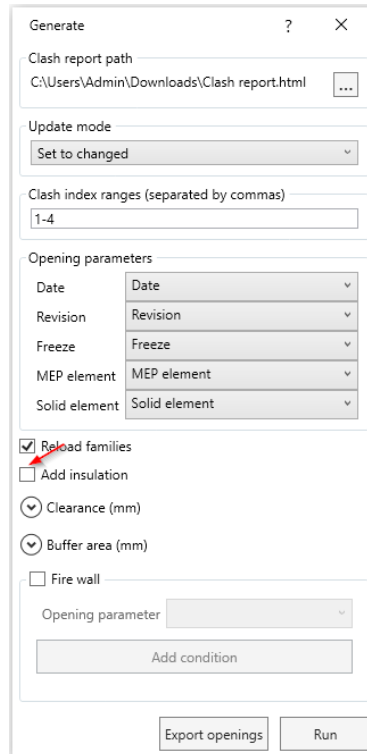
- Clash report path: C:\Users\Admin\Downloads\Clash report.html
- Update mode: Set to changed
- Clash index ranges (separated by commas): 1-4
- Opening parameters:
 - Date: Date
 - Revision: Revision
 - Freeze: Freeze
 - MEP element: MEP element
 - Solid element: Solid element
- ☐ Reload families (highlighted with a red arrow)
- ☐ Add insulation
- ☒ Clearance (mm)
- ☒ Buffer area (mm)
- ☐ Fire wall
- Opening parameter: (empty dropdown)
- Add condition button
- Export openings button
- Run button

If the checkbox is unchecked or the active model does not contain families, they will be loaded automatically. If the model contains families incompatible with the current version of the tool, it is recommended to use the *Reload families* in model option.

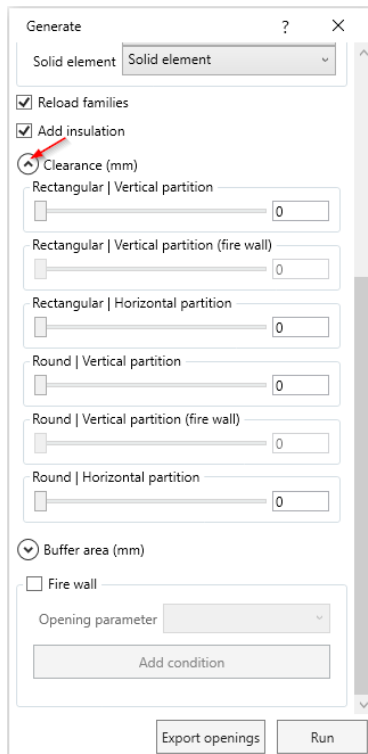
Family names used by the tool:

- Round opening (vertical partition)
- Round opening (horizontal partition)
- Rectangular opening (vertical partition)
- Rectangular opening (horizontal partition)

8. To account for the insulation thickness of installation elements in the opening dimensions, the *Add insulation* checkbox must be selected.



9. To define an additional installation clearance for specific types of openings, the *Clearance (mm)* panel must be expanded, where a slider or input field allows its definition for different opening cases. The maximum installation clearance is 100 mm.



Generate ? X

Solid element Solid element

☒ Reload families

☒ Add insulation

☒ Clearance (mm)

Rectangular | Vertical partition 0

Rectangular | Vertical partition (fire wall) 0

Rectangular | Horizontal partition 0

Round | Vertical partition 0

Round | Vertical partition (fire wall) 0

Round | Horizontal partition 0

☐ Buffer area (mm)

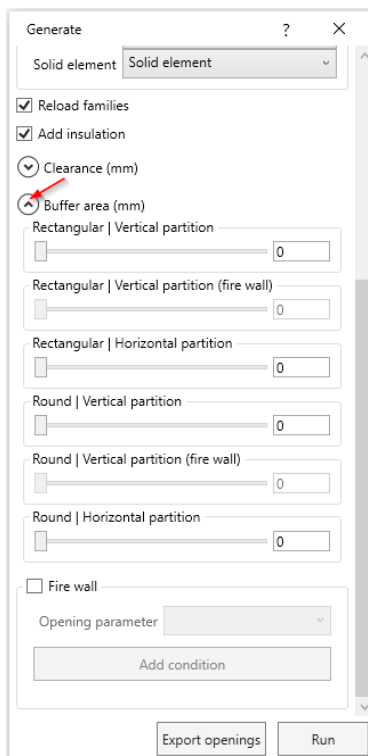
☐ Fire wall

Opening parameter

Add condition

Export openings Run

10. To define the minimum distance between openings for different types, the *Buffer area (mm)* panel must be expanded, where a slider or input field allows its definition for different opening cases. The maximum buffer area is 500 mm. Overlapping buffer areas of two or more openings may indicate the need to insert a merging opening combining them.



Generate ? X

Solid element Solid element

☒ Reload families

☒ Add insulation

☐ Clearance (mm)

☒ Buffer area (mm)

Rectangular | Vertical partition 0

Rectangular | Vertical partition (fire wall) 0

Rectangular | Horizontal partition 0

Round | Vertical partition 0

Round | Vertical partition (fire wall) 0

Round | Horizontal partition 0

☐ Fire wall

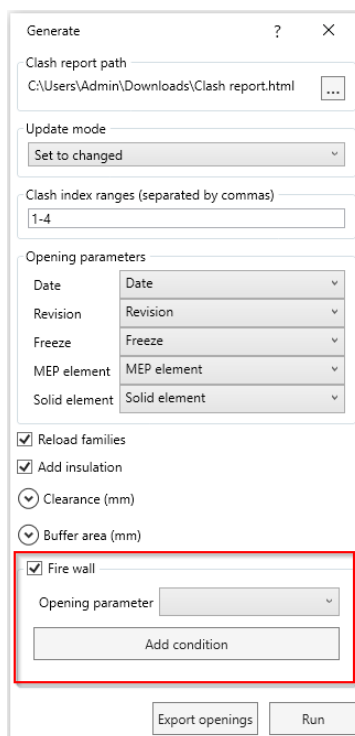
Opening parameter

Add condition

Export openings Run

11. For fire-rated walls, separate conditions can be set. To enable wall analysis based on defining parameters, the *Fire wall* checkbox must be selected. This activates two additional configuration areas:

- *Opening parameter* – a drop-down list to select a Yes/No project parameter indicating whether the opening is placed in a fire-rated wall
- *Add condition* – allows defining a set of logical conditions for wall definition, where the first drop-down list on the left selects the wall parameter, and the second (depending on the parameter type) contains logical conditions for verification. If the condition applies to a text parameter, a comparison value must be entered in the text field. If it applies to a numerical parameter, a unit must be selected from the last list.

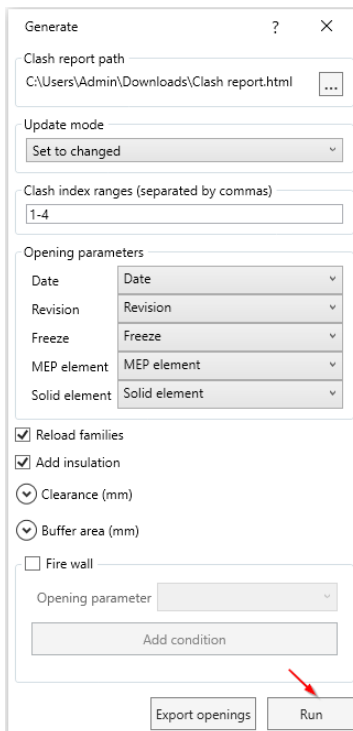


The screenshot shows the 'Generate' dialog box with the following settings:

- Clash report path:** C:\Users\Admin\Downloads\Clash report.html
- Update mode:** Set to changed
- Clash index ranges (separated by commas):** 1-4
- Opening parameters:**
 - Date: Date
 - Revision: Revision
 - Freeze: Freeze
 - MEP element: MEP element
 - Solid element: Solid element
- ☒ **Fire wall** (highlighted with a red rectangle)
- Opening parameter:** (dropdown menu)
- Add condition:** (button, highlighted with a red rectangle)
- ☒ Reload families
- ☒ Add insulation
- ☐ Clearance (mm)
- ☐ Buffer area (mm)
- Buttons:** Export openings, Run

If the wall in which the opening is placed meets at least one of the specified conditions, the opening will be considered placed in a fire-rated wall. It may then have a different installation clearance and buffer area.

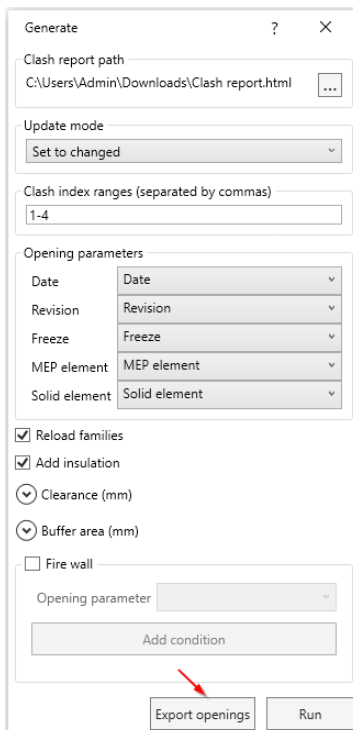
12. After completing the configuration, press the *Run* button.



The 'Generate' dialog box contains the following settings:

- Clash report path: C:\Users\Admin\Downloads\Clash report.html
- Update mode: Set to changed
- Clash index ranges (separated by commas): 1-4
- Opening parameters:
 - Date: Date
 - Revision: Revision
 - Freeze: Freeze
 - MEP element: MEP element
 - Solid element: Solid element
- ☒ Reload families
- ☒ Add insulation
- ☒ Clearance (mm)
- ☒ Buffer area (mm)
- ☐ Fire wall
- Opening parameter: (empty dropdown)
- Add condition button
- Export openings button
- Run button (highlighted with a red arrow)

13. To export the openings based on the selected configuration, press *Export openings*, then specify the location where the openings file will be saved.



The 'Generate' dialog box contains the following settings:

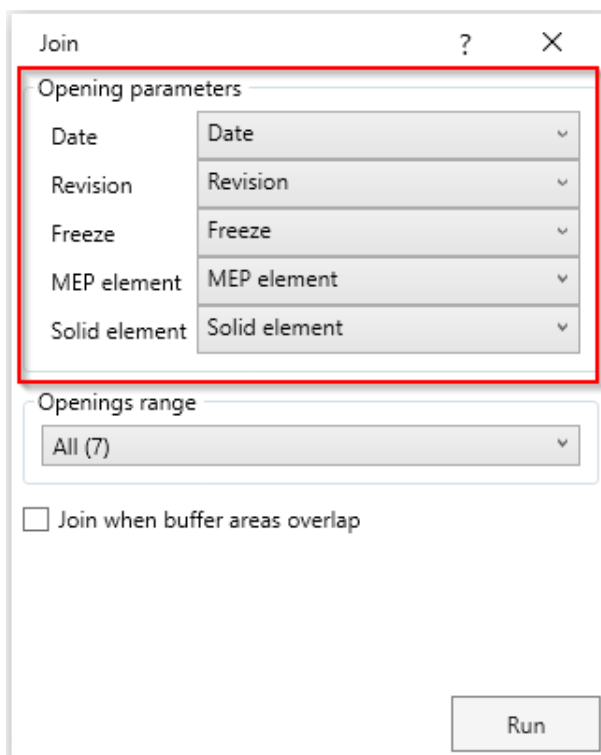
- Clash report path: C:\Users\Admin\Downloads\Clash report.html
- Update mode: Set to changed
- Clash index ranges (separated by commas): 1-4
- Opening parameters:
 - Date: Date
 - Revision: Revision
 - Freeze: Freeze
 - MEP element: MEP element
 - Solid element: Solid element
- ☒ Reload families
- ☒ Add insulation
- ☒ Clearance (mm)
- ☒ Buffer area (mm)
- ☐ Fire wall
- Opening parameter: (empty dropdown)
- Add condition button
- Export openings button (highlighted with a red arrow)
- Run button

Skillpark MEP > Openings > Join

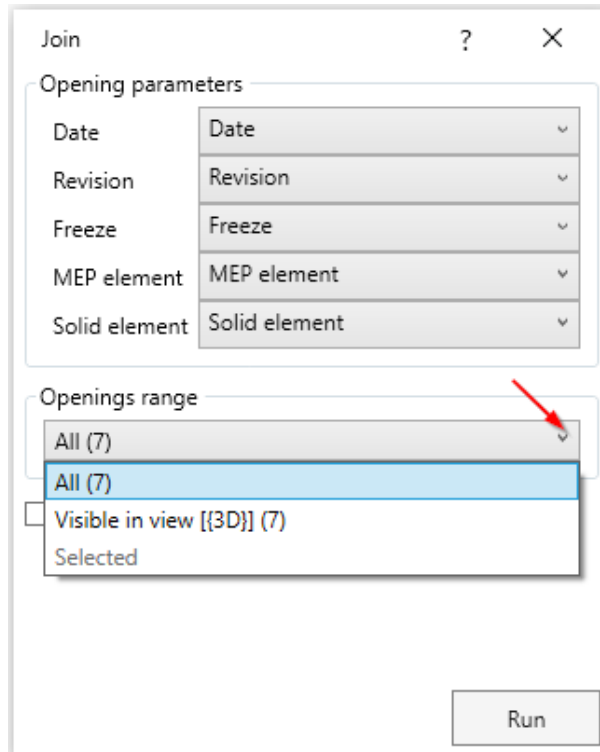
The tool analyzes the openings inserted in the model and places a collective opening for those which geometry overlaps, including in the buffer area.

Tool usage scheme:

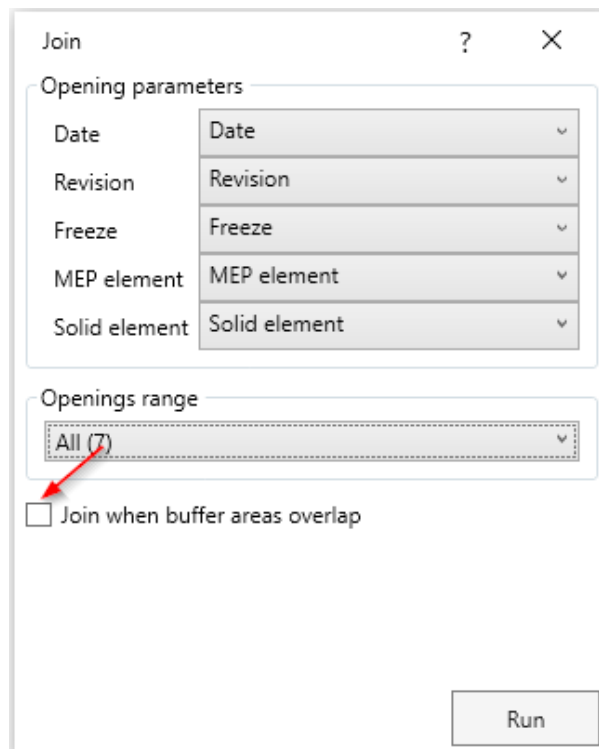
1. Using the drop-down lists *Date*, *Revision*, *Freeze*, *MEP Element*, *Solid Element*, the parameters must be specified where information will be filled in:
 - *Date* – a text parameter containing the insertion or last update date of the opening
 - *Revision* – a text parameter containing the current status of the opening, with possible values: *New*, *Changed*, *Deleted*, *Joined*
 - *Freeze* – a Yes/No parameter; if set to *Yes*, the opening will be skipped during the tool run
 - *MEP Element* – a text parameter containing the ID number, name, and source model of the installation element passing through the opening
 - *Solid Element* – a text parameter containing the ID number, name, and source model of the partition element containing the opening



2. From the drop-down list *Opening Range*, a set of openings to be considered for merging must be selected, where:
 - *All* – includes all instances of openings in the mode
 - *Visible in view* – includes openings visible in the view that was active when the tool was launched
 - *Selected* – includes openings selected by the user before launching the tool



3. In order to include buffer areas in the merging process, the *Join when buffer areas overlap* checkbox must be selected.



