SMART BROWSER MANAGE
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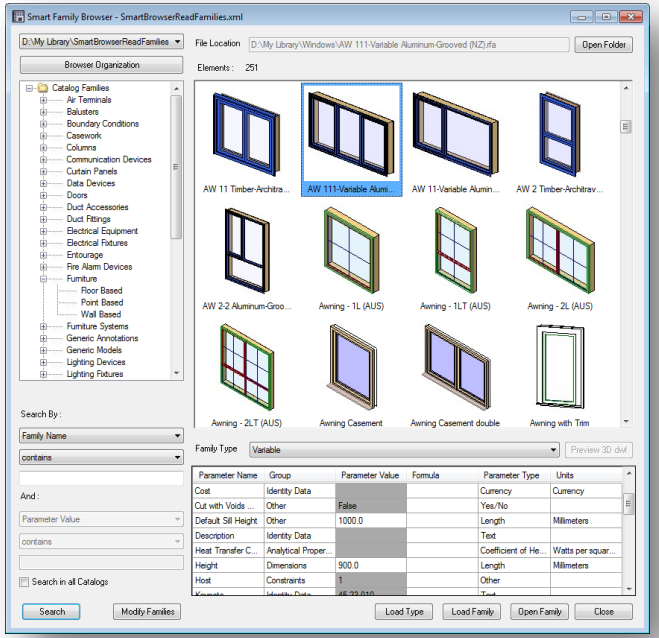
Working with Families from the Library

Smart Browser Manage is an independent family content browser and manager that allows you to:

- Easily and quickly search, modify, and place families into the project.
- Group families by original folder, category, host, version, or unit system (families are listed in a tree structure).
- Overview family types and parameters containing values.
- Modify hundreds of selected families: add new parameters (including shared), copy parameters from one family to another, rename parameters, delete parameters, change values, add new types, delete types, rename types, and much more.
- Find differences between project families and families in the library.
- See all family 2D and 3D views (using DWFX) before inserting into the project.



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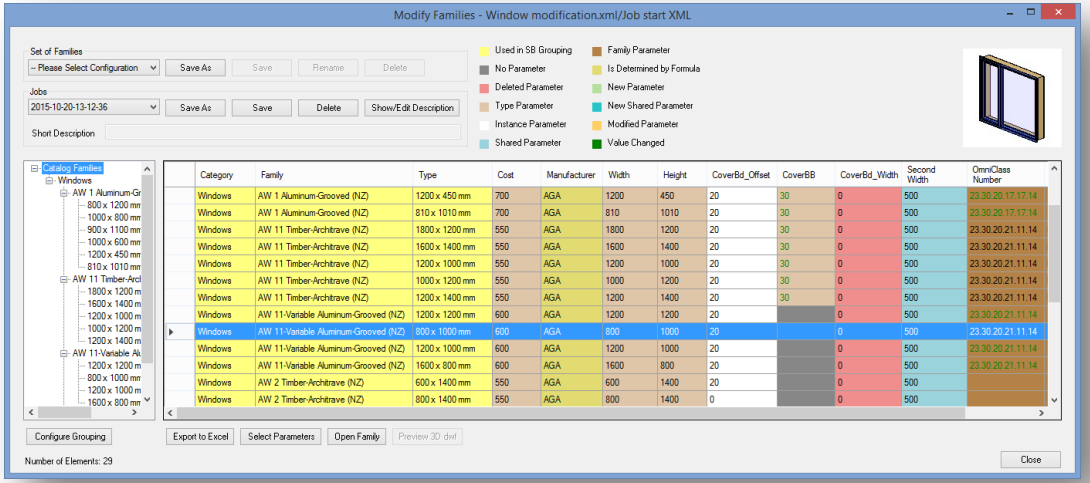
Smart Browser Manage

Smart Browser Manage adds or changes BIM object parameters and values based on rules, eliminating the error-prone manual task of updating Revit® families. Adapt in real time to new LOD specifications, object standards, and record-model needs, keeping project and library families in sync across your whole BIM team.



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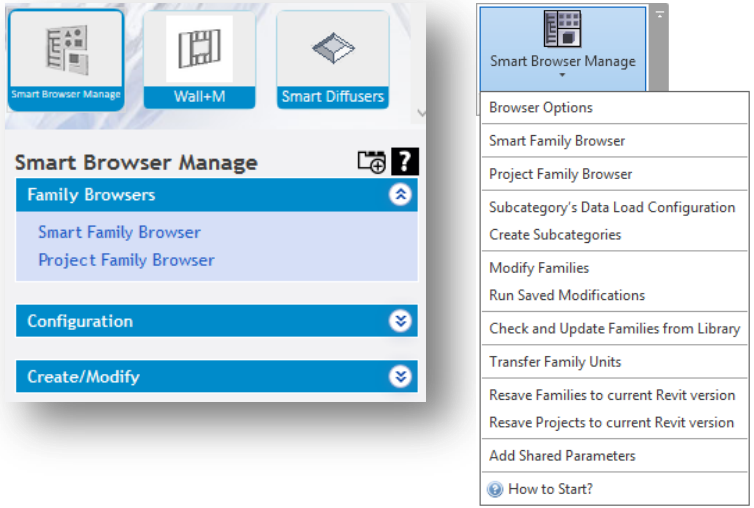
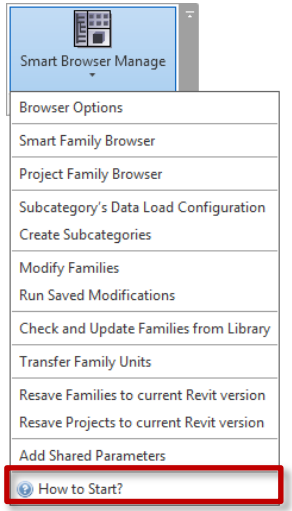
Smart Browser Manage

Smart Browser Manage functions can be accessed through the **TOOLS 4 BIM Dock** or ribbon menu.



Smart Browser Manage

Smart Browser Manage has an E-Help button where users can find videos, webinar recordings, and detailed technical documentation.



Browser Options

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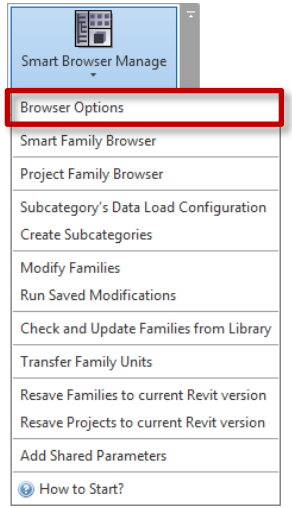
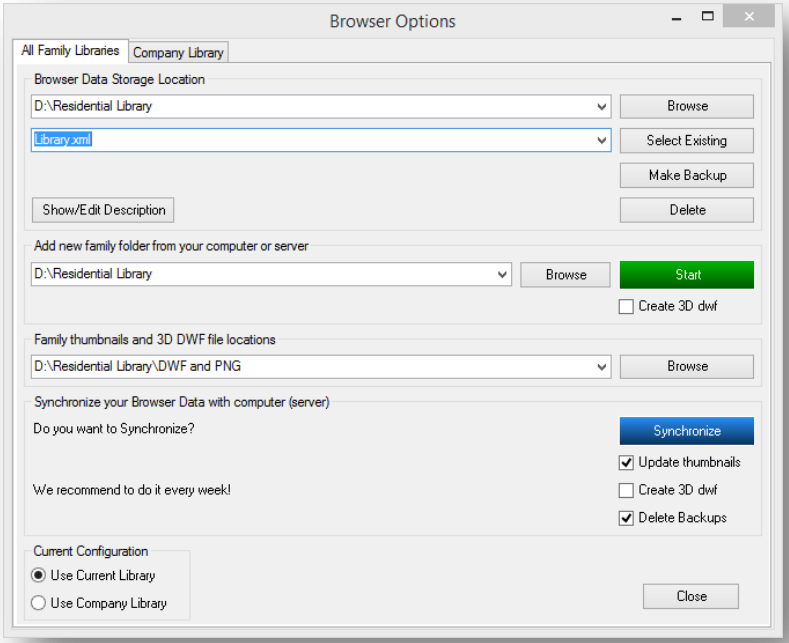
Browser Options

Before working with the **Smart Family Browser**, you need configure the software by accessing the **Browser Options**.





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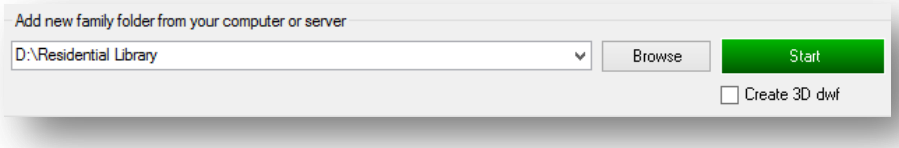
Browser Options



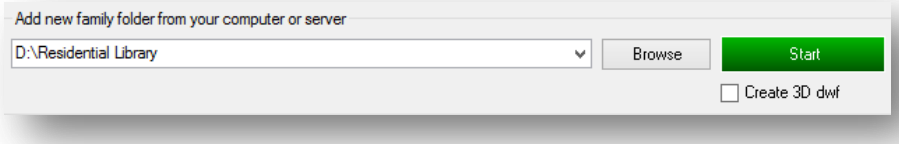
Add new family folder from your computer or server – Locates the folder containing your Revit library files.