If the checkbox is selected, openings whose buffer areas overlap will be merged into one. If the checkbox is deselected, only openings overlapping in geometry (excluding the buffer area) will be merged. In this case, the

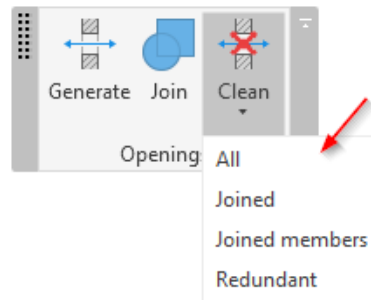
tool's generated report will contain a separate table titled *Openings too close together*, listing the ID numbers of elements whose buffer areas overlap.

Skillpark MEP > Openings > **Clean**

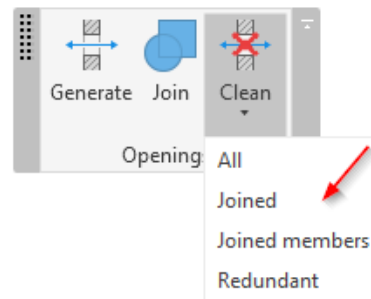
The tool is used to remove specific types of openings from the project. It only removes openings inserted by the *Generate* and *Join* tools.

Tool usage scheme:

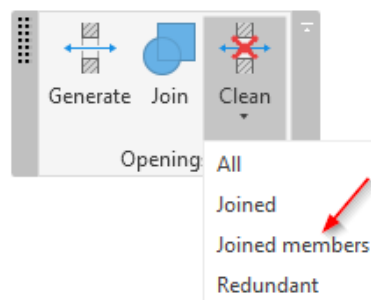
1. Clicking the "All" button removes all openings from the project that were created using the "Generate" and "Merge" tools.



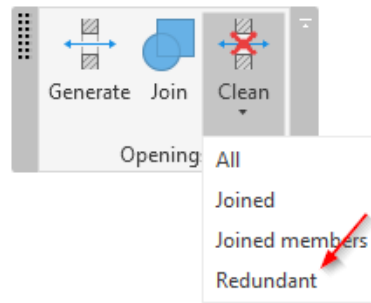
2. Clicking the "Joined" button removes merged openings from the project that were created using the "Join" tool.



3. Clicking the "Joined members" button removes individual openings from the project for which merged openings were created using the "Join" tool.



4. Clicking the “*Redundant*” button removes openings located in areas where there are no longer any clashes between installations and building partitions.

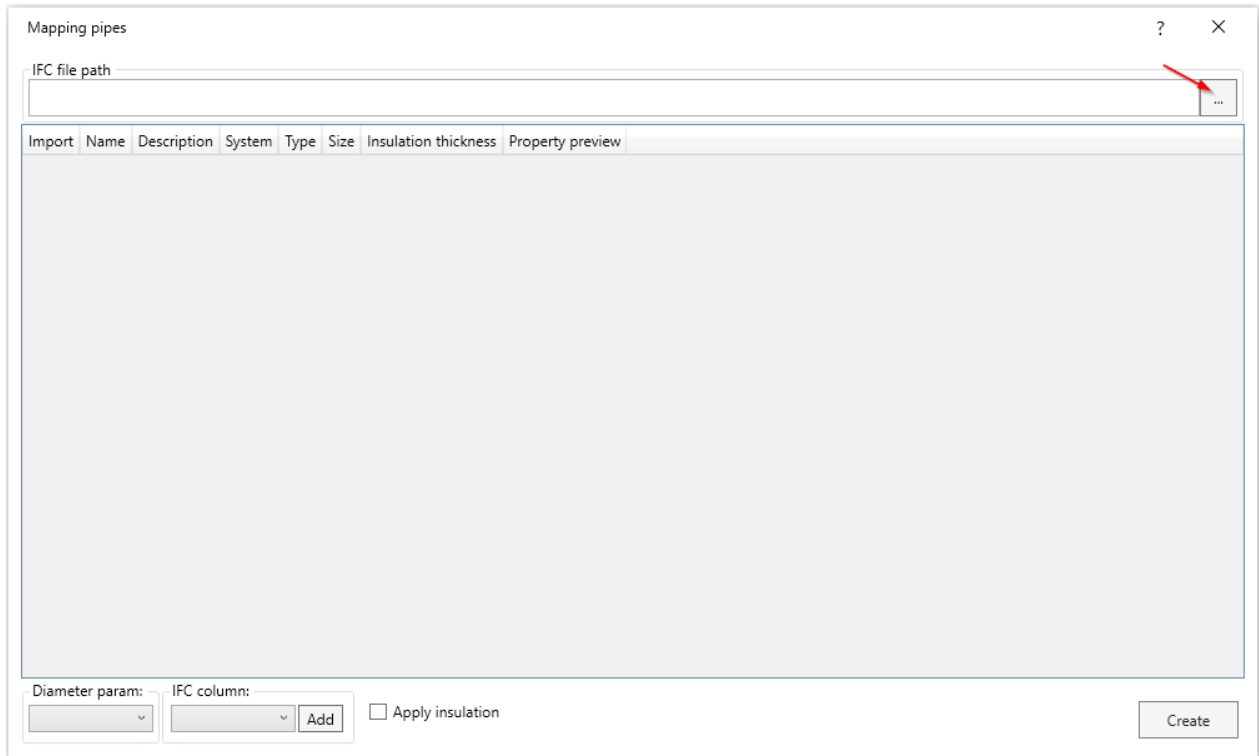


Skillpark MEP > IFC Manager > Mapping > Pipes

The tool places pipe instances at the locations of *IfcPipeSegment* class elements in IFC models. It allows sorting successive instances of IFC model elements based on a selected parameter contained within the IFC model.

Tool usage scheme:

1. Specify the file path to the IFC file based on which the pipes will be mapped in the model.



Mapping pipes

IFC file path

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
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Diameter param: IFC column: Add

☐ Apply insulation

Create

- In the *Import* column, select which elements should be included in the pipe mapping in the model.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395990		Hydronic Supply	Standard	0		

Diameter param: IFC column: Add ☐ Apply insulation

- The *Name* and *Description* columns contain information about the name and description of the IFC file components.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395990		Hydronic Supply	Standard	0		

Diameter param: IFC column: Add ☐ Apply insulation

4. In the *System* and *Type* columns, use the drop-down lists to select the target mapping for the pipe *System* and *Type*.

Mapping pipes
?
×

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380064		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380134		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380147		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380160		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380173		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380354		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380391		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380404		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380417		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380490		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380503		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380746		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380759		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1381224		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1394275		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1395291		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1395575		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1395615		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1395913		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy rur:Copper:1395990		Hydronic Supply	Standard	0		

Diameter param:
IFC column:
☐ Apply insulation

5. The Size column is filled based on the selected parameter from the *Diameter param* drop-down list.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	0		
<input checked="" type="checkbox"/>	Typy run:Copper:1395990		Hydronic Supply	Standard	0		

Diameter param: IFC column: Add

☐ Apply insulation

Create

GUID
Name
Tag
Description
Building
System
Predefined Type
IFC Pipe Schedule;Diameter
Pset_EnvironmentalImpactIndicators;Reference
Pset_PipeSegmentTypeCommon;Reference

6. To apply insulation, check the *Apply insulation* checkbox and enter the appropriate thickness in millimeters in the *Insulation thickness* column. Entering the insulation thickness alone without selecting the checkbox will not apply the insulation automatically.

Mapping pipes

IFC file path

C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	101.60000000000001	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	25.400000000000002	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	25.400000000000002	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	25.400000000000002	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	25.400000000000002	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	25.400000000000002	0	
<input checked="" type="checkbox"/>	Typy run:Copper:1395990		Hydronic Supply	Standard	25.400000000000002	0	

Diameter param: IFC column:

IFC Pipe Schedule;Diameter

Add

☐ Apply insulation

Create

7. The *Property preview* column allows viewing the value of a selected parameter from the IFC file. To do this, select the appropriate parameter from the *IFC column* drop-down list. To add a new column with the selected parameter, click the *Add* button.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380064		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380134		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380147		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380160		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380173		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380354		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380391		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380404		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380417		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380490		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380503		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380746		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1380759		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:PVC - DWV:1381224		Hydronic Supply	Standard	101.60000000000001	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1394275		Hydronic Supply	Standard	25.400000000000002	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1395291		Hydronic Supply	Standard	25.400000000000002	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1395575		Hydronic Supply	Standard	25.400000000000002	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1395615		Hydronic Supply	Standard	25.400000000000002	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1395913		Hydronic Supply	Standard	25.400000000000002	10	
<input checked="" type="checkbox"/>	Typy rur:Copper:1395990		Hydronic Supply	Standard	25.400000000000002	10	

Diameter param:
IFC Pipe Schedule:Diameter

IFC column:
 ☒ Apply insulation

Create

GUID
Name
Tag
Description
Building
System
Predefined Type
IFC Pipe Schedule:Diameter
Pset_EnvironmentalImpactIndicators;Reference
Pset_PipeSegmentTypeCommon;Reference

8. To group components by a selected value in the data column, right-click on the column header and then click *Group*.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview	GUID
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Group	000000001	10	1Z2CfTdv3aw3HeCXkWTov	1Z2CfTdv3aw3HeCXkWTc
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTp	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTc	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTq	1Z2CfTdv3aw3HeCXkWTc
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTq	1Z2CfTdv3aw3HeCXkWTc
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9z	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9O	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9B	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8r	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8e	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_Qd8	1AmYIPBcT84RlniSiB_Qd8
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_QdL	1AmYIPBcT84RlniSiB_QdL
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_Qig	1AmYIPBcT84RlniSiB_Qig
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFj	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjXPWnDKVI	1cvCN3rmPEdhjXPWnDK
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGF5	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFO	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjXPWnDK5z	1cvCN3rmPEdhjXPWnDK
<input checked="" type="checkbox"/>	Typy run:Copper:1395990		Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjXPWnDK2Y	1cvCN3rmPEdhjXPWnDK

Diameter param: IFC column: ☒ Apply insulation

9. For grouped components, the same information can be assigned to all grouped elements.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview	GUID
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTov	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTp	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTc	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTq	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWTq	1Z2CfTdv3aw3HeCXkWTi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9z	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9O	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS9B	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8r	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503		Hydronic Supply	Standard	101.600000000000001	10	1Z2CfTdv3aw3HeCXkWS8e	1Z2CfTdv3aw3HeCXkWSi
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_Qd8	1AmYIPBcT84RlniSiB_Qd8
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_QdL	1AmYIPBcT84RlniSiB_QdL
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224		Hydronic Supply	Standard	101.600000000000001	10	1AmYIPBcT84RlniSiB_Qig	1AmYIPBcT84RlniSiB_Qig
<input checked="" type="checkbox"/>	Typy run:Copper:1394275		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFj	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395291		Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjXPWnDKVI	1cvCN3rmPEdhjXPWnDK
<input checked="" type="checkbox"/>	Typy run:Copper:1395575		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGF5	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395615		Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFO	2jOLRm8iL5AvdWvCFIUGF
<input checked="" type="checkbox"/>	Typy run:Copper:1395913		Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjXPWnDK5z	1cvCN3rmPEdhjXPWnDK

Diameter param: IFC column: ☒ Apply insulation

10. To remove grouping by a selected value, right-click on the column header and then click *Remove grouping*.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview	GUID
<input checked="" type="checkbox"/>	Autodesk.Revit.DB.Plumbing.PipingSystemType	Hydronic	Supply	Standard	101.60000000000001	10	Quantity: 1526	1Z2CfTdv3aw3HeCkKwToV
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTrP	1Z2CfTdv3aw3HeCkKwTrP	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTrC	1Z2CfTdv3aw3HeCkKwTrC	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTq\$	1Z2CfTdv3aw3HeCkKwTq\$	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9z	1Z2CfTdv3aw3HeCkKwS9z	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9o	1Z2CfTdv3aw3HeCkKwS9o	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9B	1Z2CfTdv3aw3HeCkKwS9B	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS8_	1Z2CfTdv3aw3HeCkKwS8_	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS8r	1Z2CfTdv3aw3HeCkKwS8r	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwSBe	1Z2CfTdv3aw3HeCkKwSBe	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_Qd8	1AmYIPBcT84RlniSiB_Qd8	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_QdL	1AmYIPBcT84RlniSiB_QdL	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_Qig	1AmYIPBcT84RlniSiB_Qig	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFj	2jOLRm8iL5AvdWvCFIUGFj	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDKVI	1cvCN3rmPEdhjdjXPWnDKVI	
<input checked="" type="checkbox"/>	Typy run:Copper:1394275	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGF5	2jOLRm8iL5AvdWvCFIUGF5	
<input checked="" type="checkbox"/>	Typy run:Copper:1395291	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFO	2jOLRm8iL5AvdWvCFIUGFO	
<input checked="" type="checkbox"/>	Typy run:Copper:1395575	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDK5z	1cvCN3rmPEdhjdjXPWnDK5z	
<input checked="" type="checkbox"/>	Typy run:Copper:1395615	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDK5z	1cvCN3rmPEdhjdjXPWnDK5z	
<input checked="" type="checkbox"/>	Typy run:Copper:1395913	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDK5z	1cvCN3rmPEdhjdjXPWnDK5z	

Diameter param: IFC Pipe Schedule:Diameter IFC column: GUID Add ☒ Apply insulation Create