Start – Creates an XML file, which uploads families from the computer or server to the browser. During the new XML file creation, the extension opens every family from the library, reads all its information (types, parameter names, parameter values, category, host type, etc.) and creates a picture (PNG) and 3D (DWFX) files (if selected in configuration).

Creating the XML file can take a considerable amount time (½ hour to 24 or even 36 hours), depending on the size of the library.

It is recommended that a fast computer be used to create the initial XML file. You can batch process folders by selecting individual folders or sub-folders and then adding more folders at a later time.

Browser Options



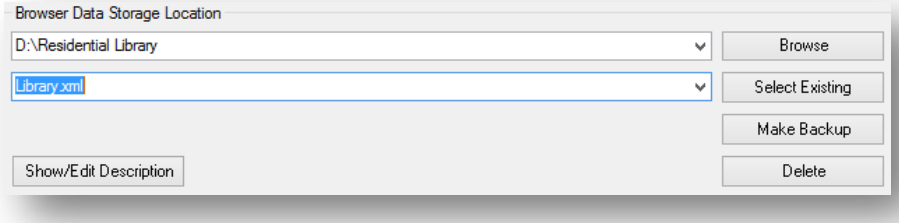
Older file formats – Because the XML file generation opens every file, this will cause Revit to convert old families to the current version of Revit as the family is opened. This does take time. The XML creation process does not save the families, so they will remain in the older format.

Prior to creating the XML database, it is recommended to use the Revit update utility to batch process the updating of all families to the current release.

Create 3D dwf – Select if DWF files are necessary in the browser for 3D viewing.

Please note that this can significantly increase the time it takes to create the database.

Browser Options



One XML file can have several locations to different libraries.

Browser Data Storage Location – Browse the folder where the XML file with the library database is to be placed. This can be placed onto a network server for access by multiple users. Please use UNC pathing to point to the server and folder (i.e. //server1/revit/library). Make sure that the UNC path can be resolved via IP ping. This may require modification of HOSTS file.

Select Existing – Select an existing XML file if one was created with a previous Smart Browser version.

Make Backup – Makes backup file of current XML file.

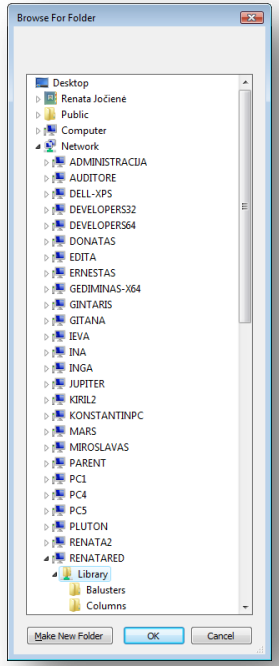
Delete – Deletes current XML file.

Browser Options

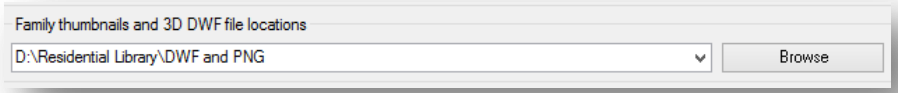
If your library is used by your whole company and is located on a server, you don't need to create an XML file for each computer.

You have to make the first XML file with a full path to your library though the network. Please use UNC pathing to point to the server and folder (i.e. //server1/revit/library).

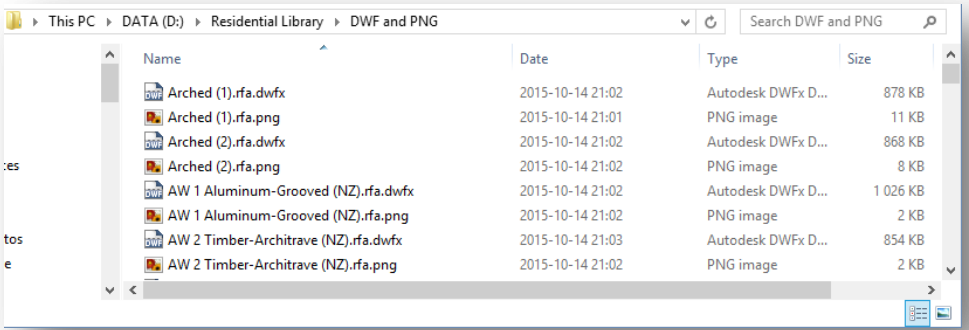
Next, it is required to change the path on every computer to point to the XML file on the network.



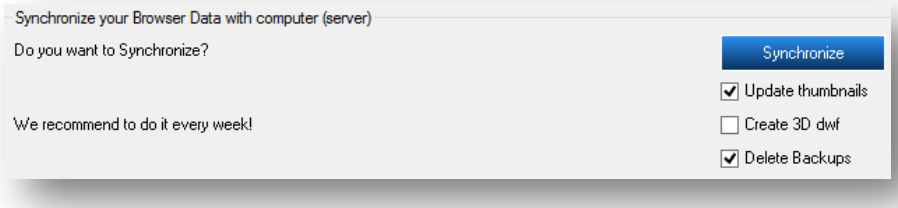
Browser Options



Family thumbnails and 3D DWF file locations – Select the folder where the PNG and DWF files are to be placed. This can be located on a network server for access by multiple users.



Browser Options

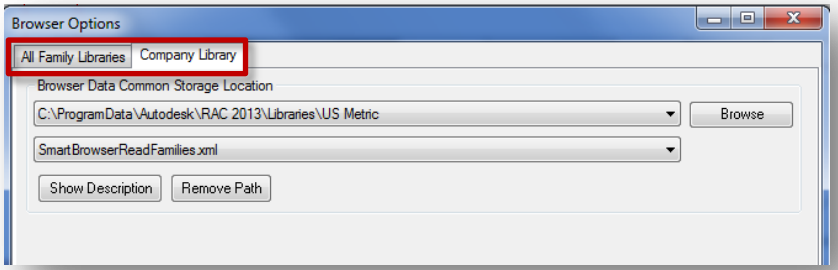


Synchronize – Updates the library if there are any changes to the families. Running this will cause all indexed Revit family files to be checked and re-indexed into the database in the event that they have been modified since the last synchronization.

Create 3D dwf – Makes DWF files for 3D viewing if those have not been created yet.

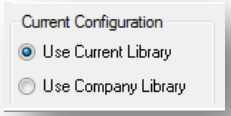
Delete Backups – Deletes backup files during synchronization process.

Browser Options



All Family Libraries – In this tab, you can create/delete/update XML files with library databases.

Company Library – In this tab, you can select which XML file is your company XML file with library database. Then you can decide which library to use in Smart Family Browser – current library or company library.



Smart Family Browser

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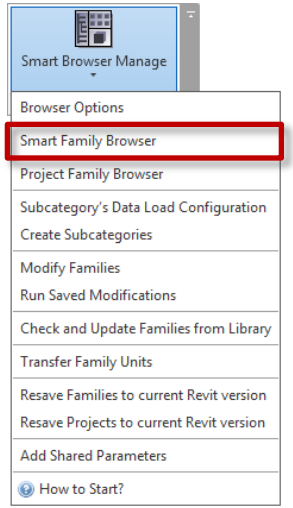
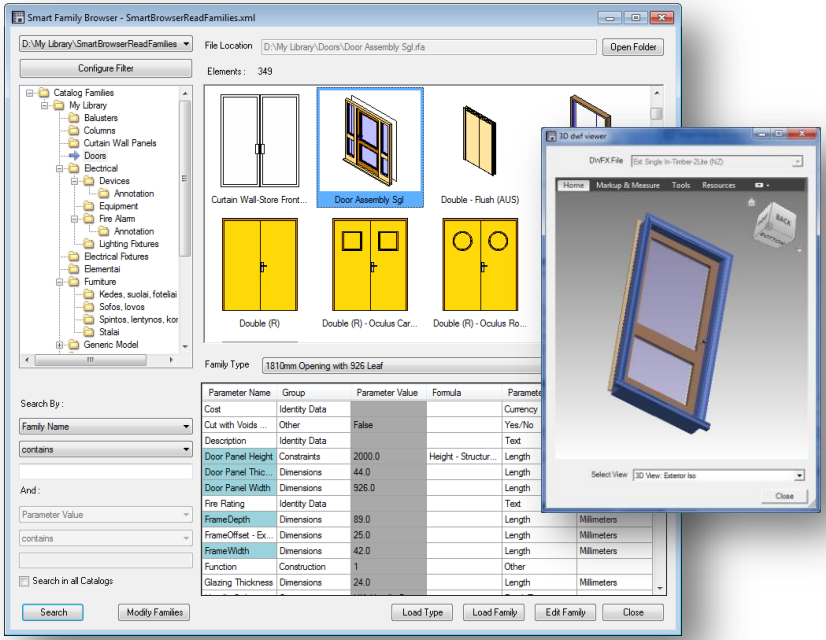
Smart Family Browser

Smart Family Browser – opens the browser with predefined families from the library.