11. After completing the configuration, press the *Create* button.

Mapping pipes

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Import	Name	Description	System	Type	Size	Insulation thickness	Property preview	GUID
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380064	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwToV	1Z2CfTdv3aw3HeCkKwToV	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380134	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTrP	1Z2CfTdv3aw3HeCkKwTrP	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380147	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTrC	1Z2CfTdv3aw3HeCkKwTrC	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380160	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTq\$	1Z2CfTdv3aw3HeCkKwTq\$	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380173	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwTqo	1Z2CfTdv3aw3HeCkKwTqo	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380354	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9z	1Z2CfTdv3aw3HeCkKwS9z	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380391	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9o	1Z2CfTdv3aw3HeCkKwS9o	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380404	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS9B	1Z2CfTdv3aw3HeCkKwS9B	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380417	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS8_	1Z2CfTdv3aw3HeCkKwS8_	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380490	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwS8r	1Z2CfTdv3aw3HeCkKwS8r	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380503	Hydronic Supply	Standard	101.60000000000001	10	1Z2CfTdv3aw3HeCkKwSBe	1Z2CfTdv3aw3HeCkKwSBe	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380746	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_Qd8	1AmYIPBcT84RlniSiB_Qd8	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1380759	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_QdL	1AmYIPBcT84RlniSiB_QdL	
<input checked="" type="checkbox"/>	Typy run:PVC - DWV:1381224	Hydronic Supply	Standard	101.60000000000001	10	1AmYIPBcT84RlniSiB_Qig	1AmYIPBcT84RlniSiB_Qig	
<input checked="" type="checkbox"/>	Typy run:Copper:1394275	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFj	2jOLRm8iL5AvdWvCFIUGFj	
<input checked="" type="checkbox"/>	Typy run:Copper:1395291	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDKVI	1cvCN3rmPEdhjdjXPWnDKVI	
<input checked="" type="checkbox"/>	Typy run:Copper:1395575	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGF5	2jOLRm8iL5AvdWvCFIUGF5	
<input checked="" type="checkbox"/>	Typy run:Copper:1395615	Hydronic Supply	Standard	25.400000000000002	10	2jOLRm8iL5AvdWvCFIUGFO	2jOLRm8iL5AvdWvCFIUGFO	
<input checked="" type="checkbox"/>	Typy run:Copper:1395913	Hydronic Supply	Standard	25.400000000000002	10	1cvCN3rmPEdhjdjXPWnDK5z	1cvCN3rmPEdhjdjXPWnDK5z	

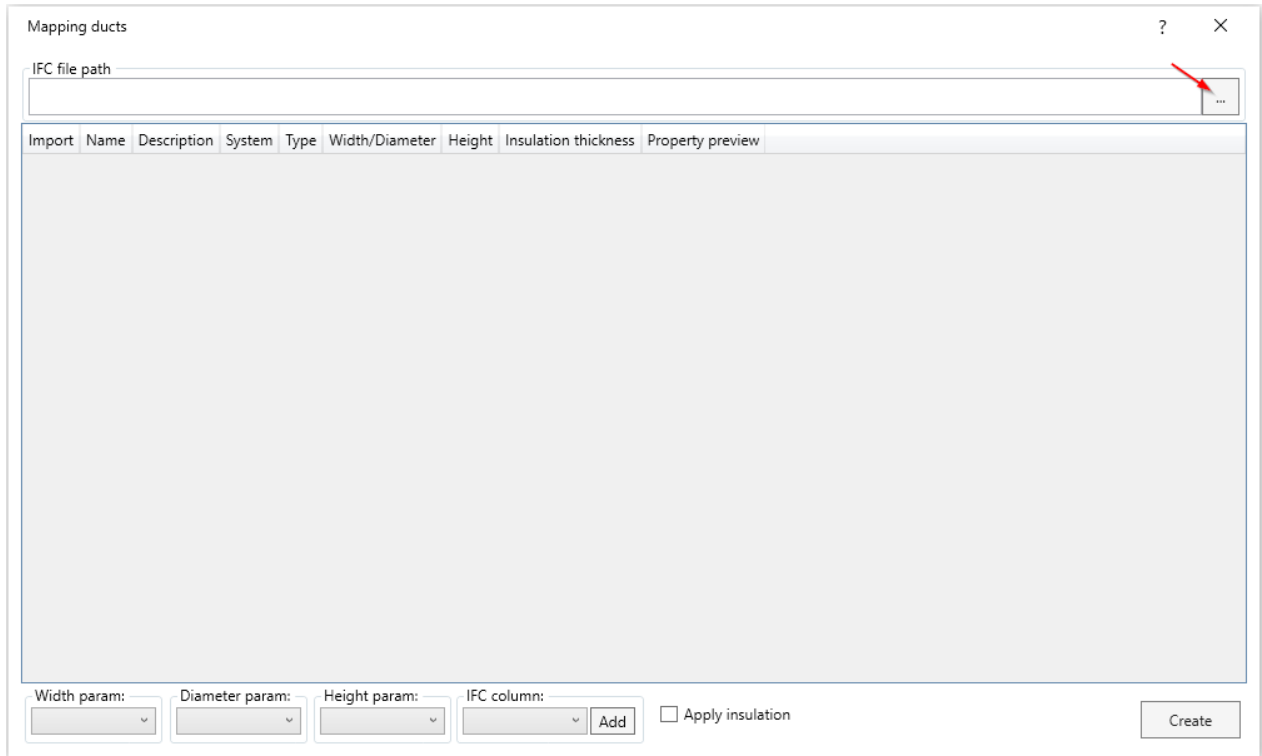
Diameter param: IFC Pipe Schedule:Diameter IFC column: GUID Add ☒ Apply insulation Create

Skillpark MEP > IFC Manager > Mapping > Ducts

The tool places duct instances at the locations of *IfcDuctSegmentType* class elements in IFC models. It allows sorting successive instances of IFC model elements based on a selected parameter contained within the IFC model.

Tool usage scheme:

1. Specify the file path to the IFC file based on which the ducts will be mapped in the model.



Mapping ducts

IFC file path

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
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Width param: Diameter param: Height param: IFC column: Add ☐ Apply insulation Create

2. In the *Import* column, select which element groups should be included in the duct mapping in the model.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Prope
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		

Width param: Diameter param: Height param: IFC column: Add ☐ Apply insulation

3. The *Name* and *Description* columns contain information about the name and description of the IFC file components.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Prope
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps		0		

Width param: Diameter param: Height param: IFC column: Add ☐ Apply insulation

4. In the *System* and *Type* columns, use the drop-down lists to select the target mapping for the duct *System* and *Type*.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Prope
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	

Width param: Diameter param: Height param: IFC column: Add ☐ Apply insulation

5. The *Width/Diameter* and *Height* columns are filled based on the selected parameters from the drop-down lists: *Width param*, *Diameter param*, and *Height param*.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Prope
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	
<input checked="" type="checkbox"/>	Kanał okragly:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps			0	

Width param: Diameter param: Height param: IFC column: Add ☐ Apply insulation

6. To apply insulation, check the *Apply insulation* checkbox and enter the appropriate thickness in millimeters in the *Insulation thickness* column. Entering the insulation thickness alone without selecting the checkbox will not apply the insulation automatically.

Mapping ducts
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IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps	125		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps	140		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps	110		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		0	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1404061		Supply Air	Rectangular Duct - Radius Elbows / Taps	375		0	

Width param: IFC Duct Schedule;Width
Diameter param: IFC Duct Schedule;Diameter
Height param: IFC Duct Schedule;Height
IFC column: Add
☐ Apply insulation
Create

7. The *Property Preview* column allows viewing the value of a selected parameter from the IFC file. To do this, select the appropriate parameter from the *IFC column* drop-down list. To add a new column with the selected parameter, click the *Add* button.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - Radius Elbows / Taps	90		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - Radius Elbows / Taps	100		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - Radius Elbows / Taps	125		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - Radius Elbows / Taps	140		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - Radius Elbows / Taps	110		10	
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - Radius Elbows / Taps	75		10	

Width param: IFC Duct Schedule;Width Diameter param: IFC Duct Schedule;Diameter Height param: IFC Duct Schedule;Height IFC column: Add ☒ Apply insulation Create

8. To group components by a selected value in the data column, right-click on the column header and then click *Group*.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Group	75		10	0CW5ZygHT5FfccaQkMoD3E
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoD05
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoDAZ
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoD3k
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoD82
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoD8p
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - R	100		10	0CW5ZygHT5FfccaQkMoE_1
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoE_0
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoE_7
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - R	100		10	0CW5ZygHT5FfccaQkMoEdg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoEdf
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoEde
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - R	75		10	20hMZHm2HFUApm3YISvPcH
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - R	90		10	20hMZHm2HFUApm3YISvPHM
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - R	100		10	20hMZHm2HFUApm3YISvPHg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - R	125		10	20hMZHm2HFUApm3YISvPP5
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - R	140		10	20hMZHm2HFUApm3YISvPQn
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - R	110		10	20hMZHm2HFUApm3YISvPQ4
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - R	75		10	20hMZHm2HFUApm3YISvP0G
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1404061		Supply Air	Rectangular Duct - R	375		10	20hMZHm2HFUApm3YISvP2w

Width param: IFC Duct Schedule;Width Diameter param: IFC Duct Schedule;Diameter Height param: IFC Duct Schedule;Height IFC column: GUID Add ☒ Apply insulation Create

9. For grouped components, the same information can be assigned to all grouped elements.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoD3E
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoD05
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoDAZ
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoD3k
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoD82
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoD8p
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - R	100		10	0CW5ZygHT5FfccaQkMoE_1
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoE_0
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoE_7
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - R	100		10	0CW5ZygHT5FfccaQkMoEdg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - R	75		10	0CW5ZygHT5FfccaQkMoEdf
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - R	90		10	0CW5ZygHT5FfccaQkMoEde
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - R	75		10	20hMZHm2HFUApm3YISvPcH
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - R	90		10	20hMZHm2HFUApm3YISvPHM
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - R	100		10	20hMZHm2HFUApm3YISvPHg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - R	125		10	20hMZHm2HFUApm3YISvPP5
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - R	140		10	20hMZHm2HFUApm3YISvPQn
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - R	110		10	20hMZHm2HFUApm3YISvPQ4
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - R	75		10	20hMZHm2HFUApm3YISvP0G

Width param: IFC Duct Schedule;Width Diameter param: IFC Duct Schedule;Diameter Height param: IFC Duct Schedule;Height IFC column: GUID Add ☒ Apply insulation Create

10. To remove grouping by a selected value, right-click on the column header and then click *Remove grouping*.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoD3E
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoD05
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoDAZ
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoD3k
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoDB2
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoD8p
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - R	100	10		0CW5ZygHT5FfccaQkMoE_1
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoE_0
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoE_7
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - R	100	10		0CW5ZygHT5FfccaQkMoEdg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoEdf
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoEdc
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - R	75	10		20hMZhm2HFUApm3YIsvPcH
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - R	90	10		20hMZhm2HFUApm3YIsvPHM
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - R	100	10		20hMZhm2HFUApm3YIsvPHg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - R	125	10		20hMZhm2HFUApm3YIsvPP5
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - R	140	10		20hMZhm2HFUApm3YIsvPQn
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - R	110	10		20hMZhm2HFUApm3YIsvPQ4
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - R	75	10		20hMZhm2HFUApm3YIsvP0G

Width param: IFC Duct Schedule;Width Diameter param: IFC Duct Schedule;Diameter Height param: IFC Duct Schedule;Height IFC column: GUID Add

☒ Apply insulation **Create**

11. After completing the configuration, press the *Create* button.

Mapping ducts

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	System	Type	Width/Diameter	Height	Insulation thickness	Property preview
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399925		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoD3E
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1399998		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoD05
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400344		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoDAZ
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400353		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoD3k
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400441		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoDB2
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1400456		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoD8p
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401658		Supply Air	Rectangular Duct - R	100	10		0CW5ZygHT5FfccaQkMoE_1
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401659		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoE_0
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1401660		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoE_7
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402193		Supply Air	Rectangular Duct - R	100	10		0CW5ZygHT5FfccaQkMoEdg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402194		Supply Air	Rectangular Duct - R	75	10		0CW5ZygHT5FfccaQkMoEdf
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402195		Supply Air	Rectangular Duct - R	90	10		0CW5ZygHT5FfccaQkMoEdc
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402294		Supply Air	Rectangular Duct - R	75	10		20hMZhm2HFUApm3YIsvPcH
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1402993		Supply Air	Rectangular Duct - R	90	10		20hMZhm2HFUApm3YIsvPHM
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403379		Supply Air	Rectangular Duct - R	100	10		20hMZhm2HFUApm3YIsvPHg
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403490		Supply Air	Rectangular Duct - R	125	10		20hMZhm2HFUApm3YIsvPP5
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403542		Supply Air	Rectangular Duct - R	140	10		20hMZhm2HFUApm3YIsvPQn
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403555		Supply Air	Rectangular Duct - R	110	10		20hMZhm2HFUApm3YIsvPQ4
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1403974		Supply Air	Rectangular Duct - R	75	10		20hMZhm2HFUApm3YIsvP0G
<input checked="" type="checkbox"/>	Kanał okragły:Tees:1404061		Supply Air	Rectangular Duct - R	375	10		20hMZhm2HFUApm3YIsvP2w

Width param: IFC Duct Schedule;Width Diameter param: IFC Duct Schedule;Diameter Height param: IFC Duct Schedule;Height IFC column: GUID Add

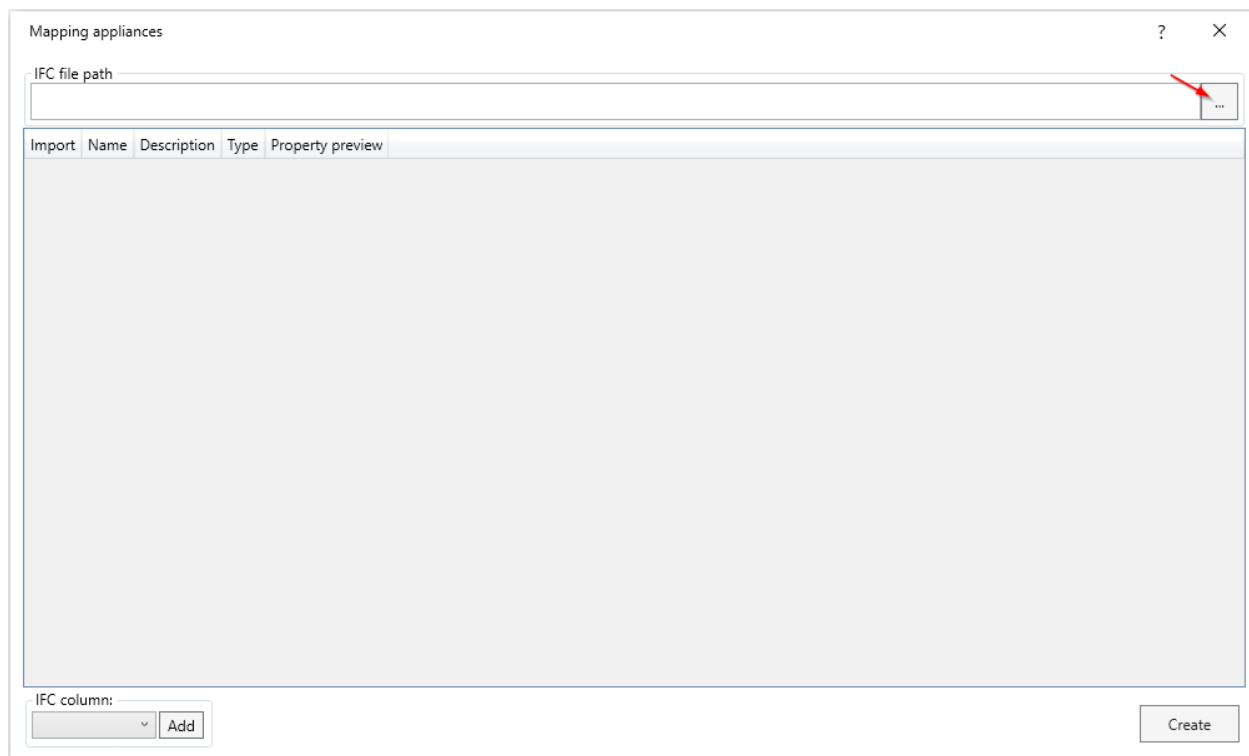
☒ Apply insulation **Create**

Skillpark MEP > IFC Manager > Mapping > Appliances

The tool places device instances at the locations of successive elements from the following IFC model classes: *IfcFlowTerminal*, *IfcFlowMovingDevice*, *IfcFlowController*, *IfcBoiler*, *IfcFlowMeter*, *IfcSanitaryTerminal*, *IfcSpaceHeater*, *IfcValve*. It allows sorting successive instances of IFC model elements based on a selected parameter contained within the IFC model.

Tool usage scheme:

1. Specify the file path to the IFC file based on which the devices will be mapped in the model.



- In the *Import* column, select which elements should be included in the device mapping in the model.

Mapping appliances

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1431859		M_Exhaust Grill - 600 x 600 Face 300 x 300 Coni	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1433121		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1435201		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1436276		M_Exhaust Grill - 600 x 600 Face 300 x 300 Coni	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	

IFC column: Add

Create

- The *Name* and *Description* columns contain information about the name and description of the IFC file components.

Mapping appliances

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1431859		M_Exhaust Grill - 600 x 600 Face 300 x 300 Coni	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1433121		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1435201		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1436276		M_Exhaust Grill - 600 x 600 Face 300 x 300 Coni	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	

IFC column: Add

Create

- In the *Type* column, use the drop-down lists to select the target mapping for device types.

Mapping appliances

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1431859		M_Exhaust Grill - 600 x 600 Face 300 x 300 Conr	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1433121		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1435201		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1436276		M_Exhaust Grill - 600 x 600 Face 300 x 300 Conr	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	

IFC column:
 Add

Create

5. The *Property Preview* column allows viewing the value of a selected parameter from the IFC file. To do this, select the appropriate parameter from the *IFC column* drop-down list. To add a new column with the selected parameter, click the *Add* button.

Mapping appliances

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1431859		M_Exhaust Grill - 600 x 600 Face 300 x 300 Conr	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1433121		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Diffuser - Square - Hosted:12" x 12":1435201		M_Supply Diffuser - 600 x 600 Face 300 x 300 C	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1436276		M_Exhaust Grill - 600 x 600 Face 300 x 300 Conr	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single Deflection - Curve Face	

IFC column:
 Add

Create

- To group components by a selected value in the data column, right-click on the column header and then click *Group*.

Mapping appliances

IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview	GUID
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		Group	ly Grille - Single I	16z2MfSxDDWumzU2PTF
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoWR
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoZr
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoPr
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoTf
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoSW
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoV7
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoU8
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoHP
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoGi
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoFolc
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoNG
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoMp
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo9C
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo9X
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoBR
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoAH
<input checked="" type="checkbox"/>	Return Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo4s
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1418758		M_Exhaust Grill - 600 x 60	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFnXV
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1419694		M_Exhaust Grill - 600 x 60	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFnVt
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	3M6pLGbD93gxT0QT3GS	3M6pLGbD93gxT0QT3GSSs9
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single I	3M6pLGbD93gxT0QT3GS	3M6pLGbD93gxT0QT3GSSsN

IFC column:
GUID Add

Create

- For grouped components, the same information can be assigned to all grouped elements.

Mapping appliances

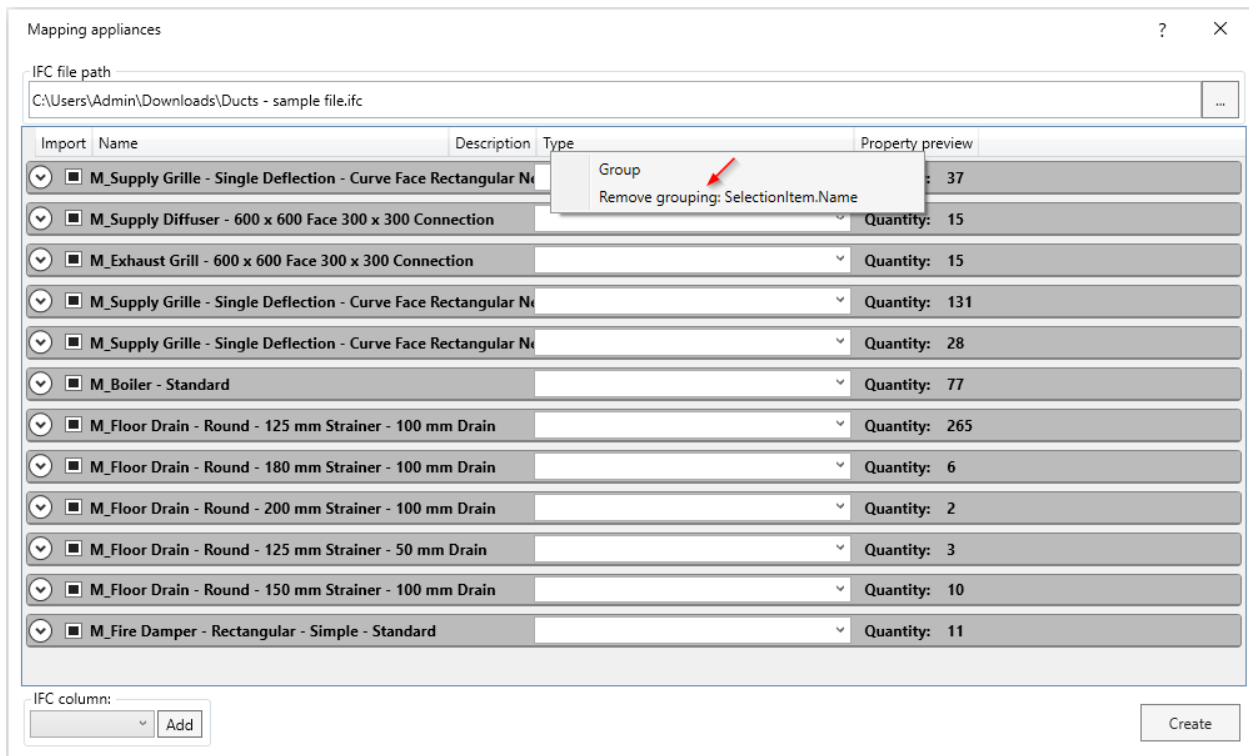
IFC file path
C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N			Quantity: 37
<input checked="" type="checkbox"/>	M_Supply Diffuser - 600 x 600 Face 300 x 300 Connection			Quantity: 15
<input checked="" type="checkbox"/>	M_Exhaust Grill - 600 x 600 Face 300 x 300 Connection			Quantity: 15
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N			Quantity: 131
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N			Quantity: 28
<input checked="" type="checkbox"/>	M_Boiler - Standard			Quantity: 77
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 125 mm Strainer - 100 mm Drain			Quantity: 265
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 180 mm Strainer - 100 mm Drain			Quantity: 6
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 200 mm Strainer - 100 mm Drain			Quantity: 2
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 125 mm Strainer - 50 mm Drain			Quantity: 3
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 150 mm Strainer - 100 mm Drain			Quantity: 10
<input checked="" type="checkbox"/>	M_Fire Damper - Rectangular - Simple - Standard			Quantity: 11

IFC column:
Add

Create

8. To remove grouping by a selected value, right-click on the column header and then click *Remove grouping*.



Mapping appliances

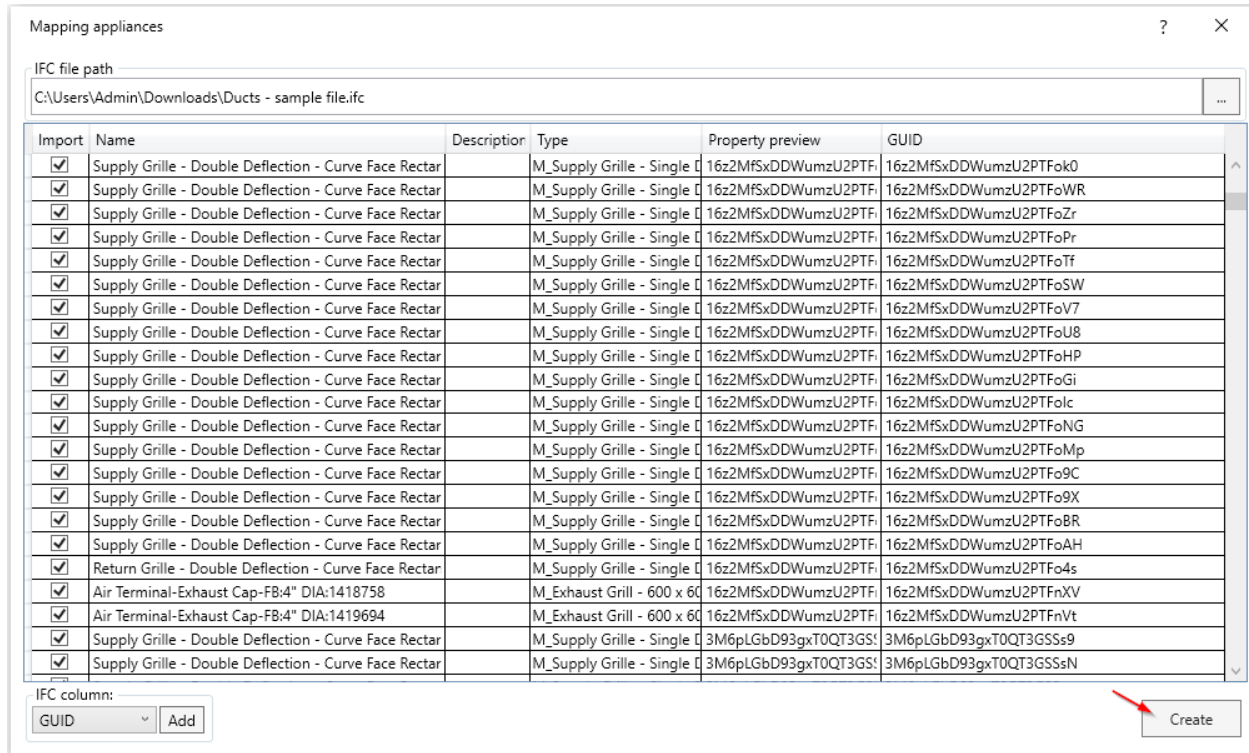
IFC file path: C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview	Quantity
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N				37
<input checked="" type="checkbox"/>	M_Supply Diffuser - 600 x 600 Face 300 x 300 Connection				15
<input checked="" type="checkbox"/>	M_Exhaust Grill - 600 x 600 Face 300 x 300 Connection				15
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N				131
<input checked="" type="checkbox"/>	M_Supply Grille - Single Deflection - Curve Face Rectangular N				28
<input checked="" type="checkbox"/>	M_Boiler - Standard				77
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 125 mm Strainer - 100 mm Drain				265
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 180 mm Strainer - 100 mm Drain				6
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 200 mm Strainer - 100 mm Drain				2
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 125 mm Strainer - 50 mm Drain				3
<input checked="" type="checkbox"/>	M_Floor Drain - Round - 150 mm Strainer - 100 mm Drain				10
<input checked="" type="checkbox"/>	M_Fire Damper - Rectangular - Simple - Standard				11

IFC column: Add

Create

9. After completing the configuration, press the *Create* button.



Mapping appliances

IFC file path: C:\Users\Admin\Downloads\Ducts - sample file.ifc

Import	Name	Description	Type	Property preview	GUID
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoK0
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoWR
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoZr
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoPr
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoTf
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoSW
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoV7
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoU8
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoHP
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoGi
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoIc
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoNG
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoM9
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoCp
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo9X
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo8R
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFoAH
<input checked="" type="checkbox"/>	Return Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFo4s
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1418758		M_Exhaust Grill - 600 x 60	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFnXV
<input checked="" type="checkbox"/>	Air Terminal-Exhaust Cap-FB:4" DIA:1419694		M_Exhaust Grill - 600 x 60	16z2MfSxDDWumzU2PTF	16z2MfSxDDWumzU2PTFnVt
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	3M6pLGbD93gxT0QT3GS!	3M6pLGbD93gxT0QT3GSSs9
<input checked="" type="checkbox"/>	Supply Grille - Double Deflection - Curve Face Rectar		M_Supply Grille - Single	3M6pLGbD93gxT0QT3GS!	3M6pLGbD93gxT0QT3GSSsN

IFC column: GUID Add

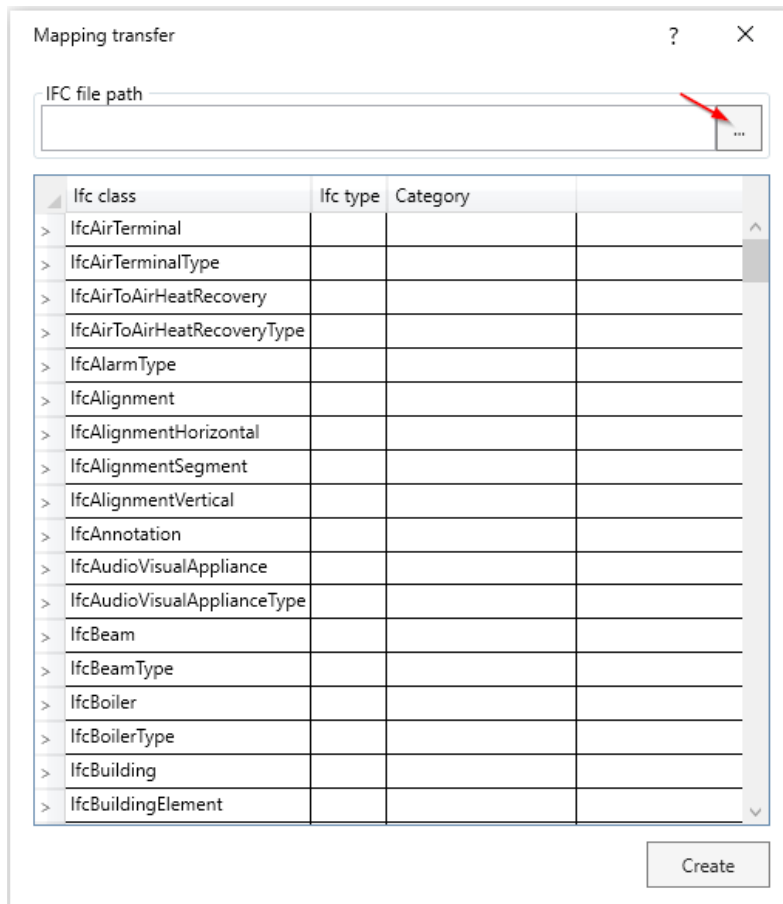
Create

Skillpark MEP > IFC Manager > Mapping > Transfer

The tool places instances of any elements at the locations of successive IFC model class elements, creating Revit components as local models in the selected category.