Smart Family Browser works independently from the Revit® project.

To reduce the time it takes to load **Smart Browser Manage**, please note that it is not necessary to close the Smart Browser dialog when working within your projects.



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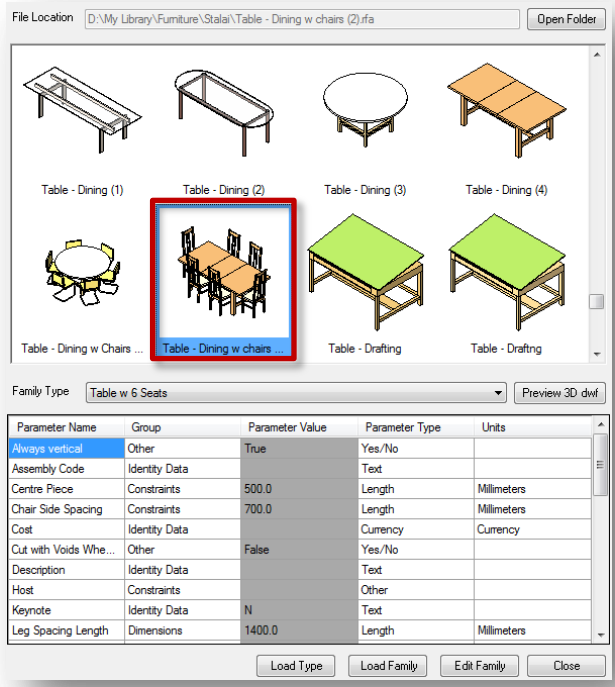
Smart Family Browser

When an element is selected, the browser shows all family types, parameter names, parameter groups, parameters values, and parameter values and units.

File Location – shows location where the selected family is placed.

Open Folder – opens the folder where the selected family is placed.

Edit Family – goes to the selected family editing mode.

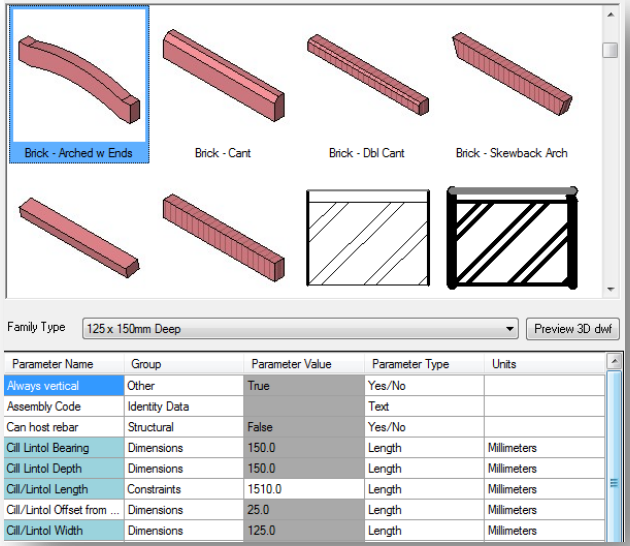


Smart Family Browser

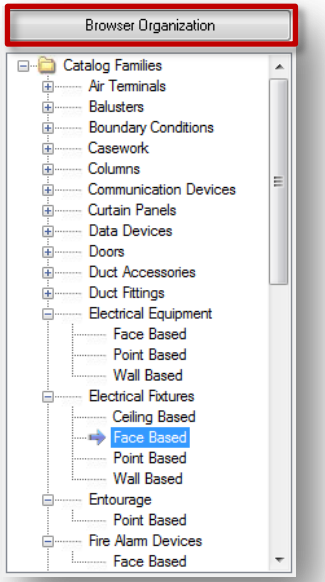
If parameter values are displayed in a gray background, it means that those values are **type values** and will affect all cases of that type in the project.

If parameter values are displayed in a white background, it means that those values are **instance values** and will effect every instance family in the project.

If parameter names are displayed in a blue background, it means that those parameters are **shared** and may be used in schedules and tags if needed.

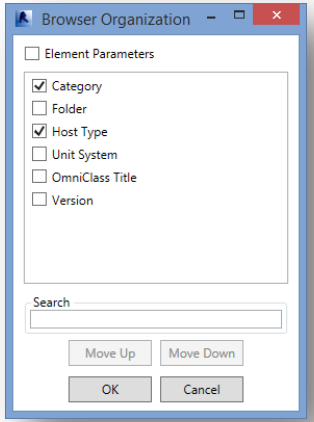


Smart Family Browser



Families are conveniently grouped together in a tree where the user can filter by configurable criteria. Criteria may be selected with the **Browser Organization** button at the top of the tree.

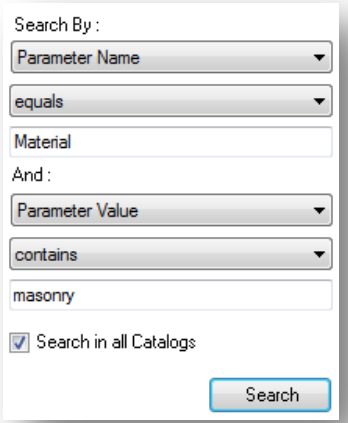
For example, if **Category** and **Host Type** are selected, elements in the tree can be expanded and filtered under these criteria:

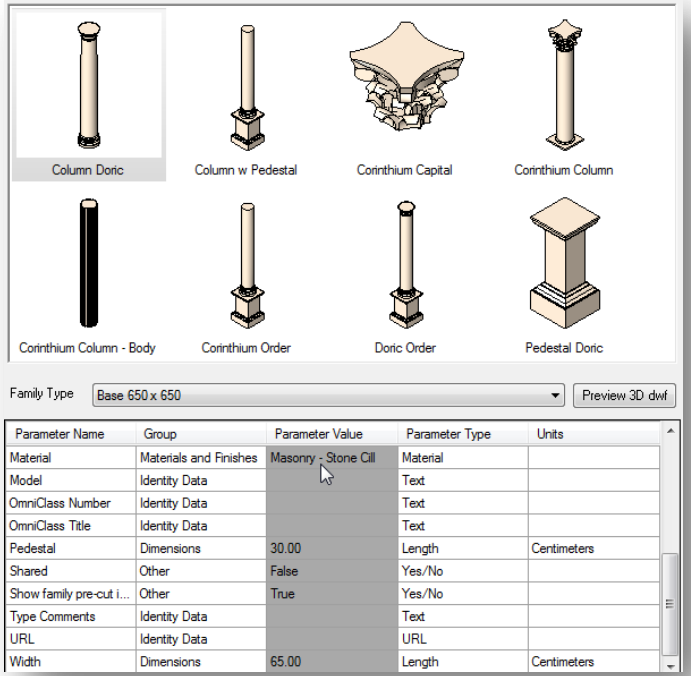


Smart Family Browser

Search By – searches for families by family name, family type, parameter name, or parameter value.

Search By – works on the selected group in the family free. If **Search in all Catalogs** is selected, then the search will be made through all families that are in the browser database.





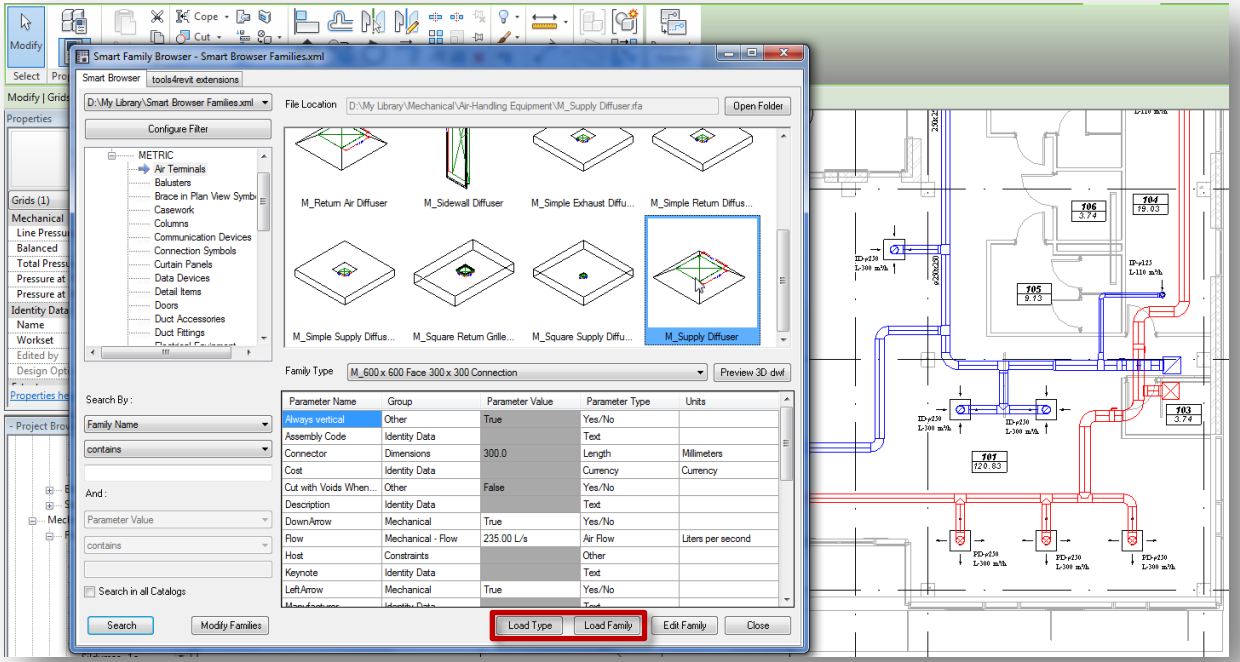
Smart Family Browser

To insert an element into the project, use the drag-and-drop functionality.