Tool usage scheme:

1. Specify the file path to the IFC file based on which the local models will be placed in the project.



Mapping transfer

IFC file path

Ifc class	Ifc type	Category
> IfcAirTerminal		
> IfcAirTerminalType		
> IfcAirToAirHeatRecovery		
> IfcAirToAirHeatRecoveryType		
> IfcAlarmType		
> IfcAlignment		
> IfcAlignmentHorizontal		
> IfcAlignmentSegment		
> IfcAlignmentVertical		
> IfcAnnotation		
> IfcAudioVisualAppliance		
> IfcAudioVisualApplianceType		
> IfcBeam		
> IfcBeamType		
> IfcBoiler		
> IfcBoilerType		
> IfcBuilding		
> IfcBuildingElement		

Create

- The *Ifc class* and *Ifc type* columns contain information about the IFC class and IFC type of the components within the IFC files.

Mapping transfer

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Ifc class	Ifc type	Category
> IfcAirTerminal		Air Terminals
> IfcAirTerminalType		Air Terminals
> IfcBuilding		Site
> IfcBuildingElement		Site
> IfcBuildingElementProxy		Electrical Analytical Bu
> IfcBuildingElementProxyType		Conduit Runs
> IfcBuildingStorey		Cable Tray Fittings
> IfcDistributionElement		Coordination Model
> IfcDistributionElementType		Data Devices
> IfcDistributionPort		Electrical Analytical Bu
> IfcDuctFitting		Duct Fittings
> IfcDuctFittingType		Duct Fittings
> IfcDuctSegment		Ducts
> IfcDuctSegmentType		Ducts
> IfcElement		Electrical Analytical Bu
> IfcFlowTerminal		Ducts
> IfcGrid		Generic Models
> IfcPipeFitting		Pipes

Create

- In the *Category* column, select the category to which elements from specific IFC classes should be assigned.

Mapping transfer

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category
> IfcAirTerminal		Air Terminals
> IfcAirTerminalType		Air Terminals
> IfcBuilding		Site
> IfcBuildingElement		Site
> IfcBuildingElementProxy		Electrical Analytical Bu
> IfcBuildingElementProxyType		Conduit Runs
> IfcBuildingStorey		Cable Tray Fittings
> IfcDistributionElement		Coordination Model
> IfcDistributionElementType		Data Devices
> IfcDistributionPort		Electrical Analytical Bu
> IfcDuctFitting		Duct Fittings
> IfcDuctFittingType		Duct Fittings
> IfcDuctSegment		Ducts
> IfcDuctSegmentType		Ducts
> IfcElement		Electrical Analytical Bu
> IfcFlowTerminal		Ducts
> IfcGrid		Generic Models
> IfcPipeFitting		Pipes

Create

4. If the *DontImport* category is selected, the tool will not place any elements from the given IFC class.

Mapping transfer
?
X

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category	
> IfcAirTerminal		DontImport	^
> IfcAirTerminalType		Air Terminals	
> IfcBuilding		Site	
> IfcBuildingElement		Site	
> IfcBuildingElementProxy		Electrical Analytical Bu	
> IfcBuildingElementProxyType		Conduit Runs	
> IfcBuildingStorey		Cable Tray Fittings	
> IfcDistributionElement		Coordination Model	
> IfcDistributionElementType		Data Devices	
> IfcDistributionPort		Electrical Analytical Bu	
> IfcDuctFitting		Duct Fittings	
> IfcDuctFittingType		Duct Fittings	
> IfcDuctSegment		Ducts	
> IfcDuctSegmentType		Ducts	
> IfcElement		Electrical Analytical Bu	
> IfcFlowTerminal		Ducts	
> IfcGrid		Generic Models	
> IfcPipeFitting		Pipes	v

Create

5. To add a data row, activate the last row and press ENTER.
6. To delete a data row, select it and press DELETE.

Mapping transfer
?
×

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

	Ifc class	Ifc type	Category	
>	IfcDuctSegment		Ducts	^
>	IfcDuctSegmentType		Ducts	
>	IfcElement		Electrical Analytical Bu	
>	IfcFlowTerminal		Ducts	
>	IfcGrid		Generic Models	
>	IfcPipeFitting		Pipes	
>	IfcPipeFittingType		Pipe Fittings	
>	IfcPipeSegment		Pipe Segments	
>	IfcPipeSegmentType		Pipe Segments	
>	IfcSite		Site	
>	IfcValve		Pipe Accessories	
>	IfcValve	DRAWOFFCOCK	Pipe Accessories	
>	IfcValve	FAUCET	Pipe Accessories	
>	IfcValveType		Pipe Accessories	
>	IfcValveType	DRAWOFFCOCK	Pipe Accessories	
>	IfcValveType	FAUCET	Pipe Accessories	
>	IfcClass	IfcType	Generic Models	
>				↓

Create

- After completing the configuration, press the *Create* button.

Mapping transfer
?
X

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category	
> IfcAirTerminal		DontImport	^
> IfcAirTerminalType		Air Terminals	
> IfcBuilding		Site	
> IfcBuildingElement		Site	
> IfcBuildingElementProxy		Electrical Analytical Bu	
> IfcBuildingElementProxyType		Conduit Runs	
> IfcBuildingStorey		Cable Tray Fittings	
> IfcDistributionElement		Coordination Model	
> IfcDistributionElementType		Data Devices	
> IfcDistributionPort		Electrical Analytical Bu	
> IfcDuctFitting		Duct Fittings	
> IfcDuctFittingType		Duct Fittings	
> IfcDuctSegment		Ducts	
> IfcDuctSegmentType		Ducts	
> IfcElement		Electrical Analytical Bu	
> IfcFlowTerminal		Ducts	
> IfcGrid		Generic Models	
> IfcPipeFitting		Pipes	v

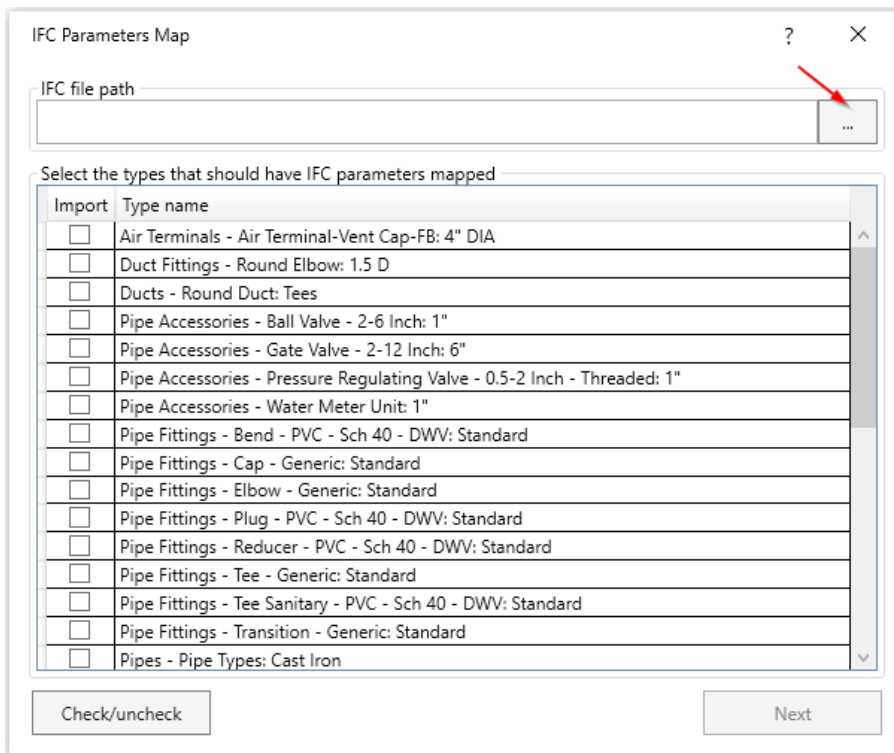
Create

Skillpark MEP > IFC Manager > Parameters Map

The tool transfers the values of IFC model element properties to parameters in the model based on the GUID match between the IFC model element and the Revit component.

Tool usage scheme:

1. Click the button to select the access path to the IFC file based on which elements will be placed in the model.



IFC Parameters Map

IFC file path

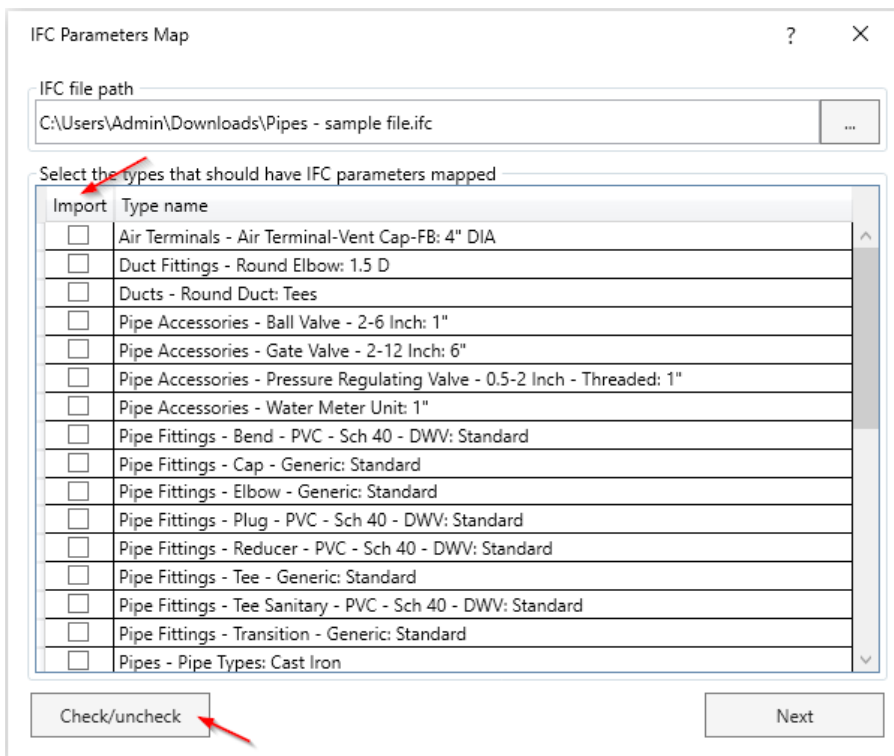
Select the types that should have IFC parameters mapped

Import	Type name
<input type="checkbox"/>	Air Terminals - Air Terminal-Vent Cap-FB: 4" DIA
<input type="checkbox"/>	Duct Fittings - Round Elbow: 1.5 D
<input type="checkbox"/>	Ducts - Round Duct: Tees
<input type="checkbox"/>	Pipe Accessories - Ball Valve - 2-6 Inch: 1"
<input type="checkbox"/>	Pipe Accessories - Gate Valve - 2-12 Inch: 6"
<input type="checkbox"/>	Pipe Accessories - Pressure Regulating Valve - 0.5-2 Inch - Threaded: 1"
<input type="checkbox"/>	Pipe Accessories - Water Meter Unit: 1"
<input type="checkbox"/>	Pipe Fittings - Bend - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Cap - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Elbow - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Plug - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Reducer - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Tee - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Tee Sanitary - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Transition - Generic: Standard
<input type="checkbox"/>	Pipes - Pipe Types: Cast Iron

Check/uncheck

Next

- In the selection fields under the *Import* column, specify the types that should have their IFC parameters mapped. The *Select/Deselect* button is used to mark or unmark all elements.



IFC Parameters Map

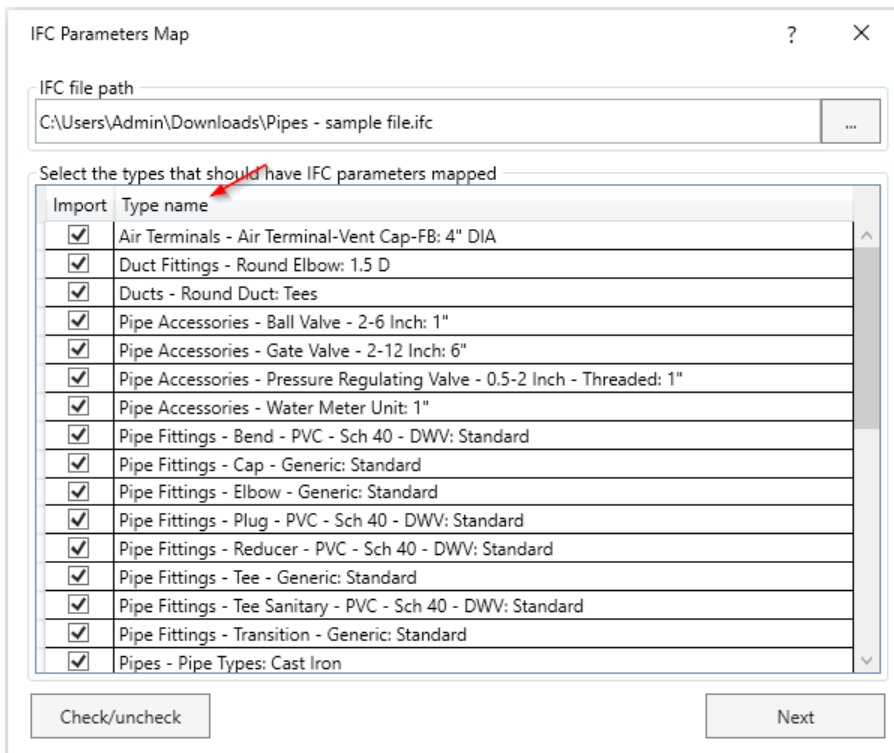
IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Select the types that should have IFC parameters mapped

Import	Type name
<input type="checkbox"/>	Air Terminals - Air Terminal-Vent Cap-FB: 4" DIA
<input type="checkbox"/>	Duct Fittings - Round Elbow: 1.5 D
<input type="checkbox"/>	Ducts - Round Duct: Tees
<input type="checkbox"/>	Pipe Accessories - Ball Valve - 2-6 Inch: 1"
<input type="checkbox"/>	Pipe Accessories - Gate Valve - 2-12 Inch: 6"
<input type="checkbox"/>	Pipe Accessories - Pressure Regulating Valve - 0.5-2 Inch - Threaded: 1"
<input type="checkbox"/>	Pipe Accessories - Water Meter Unit: 1"
<input type="checkbox"/>	Pipe Fittings - Bend - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Cap - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Elbow - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Plug - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Reducer - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Tee - Generic: Standard
<input type="checkbox"/>	Pipe Fittings - Tee Sanitary - PVC - Sch 40 - DWV: Standard
<input type="checkbox"/>	Pipe Fittings - Transition - Generic: Standard
<input type="checkbox"/>	Pipes - Pipe Types: Cast Iron

Check/uncheck Next

- The *Type Name* column contains information about the element types.