The element will be loaded by default with the first type in the list. If you don't want the first type, select the one you want.

Load Type – loads family with the selected type only.

Load Family – loads family with all its types.



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Modify Families

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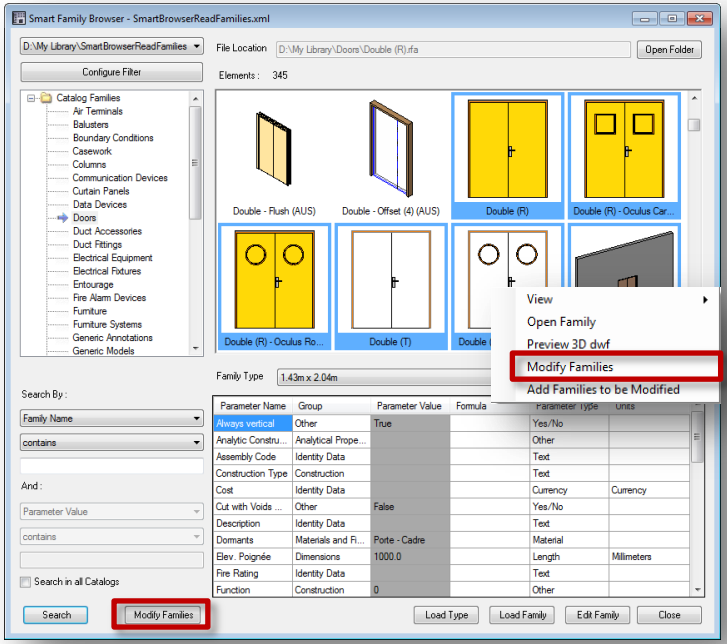
Modify Families

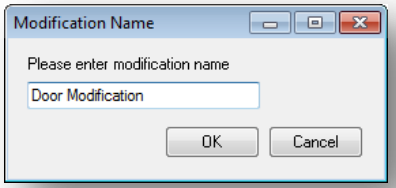
Modify Families - extremely powerful functionality that allows you to change/add/delete parameters or types for selected families.

“Modify Families” can be found by right-clicking the selected family (or families).

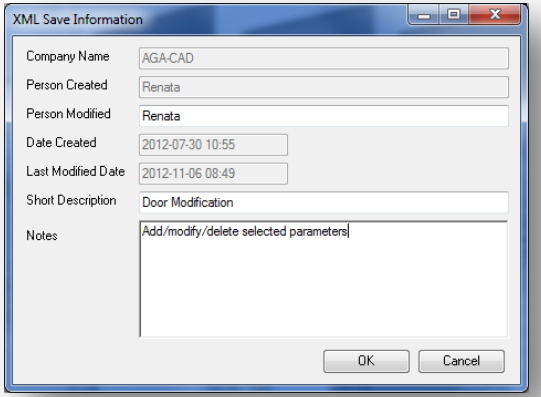


Modify Families

Input the name of the modification. The modification name will identify the group of families with tasks that are assigned to those families:

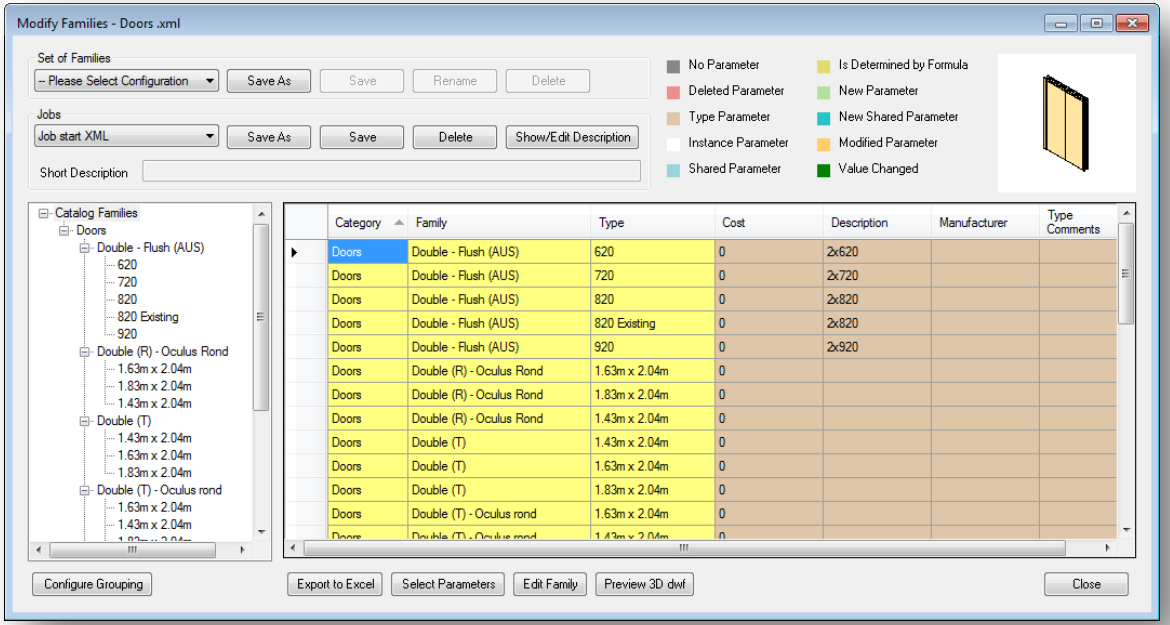


Then, it's necessary to write the name of the person who is modifying the library. A short description and notes may be written with information about the changes that will be made.



Modify Families

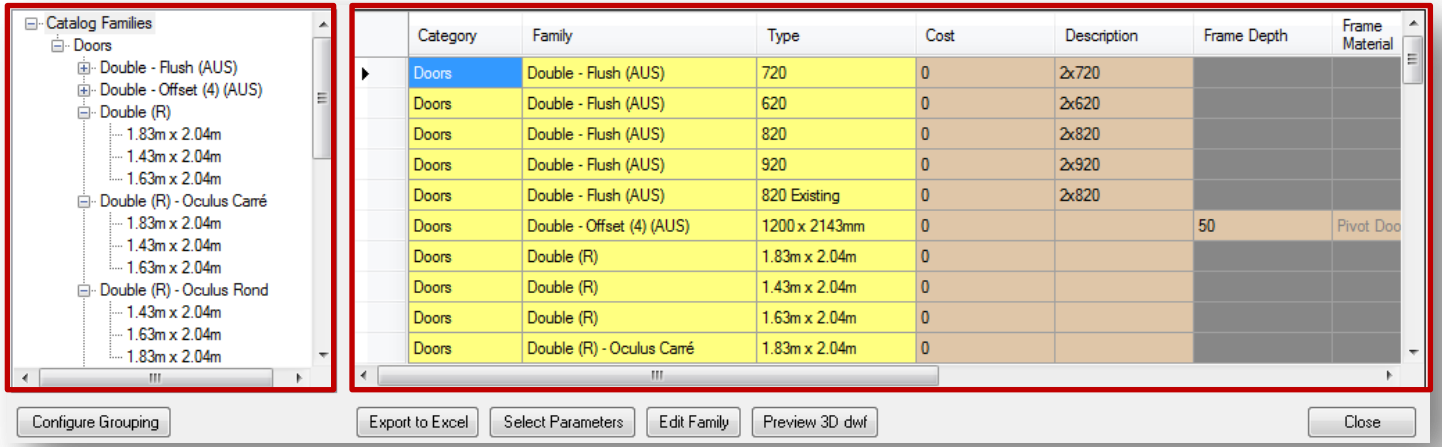
Dialog for modification:



Modify Families

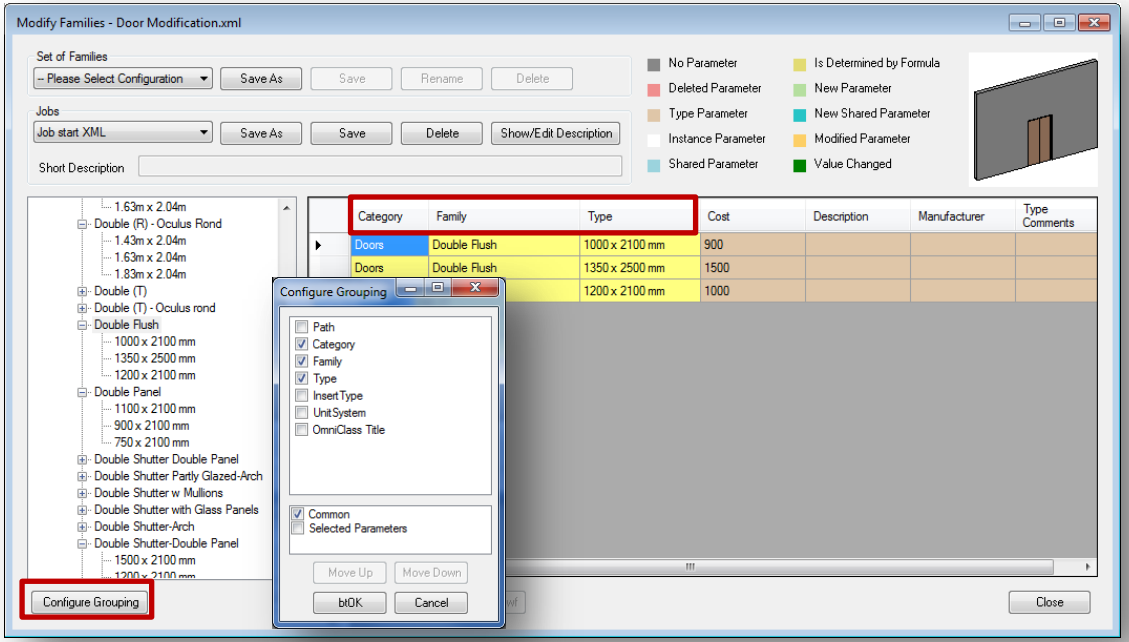
Families are conveniently grouped together in a tree, which may be filtered by any parameter. Define grouping parameters with **Configure Grouping**.

Families are displayed in the table with their parameters. Every type is displayed in a separate row. Grouping parameters are displayed in a yellow color (“Category”, “Family”, “Type”). Select other parameters (“Cost”, “Description” etc.) with **Select Parameters**.



Modify Families

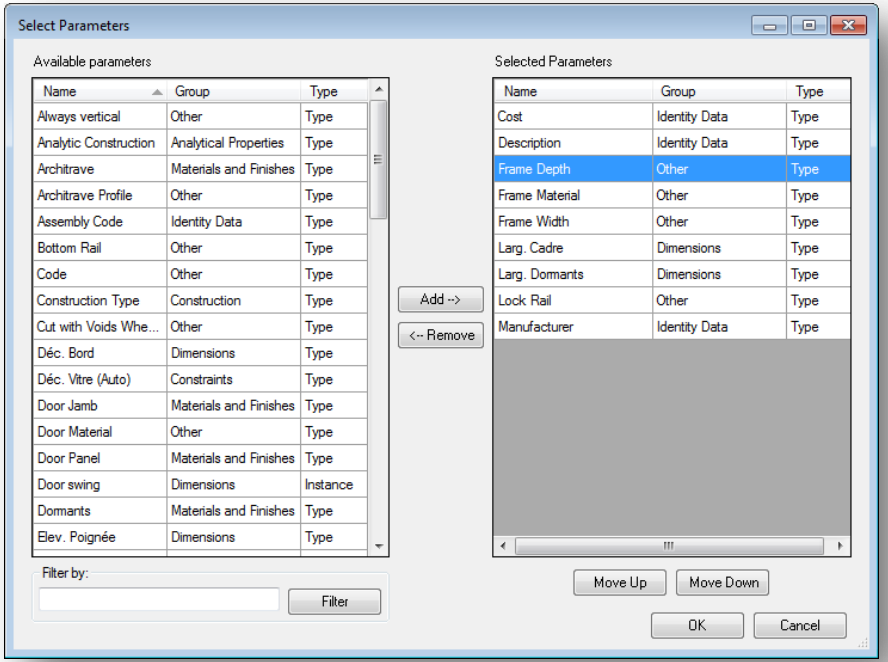
If “Category”, “Family” and “Type” are selected in **Configure Grouping**, then elements will be expanded and filtered under these criteria.



Modify Families

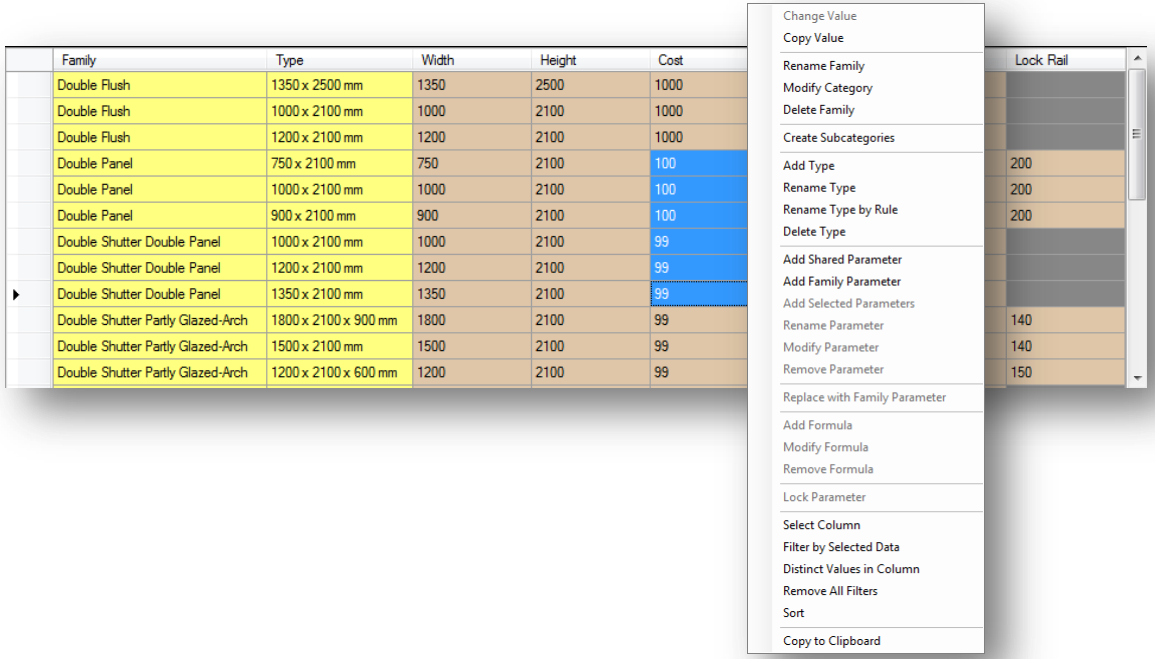
Parameters can be selected with **Select Parameters**.

- All available parameters from the selected families can be seen on the left side of the dialog.
- Select the parameters you would like to modify by adding them to the right side of the dialog.
- Adding new or removing parameters are available with the commands “Add” and “Remove”.
- The order of parameters can be changed with “Move Up” and “Move Down”.

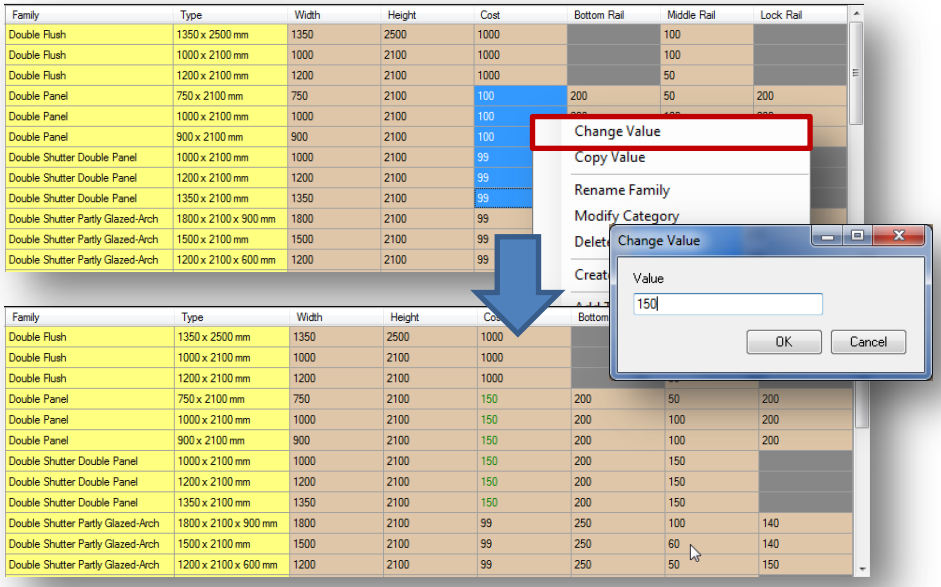


Modify Families

With right-click menu, you can modify selected values or parameters.



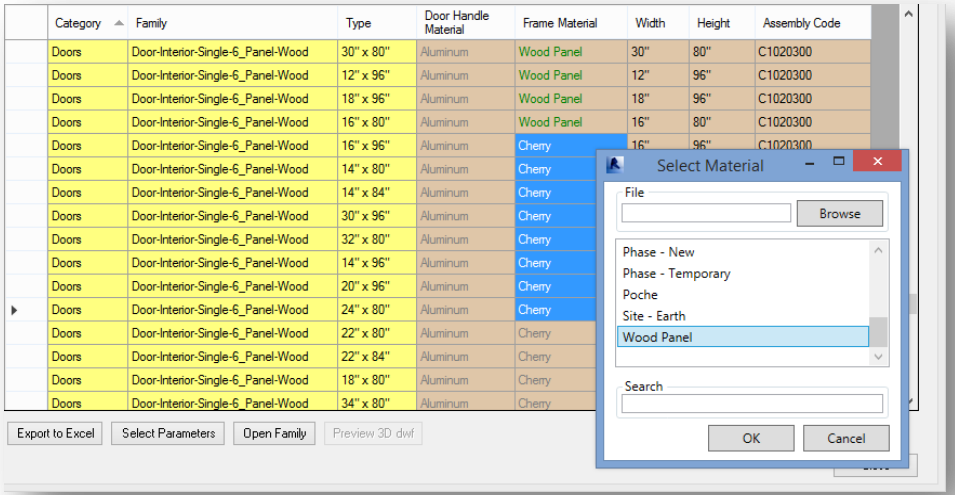
Modify Families – Change Value



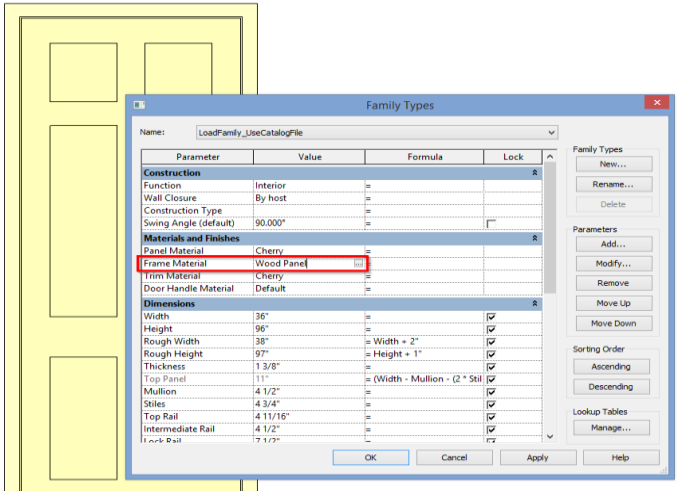
Change Value – changes values of selected parameters.

Changed values will be displayed in green.

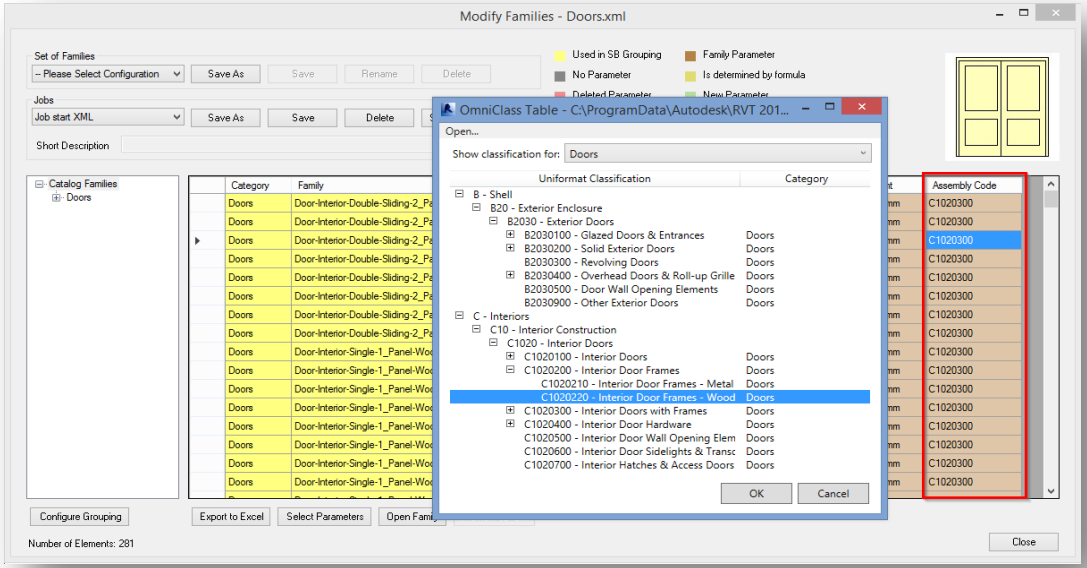
Modify Families – Change Value



You can modify not only regular parameter values but also the materials of selected families. The list of materials will come from the current family or from another family you select.

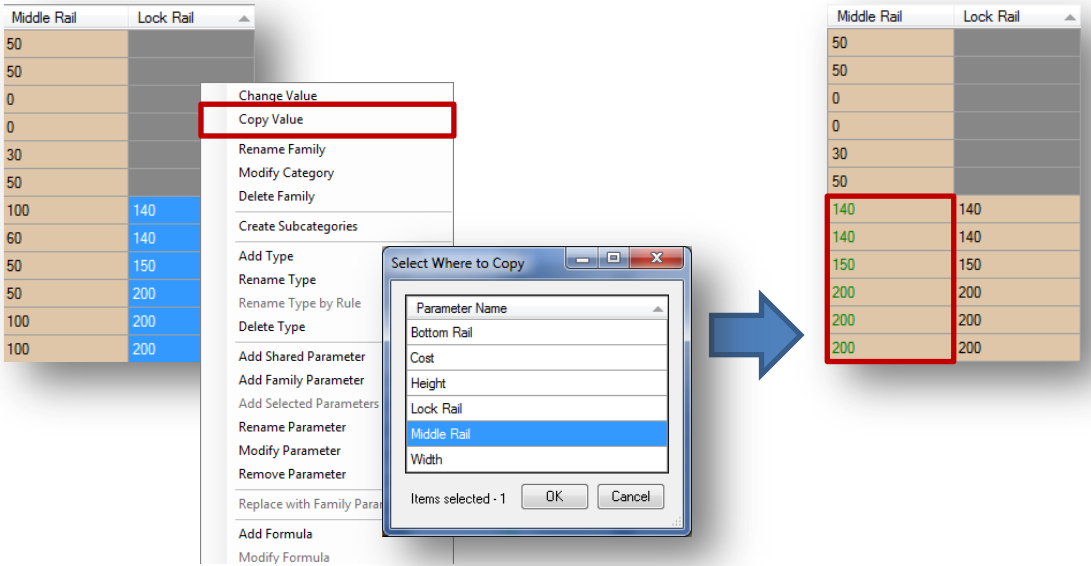


Modify Families – Change Value



You can easily change Assembly Code, OmniClass, etc.

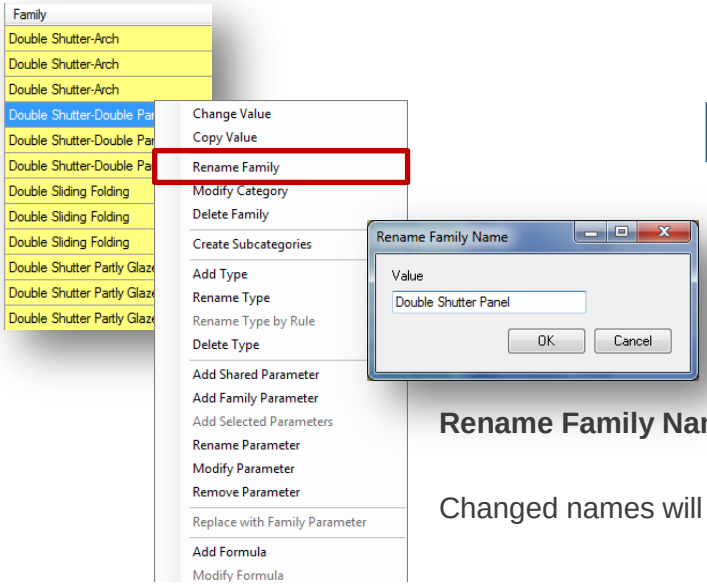
Modify Families – Copy Value



Copy Value – makes a copy of selected values from one parameter to another.

Changed values will be displayed in green.