IFC Parameters Map

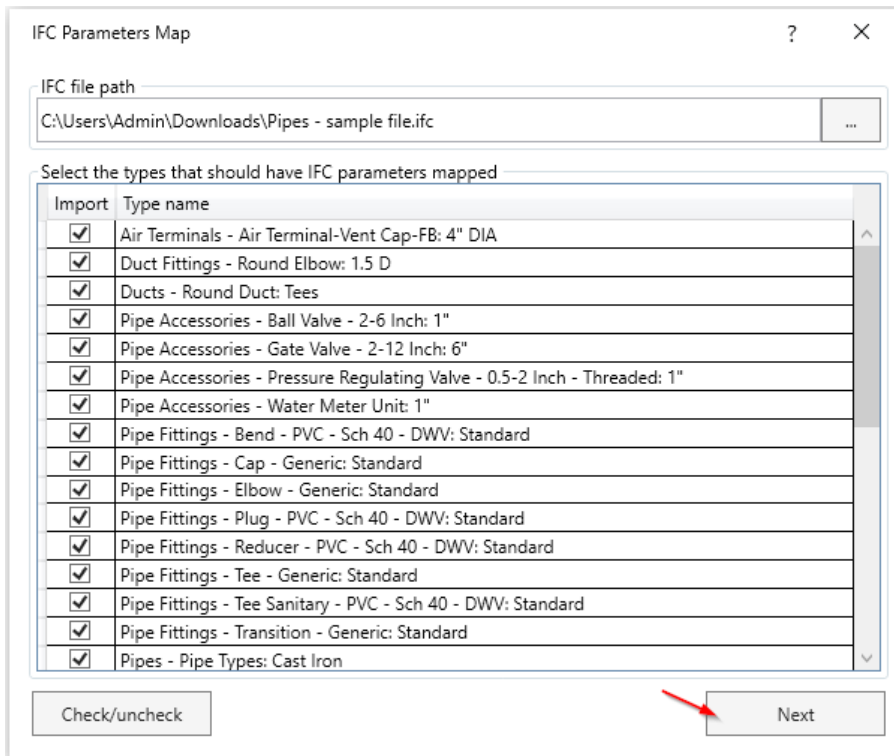
IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Select the types that should have IFC parameters mapped

Import	Type name
<input checked="" type="checkbox"/>	Air Terminals - Air Terminal-Vent Cap-FB: 4" DIA
<input checked="" type="checkbox"/>	Duct Fittings - Round Elbow: 1.5 D
<input checked="" type="checkbox"/>	Ducts - Round Duct: Tees
<input checked="" type="checkbox"/>	Pipe Accessories - Ball Valve - 2-6 Inch: 1"
<input checked="" type="checkbox"/>	Pipe Accessories - Gate Valve - 2-12 Inch: 6"
<input checked="" type="checkbox"/>	Pipe Accessories - Pressure Regulating Valve - 0.5-2 Inch - Threaded: 1"
<input checked="" type="checkbox"/>	Pipe Accessories - Water Meter Unit: 1"
<input checked="" type="checkbox"/>	Pipe Fittings - Bend - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Cap - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Elbow - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Plug - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Reducer - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Tee - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Tee Sanitary - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Transition - Generic: Standard
<input checked="" type="checkbox"/>	Pipes - Pipe Types: Cast Iron

Check/uncheck Next

4. After selecting the types for parameter mapping, click the *Next* button.



IFC Parameters Map

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

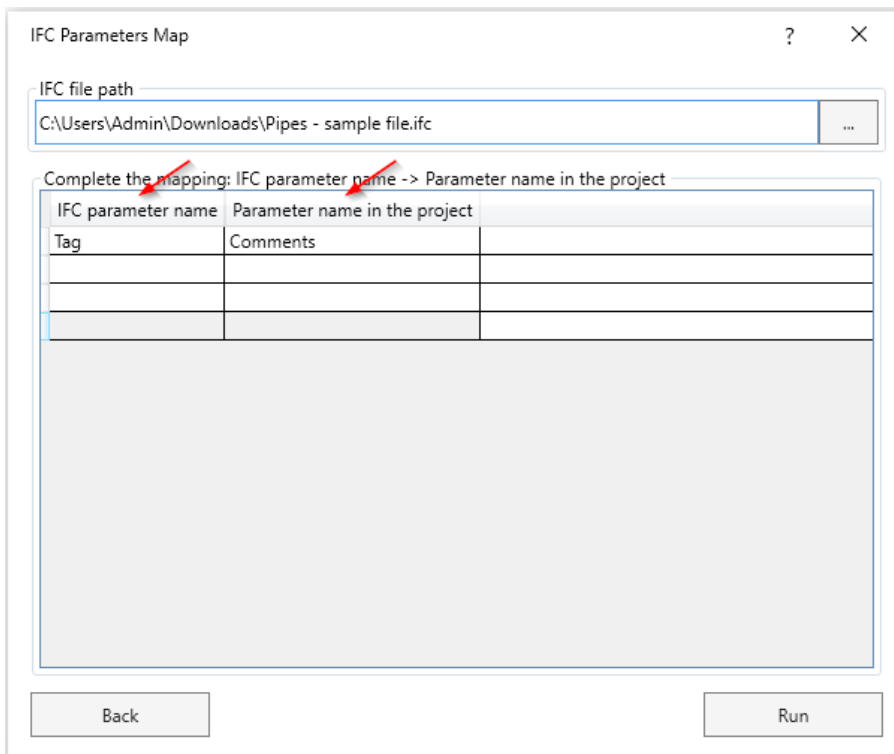
Select the types that should have IFC parameters mapped

Import	Type name
<input checked="" type="checkbox"/>	Air Terminals - Air Terminal-Vent Cap-FB: 4" DIA
<input checked="" type="checkbox"/>	Duct Fittings - Round Elbow: 1.5 D
<input checked="" type="checkbox"/>	Ducts - Round Duct: Tees
<input checked="" type="checkbox"/>	Pipe Accessories - Ball Valve - 2-6 Inch: 1"
<input checked="" type="checkbox"/>	Pipe Accessories - Gate Valve - 2-12 Inch: 6"
<input checked="" type="checkbox"/>	Pipe Accessories - Pressure Regulating Valve - 0.5-2 Inch - Threaded: 1"
<input checked="" type="checkbox"/>	Pipe Accessories - Water Meter Unit: 1"
<input checked="" type="checkbox"/>	Pipe Fittings - Bend - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Cap - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Elbow - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Plug - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Reducer - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Tee - Generic: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Tee Sanitary - PVC - Sch 40 - DWV: Standard
<input checked="" type="checkbox"/>	Pipe Fittings - Transition - Generic: Standard
<input checked="" type="checkbox"/>	Pipes - Pipe Types: Cast Iron

Check/uncheck

Next

5. In the *IFC Parameter Name* and *Parameter name in the project* columns, enter the respective names of the parameter from the IFC file and the project parameter. Values are transferred based on the GUID match between the element and the Revit component. To add a data row, activate the last row and press ENTER.



IFC Parameters Map

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

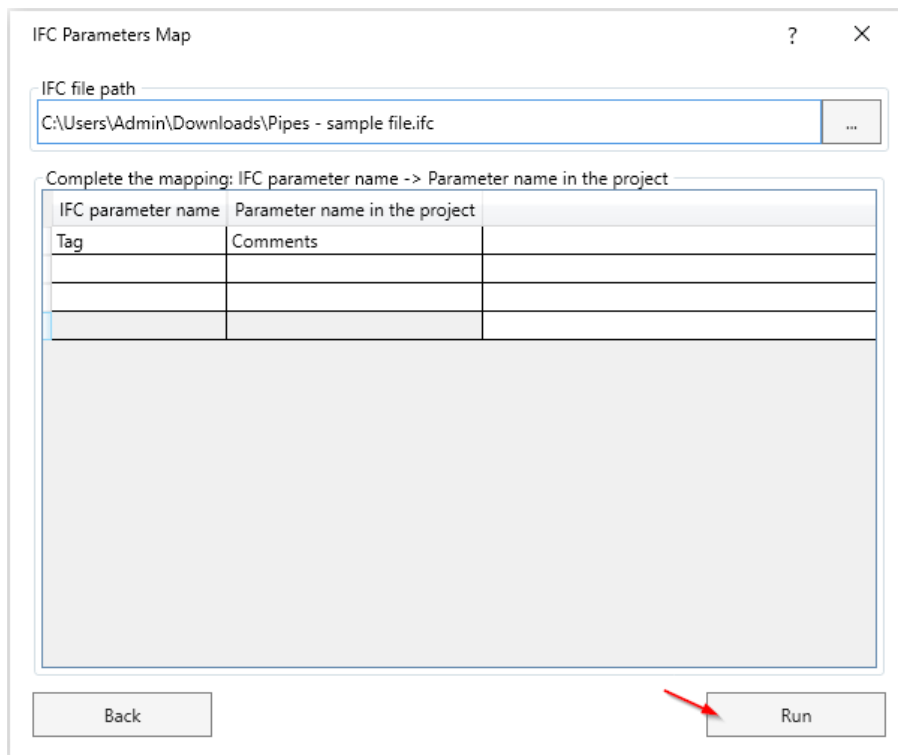
Complete the mapping: IFC parameter name -> Parameter name in the project

IFC parameter name	Parameter name in the project	Tag
	Comments	

Back

Run

6. After completing the configuration, click the *Run* button.



IFC Parameters Map

IFC file path

C:\Users\Admin\Downloads\Pipes - sample file.ifc

Complete the mapping: IFC parameter name -> Parameter name in the project

IFC parameter name	Parameter name in the project	
Tag	Comments	

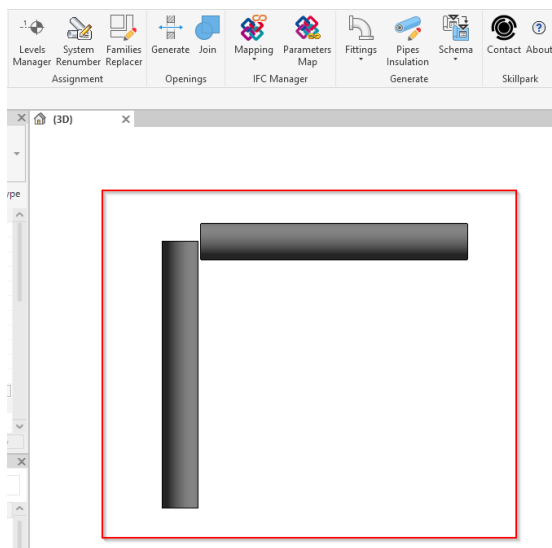
Back Run

Skillpark MEP > Generate > Fittings > Pipes

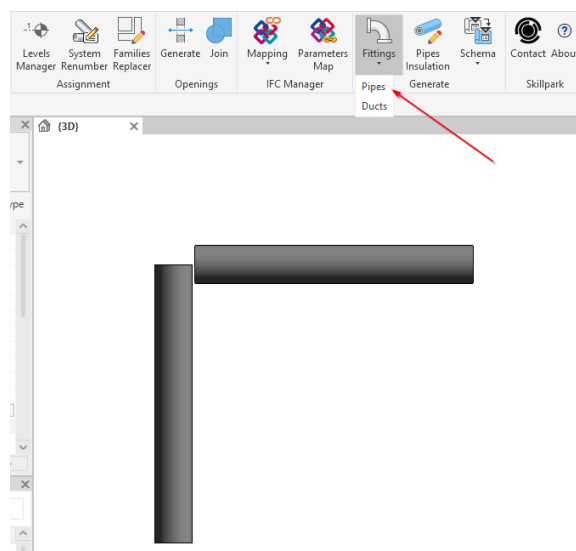
The tool generates pipe fittings for selected pipes belonging to the same system.

Tool usage scheme:

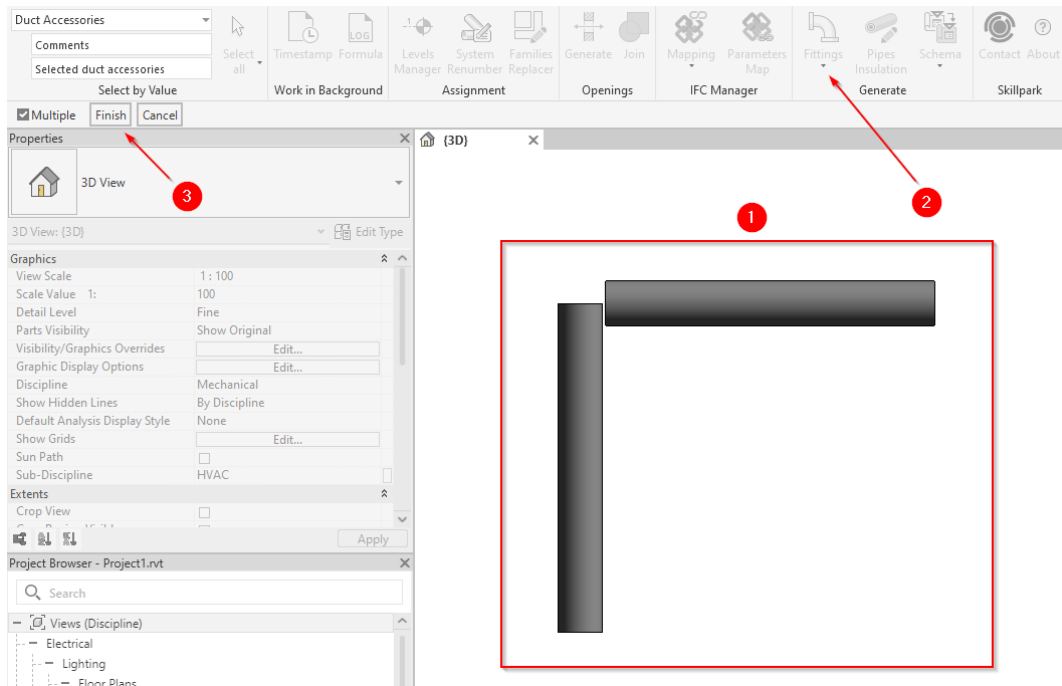
1. In the model workspace, select the pipe components for which the tool should automatically place pipe fitting components.



2. After execution, the tool will generate pipe fittings between successive pipe segments belonging to the same system, considering the information contained in the routing preferences.



3. Optional: If you did not select 3D model components, first launch the tool (1), then select the components in the workspace (2) and confirm the selection by clicking the *Finish* button (3) located on the *Options Bar*.

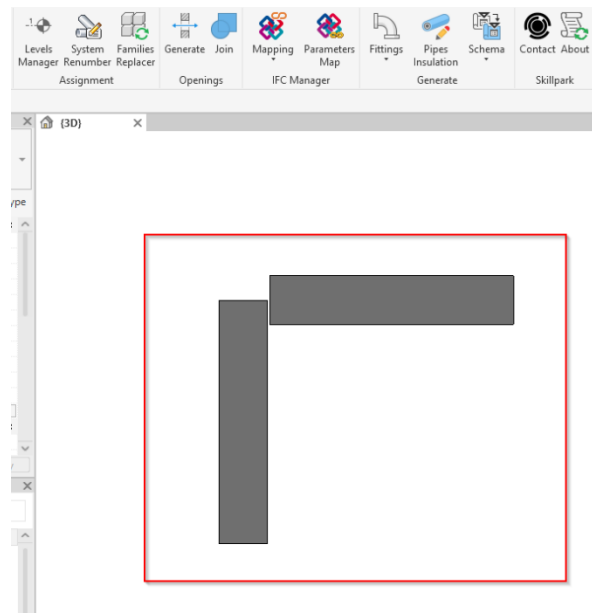


Skillpark MEP > Generate > Fittings > Ducts

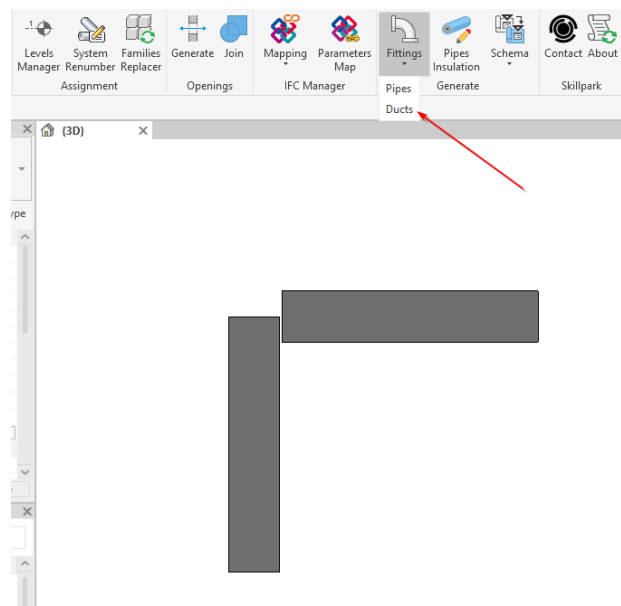
The tool generates duct fittings for selected ducts belonging to the same system.

Tool usage scheme:

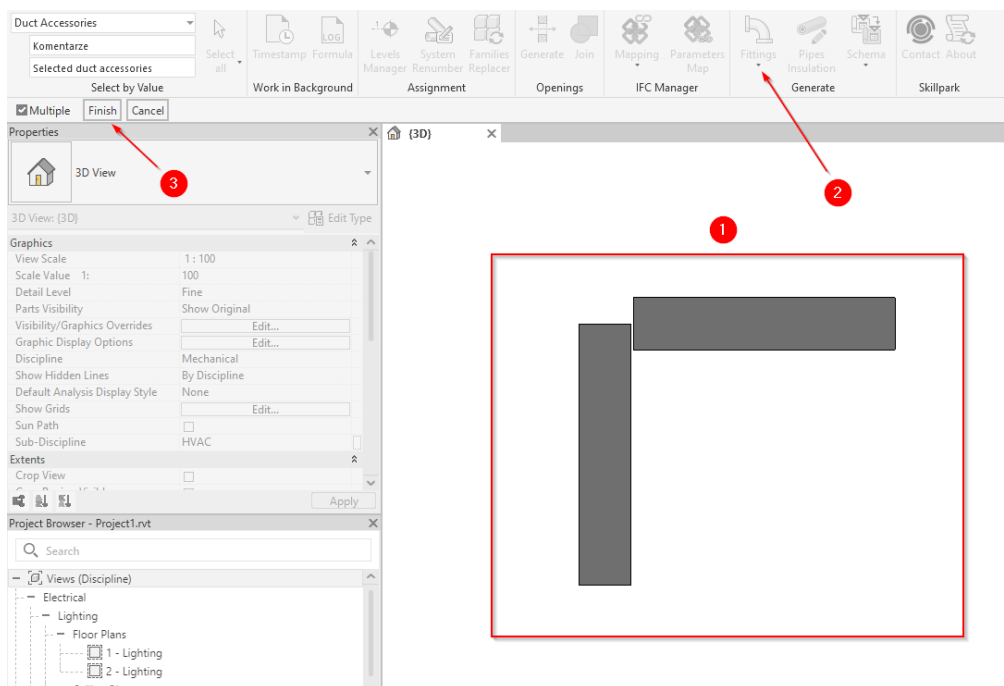
1. In the model workspace, select the duct components for which the tool should automatically place duct fitting components.



2. After execution, the tool will generate duct fittings between successive duct segments belonging to the same system, considering the information contained in the routing preferences.



3. Optional: If you did not select 3D model components, first launch the tool (1), then select the components in the workspace (2) and confirm the selection by clicking the *Finish* button (3) located on the *Options Bar*.



Skillpark MEP > Generete > Pipes Insulation

The tool collectively adds insulation to pipes, taking into account their classification, system type, and pipe type. It allows selecting the appropriate insulation condition in accordance with building regulations, considering the complete location of pipes within building partitions.

Tool usage scheme:

1. The upper table in the tool's dialog window lists information about pipe components in the model, including *System class*, *System type*, and *Pipe type*. The table data can be sorted (ascending/descending) by clicking on the column headers.

Pipes Insulation

System class

System type

Pipe type

Condition

Sanitary	Sanitary	PVC - DWV	
Domestic Cold Water	Domestic Cold Water	Copper	
Domestic Hot Water	Domestic Hot Water	Copper	
Sanitary	Sanitary	Copper	
Domestic Cold Water	Domestic Cold Water	Cast Iron	
Sanitary	Roof Drainage	Cast Iron	

Refresh


?

System class	System type	Pipe type	Condition	Diameter	Qua	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	0	101.60	113	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	254.00	11	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	50.80	143	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	152.40	12	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	203.20	1	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	76.20	2	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	25.40	403	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	12.70	341	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	12.70	3	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	152.40	40	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	50.80	46	Fiberglass	0

☐ Isolate fittings
 ☐ Override existing


Run

- In the *Condition* column, define the set of conditions based on which insulation sizes will be selected.

A list of available conditions can be accessed by clicking the button .

Pipes Insulation
?
×

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	
Domestic Cold Water	Domestic Cold Water	Copper	
Domestic Hot Water	Domestic Hot Water	Copper	
Sanitary	Sanitary	Copper	
Domestic Cold Water	Domestic Cold Water	Cast Iron	
Sanitary	Roof Drainage	Cast Iron	

Refresh


System class	System type	Pipe type	Condition	Diameter	Qu	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	0	101.60	113	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	254.00	11	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	50.80	143	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	152.40	12	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	203.20	1	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	76.20	2	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	25.40	403	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	12.70	341	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	12.70	3	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	152.40	40	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	50.80	46	Fiberglass	0

☐ Isolate fittings
☐ Override existing

Run

- After clicking the *Refresh* button, the lower table in the dialog window will populate with proposed pipe insulation diameters, categorized by *System class*, *System type*, *Pipe type*, *Condition*, and *Diameter*. The *Quantity* column displays the number of components within each group.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Sanitary	Sanitary	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.

Refresh
i

System class	System type	Pipe type	Condition	Diameter	Quantity	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	0	152.40	12	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	203.20	1	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	76.20	2	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	101.60	113	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	254.00	11	Fiberglass	0
Sanitary	Sanitary	PVC - DWV	0	50.80	143	Fiberglass	0
Domestic Hot \	Domestic Hot \	Copper	0	12.70	312	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	50.80	46	Fiberglass	0
Sanitary	Sanitary	Copper	0	50.80	43	Fiberglass	0
Domestic Hot \	Domestic Hot \	Copper	0	12.70	2	Fiberglass	0
Domestic Cold	Domestic Cold	Copper	0	12.70	341	Fiberglass	0

☐ Isolate fittings
☐ Override existing
Run

4. In the *Isolation* column, use the drop-down lists to select the insulation type for each pipe component group.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Sanitary	Sanitary	Copper	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.

Refresh
i

System class	System type	Pipe type	Condition	Diameter	Qua	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	4	101.60	113	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	254.00	11	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	50.80	143	Fiberglass	50.8
Sanitary	Sanitary	PVC - DWV	4	152.40	12	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	203.20	1	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	76.20	2	Fiberglass	76.2
Domestic Cold	Domestic Cold	Copper	2	25.40	403	Fiberglass	30
Domestic Cold	Domestic Cold	Copper	1	12.70	341	Fiberglass	20
Domestic Cold	Domestic Cold	Copper	5	12.70	3	Fiberglass	10
Domestic Cold	Domestic Cold	Copper	4	152.40	40	Fiberglass	100
Domestic Cold	Domestic Cold	Copper	3	50.80	46	Fiberglass	50.8


☐ Isolate fittings
☐ Override existing
Run

5. In the *Isolation thickness* column, the insulation thickness can be manually overridden for specific pipe component groups.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Sanitary	Sanitary	Copper	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.

Refresh



System class	System type	Pipe type	Condition	Diameter	Quz	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	4	101.60	113	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	254.00	11	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	50.80	143	Fiberglass	50.8
Sanitary	Sanitary	PVC - DWV	4	152.40	12	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	203.20	1	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	76.20	2	Fiberglass	76.2
Domestic Cold	Domestic Cold	Copper	2	25.40	403	Fiberglass	30
Domestic Cold	Domestic Cold	Copper	1	12.70	341	Fiberglass	20
Domestic Cold	Domestic Cold	Copper	5	12.70	3	Fiberglass	10
Domestic Cold	Domestic Cold	Copper	4	152.40	40	Fiberglass	100
Domestic Cold	Domestic Cold	Copper	3	50.80	46	Fiberglass	50.8

☐ Isolate fittings
☐ Override existing

Run

6. Optional: To also insulate components in the *Pipe Fittings* category, check the *Isolate fittings* checkbox.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Sanitary	Sanitary	Copper	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.

Refresh
i

System class	System type	Pipe type	Condition	Diameter	Qu	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	4	101.60	113	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	254.00	11	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	50.80	143	Fiberglass	50.8
Sanitary	Sanitary	PVC - DWV	4	152.40	12	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	203.20	1	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	76.20	2	Fiberglass	76.2
Domestic Cold	Domestic Cold	Copper	2	25.40	403	Fiberglass	30
Domestic Cold	Domestic Cold	Copper	1	12.70	341	Fiberglass	20
Domestic Cold	Domestic Cold	Copper	5	12.70	3	Fiberglass	10
Domestic Cold	Domestic Cold	Copper	4	152.40	40	Fiberglass	100
Domestic Cold	Domestic Cold	Copper	3	50.80	46	Fiberglass	50.8

☐ Isolate fittings
☐ Override existing
Run

7. Optional: To allow overwriting insulation on previously insulated pipe components, check the *Override existing* checkbox.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Sanitary	Sanitary	Copper	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.

Refresh
i

System class	System type	Pipe type	Condition	Diameter	Qu	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	4	101.60	113	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	254.00	11	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	50.80	143	Fiberglass	50.8
Sanitary	Sanitary	PVC - DWV	4	152.40	12	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	203.20	1	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	76.20	2	Fiberglass	76.2
Domestic Cold	Domestic Cold	Copper	2	25.40	403	Fiberglass	30
Domestic Cold	Domestic Cold	Copper	1	12.70	341	Fiberglass	20
Domestic Cold	Domestic Cold	Copper	5	12.70	3	Fiberglass	10
Domestic Cold	Domestic Cold	Copper	4	152.40	40	Fiberglass	100
Domestic Cold	Domestic Cold	Copper	3	50.80	46	Fiberglass	50.8

☒ Isolate fittings
☐ *Override existing*
Run

8. To start the process, click the *Run* button.

Pipes Insulation
?
X

System class	System type	Pipe type	Condition
Sanitary	Sanitary	PVC - DWV	1-5.
Domestic Cold Water	Domestic Cold Water	Copper	1-5.
Domestic Hot Water	Domestic Hot Water	Copper	6-7.
Sanitary	Sanitary	Copper	1-5.
Domestic Cold Water	Domestic Cold Water	Cast Iron	1-5.
Sanitary	Roof Drainage	Cast Iron	1-5.

Refresh
i

System class	System type	Pipe type	Condition	Diameter	Qu	Isolation	Isolation
Sanitary	Sanitary	PVC - DWV	4	101.60	113	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	254.00	11	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	50.80	143	Fiberglass	50.8
Sanitary	Sanitary	PVC - DWV	4	152.40	12	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	4	203.20	1	Fiberglass	100
Sanitary	Sanitary	PVC - DWV	3	76.20	2	Fiberglass	76.2
Domestic Cold	Domestic Cold	Copper	2	25.40	403	Fiberglass	30
Domestic Cold	Domestic Cold	Copper	1	12.70	341	Fiberglass	20
Domestic Cold	Domestic Cold	Copper	5	12.70	3	Fiberglass	10
Domestic Cold	Domestic Cold	Copper	4	152.40	40	Fiberglass	100
Domestic Cold	Domestic Cold	Copper	3	50.80	46	Fiberglass	50.8

☒ Isolate fittings
☒ Override existing

Run

Skillpark MEP > Generate > Schema > Import

The tool generates sanitary installation diagrams based on a properly prepared data sheet by arranging component families. The tool requires Microsoft Excel and a set of line-based families in the *Detail Items* category for proper operation.

Tool usage scheme:

1. A spreadsheet used by the tool is located in the SkillparkMEP add-in installation folder (default path: *C:\Users\User\Documents\SkillparkMEP\SchemaGenerator\example_schema.xlsx*).
For proper functionality, the *data input standard* contained in the *Sche* sheet must be followed.

In cell B1, define the path to the folder containing the families used in the diagrams. If the family folder is in the same location as the schema file, simply enter the folder name in cell B1. Column A, starting from row 4, should contain the elevation levels of subsequent floors.

Columns B, C, ... should be filled with information about the structure of vertical shafts, where:

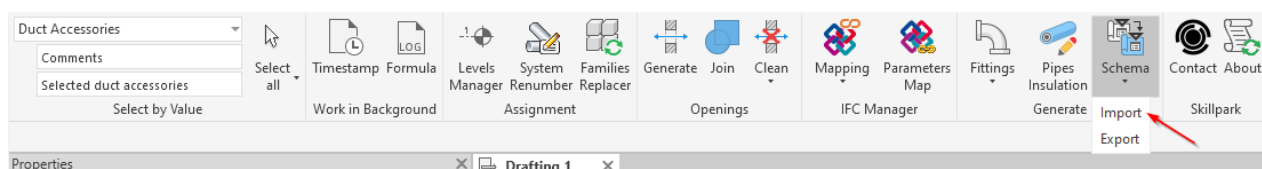
- Cell 2 – defines the shaft's assignment within a given drawing segment, and segments are separated by vertical lines.
- Cell 3 – specifies the set of families used within the shaft, considering the character string up to the second occurrence of "-" in the family name.
- Cells 4, 5, ... – define the types of families used on each floor of the shaft, considering the character string after "#".