Modify Families – Rename Family

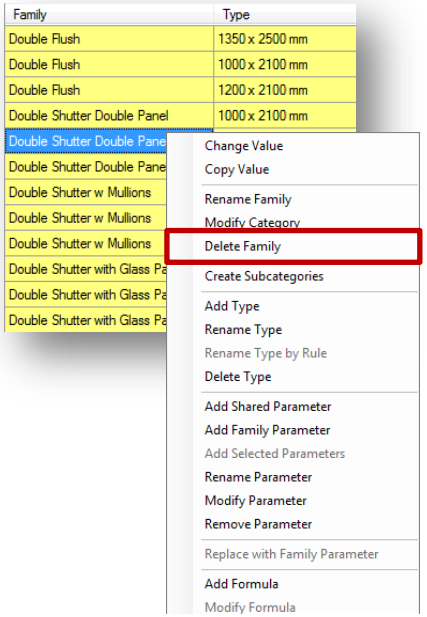


Family	Type
Double Shutter-Arch	1500 x 2100 x 750 mm
Double Shutter-Arch	1800 x 2100 x 900 mm
Double Shutter-Arch	1200 x 2100 x 600 mm
Double Shutter Panel	1800 x 2100 mm
Double Shutter Panel	1200 x 2100 mm
Double Shutter Panel	1500 x 2100 mm
Double Sliding Folding	1500 x 2100 mm
Double Sliding Folding	2400 x 2100 mm
Double Sliding Folding	1800 x 2100 mm
Double Shutter Partly Glazed-Arch	1800 x 2100 x 900 mm
Double Shutter Partly Glazed-Arch	1500 x 2100 mm
Double Shutter Partly Glazed-Arch	1200 x 2100 x 600 mm

Rename Family Name – will rename the selected family.

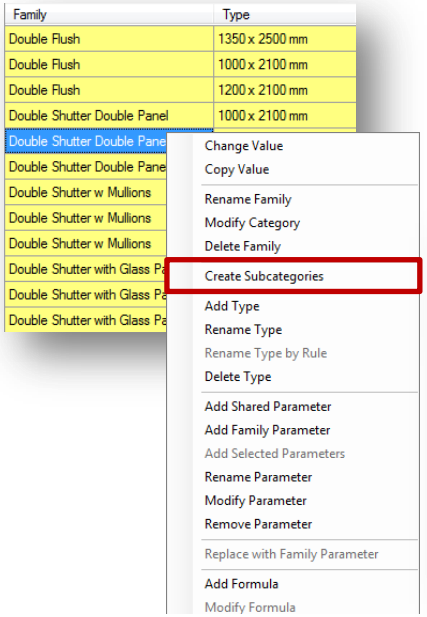
Changed names will be displayed in green.

Modify Families – Delete Family



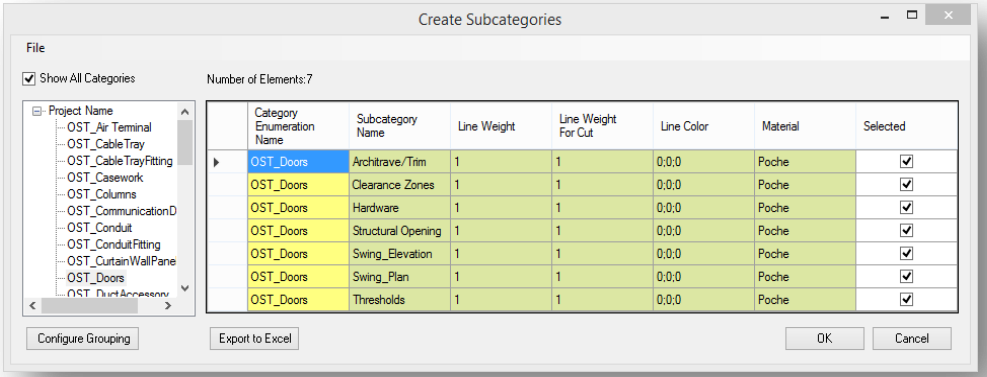
Delete Family – deletes the selected family file from the library.

Modify Families – Create Subcategories



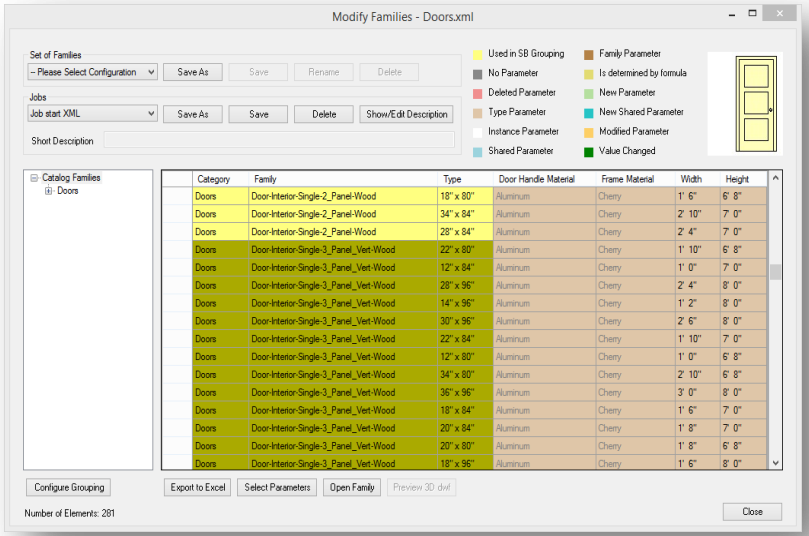
Create Subcategories – creates subcategories in a family. The list of subcategories comes from an external text file, which can be easily modified in accordance with company or country standards. The default list of subcategories comes from ANZRS!

Here you can select the subcategories from the list:

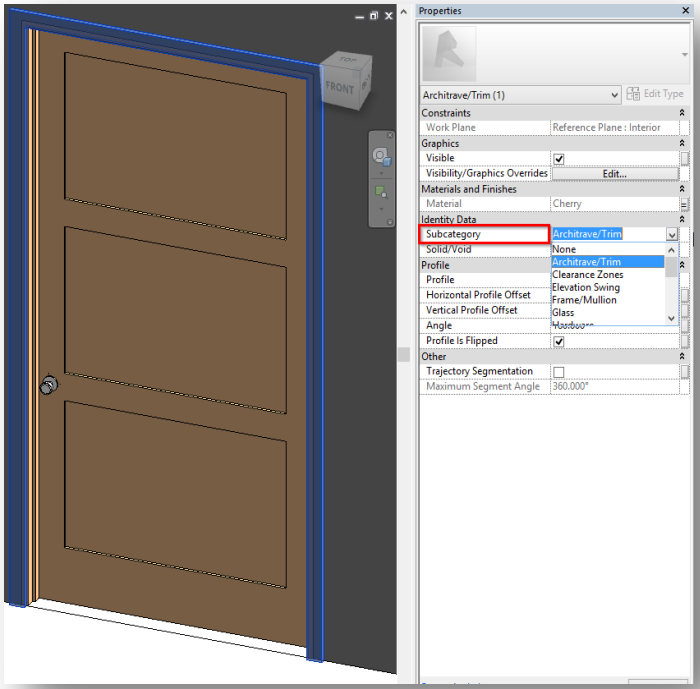


Modify Families – Create Subcategories

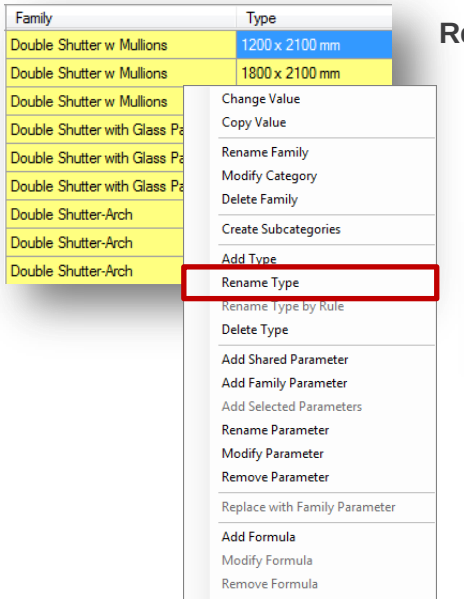
The families will change color if you add a task to create subcategories.



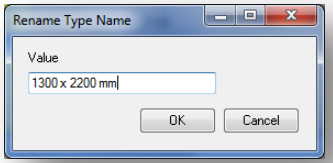
After running saved modifications, every family will have a list of subcategories, which can easily be assigned to solids.



Modify Families – Rename Type



Rename Type – renames selected type names. Renamed types will be displayed in green.