A	B	C
1	C:\Users\Admin\Documents\SkillparkMEP\SchemaGenerator\Families	
2	Level	S1
3	elevation in mm	IS_SEW - Sewerage
4	0	SEW#Initial segment with a toilet and a washbasin
5	3000	SEW#Intermediate segment without a branch
6	6000	SEW#Intermediate segment with a toilet, bathtub, washbasin, and washing m
7	9000	SEW#Intermediate segment with a toilet, washbasin, shower, and washing m
8	12000	SEW#Intermediate segment with a sink and a dishwasher
9	15000	SEW#Terminal segment with a vent

2. Optional: To facilitate batch data management, it is recommended to store potential variants in list form in an auxiliary sheet. Example of such data preparation is provided in the Lists sheet of the *example_schema.xlsx* file.

A	B	C
1	Lista rodzin	Lista typów
2	---	---
3	IS_VENT - Kitchen	VENT#Initial segment with an elbow
4	IS_VENT - Hood	VENT#Initial segment with a tee
5	IS_VENT - Bathroom	VENT#Intermediate segment with a branch
6	IS_VENT - Wardrobe	VENT#Intermediate segment without a branch
7	---	---
8	IS_SEW - Sewerage	SEW#Terminal segment with a vent
9		SEW#Initial segment with a toilet and a washbasin
10		SEW#Initial segment with a toilet, washbasin, shower, and washing machine
11		SEW#Initial segment with a toilet, washbasin, bathtub, and washing machine

3. Before launching the tool, switch to or create a drafting view in the model file.
4. Select the *Schema* tool icon, then choose *Import* from the dropdown menu.



5. Specify the location of the prepared installation diagram in the Excel spreadsheet.
6. After opening the selected file, the installation diagram will be generated in the current drafting view.

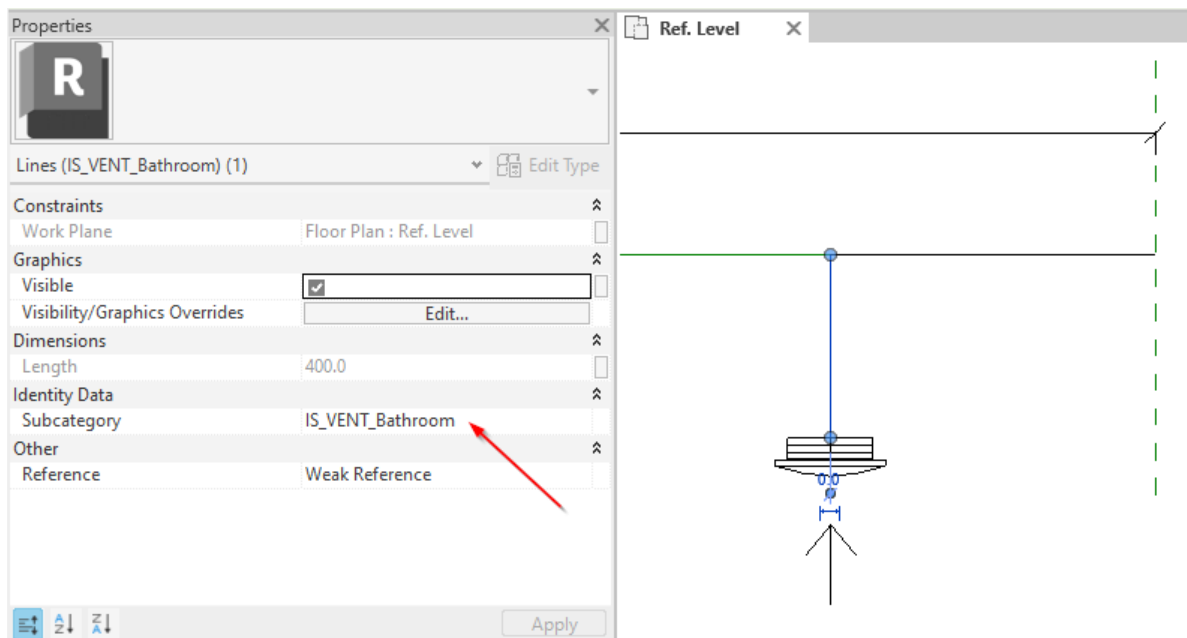
Structure of Diagram Component Families:

SKILLPARK sp. z o.o.
ul. Przewóz 34/100
30-716 Kraków

biuro@skillpark.pl
www.skillpark.pl

NIP: 6793211917
REGON: 388135274
KRS: 0000882987

Families created in the standard supported by the tool are located in the SkillparkMEP add-in installation folder (default path: C:\Users\User\Documents\SkillparkMEP\SchemaGenerator\Families). If the data in the batch sheet does not match the available family database, the tool will place a placeholder family "IS_Lack of family or type" in the problematic areas of the diagram. Each diagram component family is created as a line-based *Detail Item*, allowing it to adjust in size according to floor spacing. When creating additional component families, it is recommended to follow the same standard. When developing new families for use with the tool, ensure that subcategory functionality is maintained for appropriate lines. This ensures consistent color representation of selected elements within diagrams in the project.

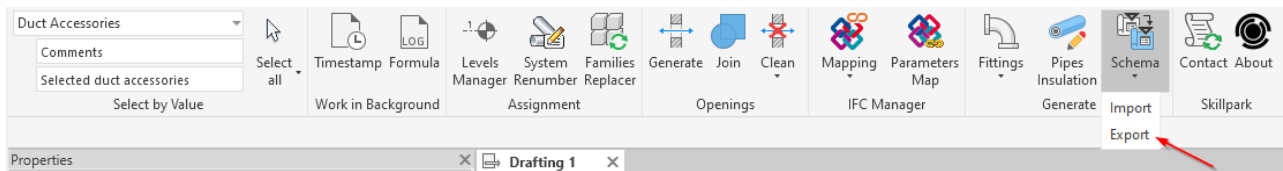


Skillpark MEP > Generate > **Schema** > **Export**

The tool exports a sanitary installation diagram to a spreadsheet based on a prepared drafting view. The tool only exports diagrams created using the *Schema > Import* standard.

Tool usage scheme:

1. Select the *Schema* tool icon, then choose *Export from the dropdown menu*.



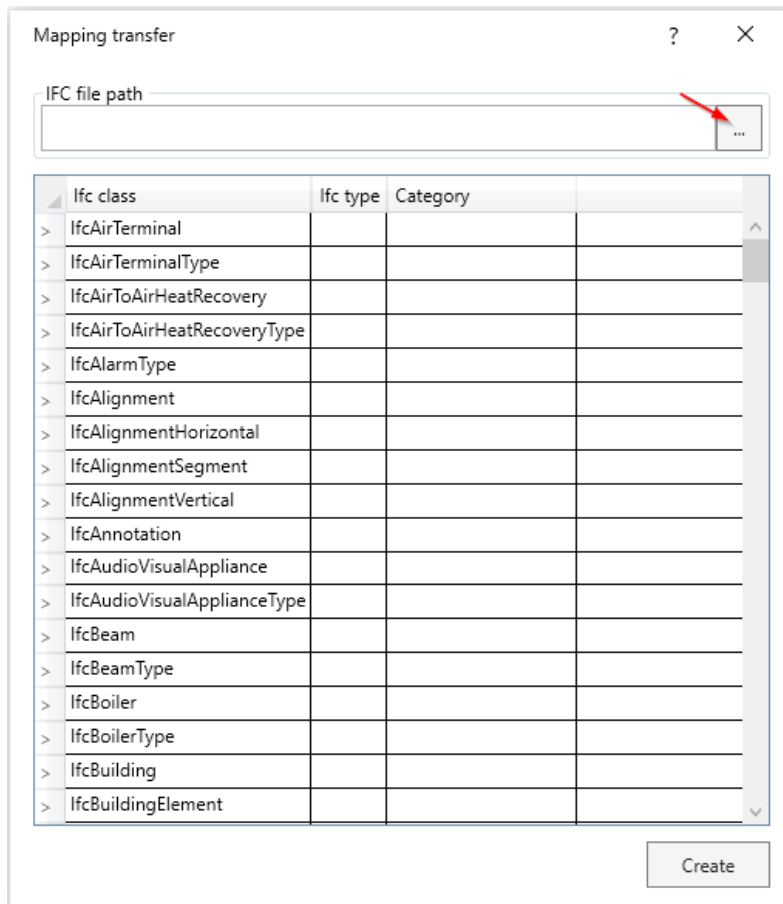
2. Specify the location where the spreadsheet containing the diagram should be saved.

Skillpark MEP > IFC Manager > Mapping > Transfer

The tool places instances of any elements at the locations of successive IFC model class elements, creating Revit components as local models in the selected category.

Tool usage scheme:

1. Specify the file path to the IFC file based on which the local models will be placed in the project.



Mapping transfer

IFC file path

Ifc class	Ifc type	Category
> IfcAirTerminal		
> IfcAirTerminalType		
> IfcAirToAirHeatRecovery		
> IfcAirToAirHeatRecoveryType		
> IfcAlarmType		
> IfcAlignment		
> IfcAlignmentHorizontal		
> IfcAlignmentSegment		
> IfcAlignmentVertical		
> IfcAnnotation		
> IfcAudioVisualAppliance		
> IfcAudioVisualApplianceType		
> IfcBeam		
> IfcBeamType		
> IfcBoiler		
> IfcBoilerType		
> IfcBuilding		
> IfcBuildingElement		

Create

2. The *Ifc class* and *Ifc type* columns contain information about the IFC class and IFC type of the components within the IFC files.

Mapping transfer
?
X

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

Ifc class	Ifc type	Category	
> IfcAirTerminal		Air Terminals	
> IfcAirTerminalType		Air Terminals	
> IfcBuilding		Site	
> IfcBuildingElement		Site	
> IfcBuildingElementProxy		Electrical Analytical Bu	
> IfcBuildingElementProxyType		Conduit Runs	
> IfcBuildingStorey		Cable Tray Fittings	
> IfcDistributionElement		Coordination Model	
> IfcDistributionElementType		Data Devices	
> IfcDistributionPort		Electrical Analytical Bu	
> IfcDuctFitting		Duct Fittings	
> IfcDuctFittingType		Duct Fittings	
> IfcDuctSegment		Ducts	
> IfcDuctSegmentType		Ducts	
> IfcElement		Electrical Analytical Bu	
> IfcFlowTerminal		Ducts	
> IfcGrid		Generic Models	
> IfcPipeFitting		Pipes	

Create

- In the *Category* column, select the category to which elements from specific IFC classes should be assigned.

Mapping transfer

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category
> IfcAirTerminal		Air Terminals
> IfcAirTerminalType		Air Terminals
> IfcBuilding		Site
> IfcBuildingElement		Site
> IfcBuildingElementProxy		Electrical Analytical Bu
> IfcBuildingElementProxyType		Conduit Runs
> IfcBuildingStorey		Cable Tray Fittings
> IfcDistributionElement		Coordination Model
> IfcDistributionElementType		Data Devices
> IfcDistributionPort		Electrical Analytical Bu
> IfcDuctFitting		Duct Fittings
> IfcDuctFittingType		Duct Fittings
> IfcDuctSegment		Ducts
> IfcDuctSegmentType		Ducts
> IfcElement		Electrical Analytical Bu
> IfcFlowTerminal		Ducts
> IfcGrid		Generic Models
> IfcPipeFitting		Pipes

Create

4. If the *DontImport* category is selected, the tool will not place any elements from the given IFC class.

Mapping transfer
?
X

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category	
> IfcAirTerminal		DontImport	^
> IfcAirTerminalType		Air Terminals	
> IfcBuilding		Site	
> IfcBuildingElement		Site	
> IfcBuildingElementProxy		Electrical Analytical Bu	
> IfcBuildingElementProxyType		Conduit Runs	
> IfcBuildingStorey		Cable Tray Fittings	
> IfcDistributionElement		Coordination Model	
> IfcDistributionElementType		Data Devices	
> IfcDistributionPort		Electrical Analytical Bu	
> IfcDuctFitting		Duct Fittings	
> IfcDuctFittingType		Duct Fittings	
> IfcDuctSegment		Ducts	
> IfcDuctSegmentType		Ducts	
> IfcElement		Electrical Analytical Bu	
> IfcFlowTerminal		Ducts	
> IfcGrid		Generic Models	
> IfcPipeFitting		Pipes	v

Create

5. To add a data row, activate the last row and press ENTER.
6. To delete a data row, select it and press DELETE.

Mapping transfer
?
×

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

	Ifc class	Ifc type	Category	
>	IfcDuctSegment		Ducts	^
>	IfcDuctSegmentType		Ducts	
>	IfcElement		Electrical Analytical Bu	
>	IfcFlowTerminal		Ducts	
>	IfcGrid		Generic Models	
>	IfcPipeFitting		Pipes	
>	IfcPipeFittingType		Pipe Fittings	
>	IfcPipeSegment		Pipe Segments	
>	IfcPipeSegmentType		Pipe Segments	
>	IfcSite		Site	
>	IfcValve		Pipe Accessories	
>	IfcValve	DRAWOFFCOCK	Pipe Accessories	
>	IfcValve	FAUCET	Pipe Accessories	
>	IfcValveType		Pipe Accessories	
>	IfcValveType	DRAWOFFCOCK	Pipe Accessories	
>	IfcValveType	FAUCET	Pipe Accessories	
>	IfcClass	IfcType	Generic Models	
>				

Create

7. After completing the configuration, press the *Create* button.

Mapping transfer
?
X

IFC file path
C:\Users\Admin\Downloads\Pipes - sample file.ifc

lfc class	lfc type	Category	
> IfcAirTerminal		DontImport	
> IfcAirTerminalType		Air Terminals	
> IfcBuilding		Site	
> IfcBuildingElement		Site	
> IfcBuildingElementProxy		Electrical Analytical Bu	
> IfcBuildingElementProxyType		Conduit Runs	
> IfcBuildingStorey		Cable Tray Fittings	
> IfcDistributionElement		Coordination Model	
> IfcDistributionElementType		Data Devices	
> IfcDistributionPort		Electrical Analytical Bu	
> IfcDuctFitting		Duct Fittings	
> IfcDuctFittingType		Duct Fittings	
> IfcDuctSegment		Ducts	
> IfcDuctSegmentType		Ducts	
> IfcElement		Electrical Analytical Bu	
> IfcFlowTerminal		Ducts	
> IfcGrid		Generic Models	
> IfcPipeFitting		Pipes	

Create