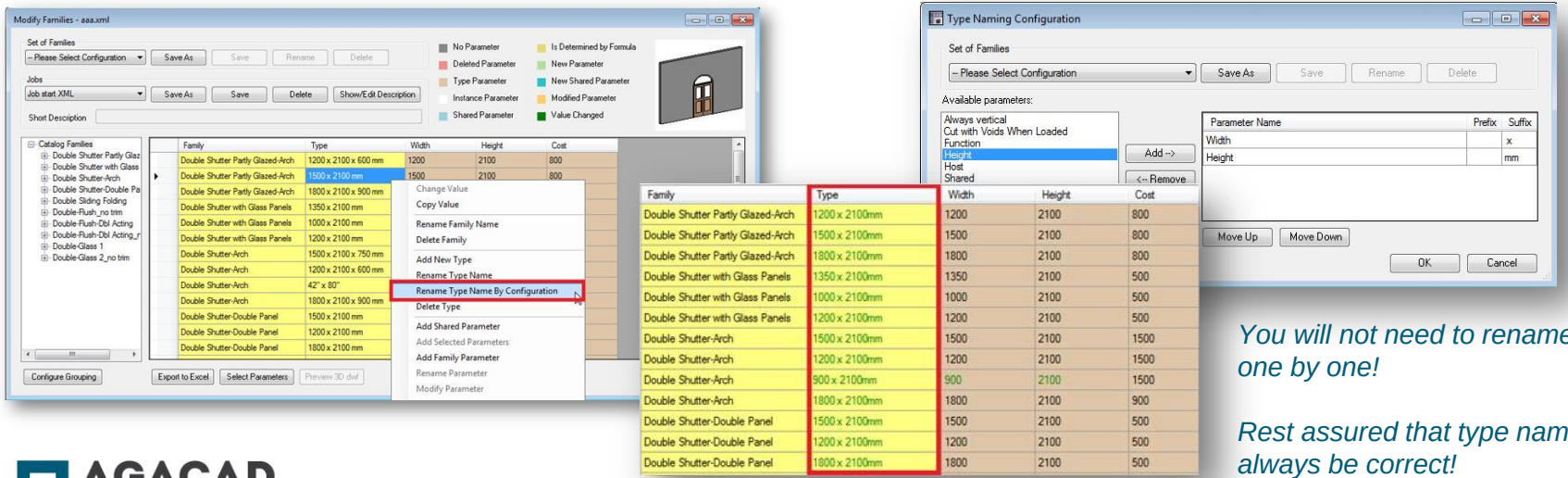


Family	Type
Double Shutter w Mullions	1300 x 2200 mm
Double Shutter w Mullions	1800 x 2100 mm
Double Shutter w Mullions	1500 x 2100 mm
Double Shutter with Glass Panels	1350 x 2100 mm
Double Shutter with Glass Panels	1300 x 2200 mm
Double Shutter with Glass Panels	1000 x 2100 mm
Double Shutter-Arch	1500 x 2100 x 750 mm
Double Shutter-Arch	1800 x 2100 x 900 mm
Double Shutter-Arch	1300 x 2200 mm

Modify Families – Rename Type by Using Rules

You can very easily add your own configuration for type names.

Let's say door type names need to be renamed as "Width x Height mm".



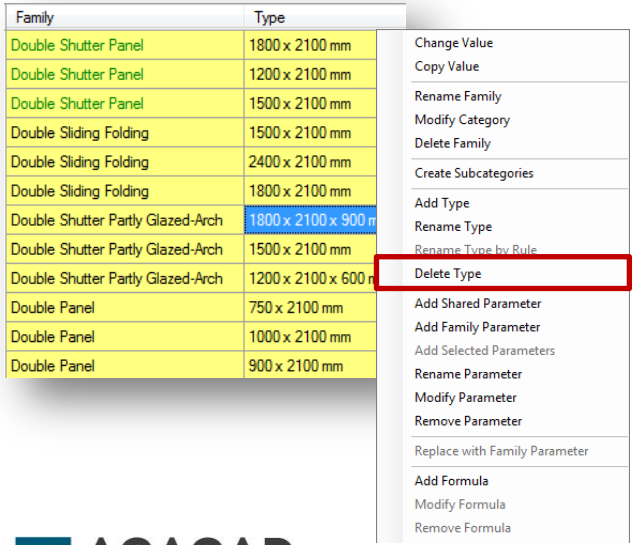
Family	Type	Width	Height	Cost
Double Shutter Partly Glazed-Arch	1200 x 2100mm	1200	2100	800
Double Shutter Partly Glazed-Arch	1500 x 2100mm	1500	2100	800
Double Shutter Partly Glazed-Arch	1800 x 2100mm	1800	2100	800
Double Shutter with Glass Panels	1350 x 2100mm	1350	2100	500
Double Shutter with Glass Panels	1000 x 2100mm	1000	2100	500
Double Shutter with Glass Panels	1200 x 2100mm	1200	2100	500
Double Shutter-Arch	1500 x 2100mm	1500	2100	1500
Double Shutter-Arch	1200 x 2100mm	1200	2100	1500
Double Shutter-Arch	900 x 2100mm	900	2100	1500
Double Shutter-Arch	1800 x 2100mm	1800	2100	900
Double Shutter-Double Panel	1500 x 2100mm	1500	2100	500
Double Shutter-Double Panel	1200 x 2100mm	1200	2100	500
Double Shutter-Double Panel	1800 x 2100mm	1800	2100	500

You will not need to rename types one by one!

Rest assured that type names will always be correct!

Modify Families – Delete Type

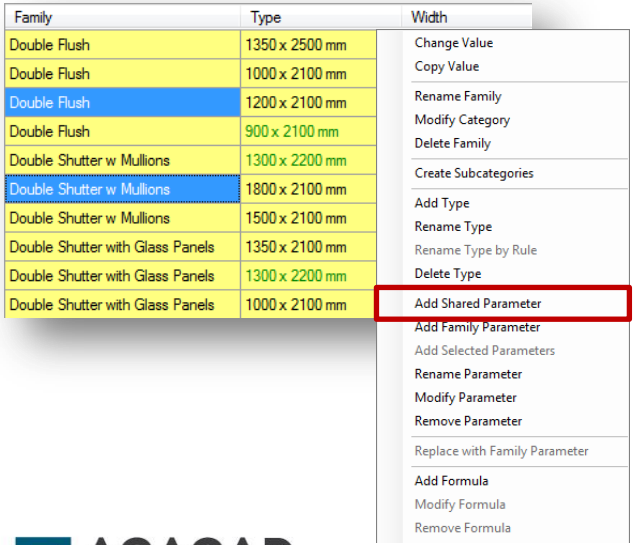
Delete Type – deletes selected types.



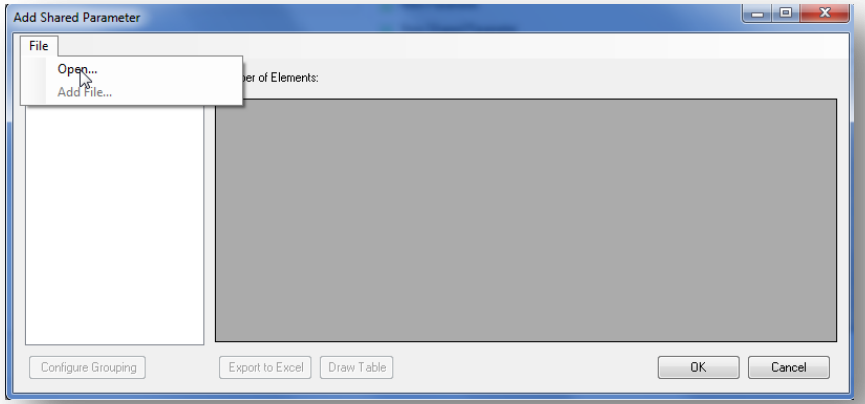
Family	Type
Double Shutter Panel	1800 x 2100 mm
Double Shutter Panel	1200 x 2100 mm
Double Shutter Panel	1500 x 2100 mm
Double Sliding Folding	1500 x 2100 mm
Double Sliding Folding	2400 x 2100 mm
Double Sliding Folding	1800 x 2100 mm
Double Shutter Partly Glazed-Arch	1500 x 2100 mm
Double Shutter Partly Glazed-Arch	1200 x 2100 x 600 mm
Double Panel	750 x 2100 mm
Double Panel	1000 x 2100 mm
Double Panel	900 x 2100 mm

Modify Families – Add Shared Parameter

Add Shared Parameter – adds shared parameters for selected families.

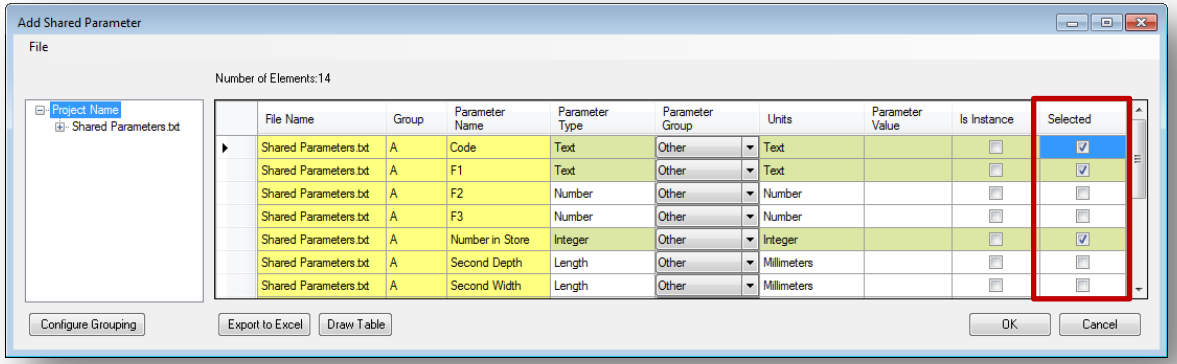


Select and open txt shared parameter file:



Modify Families – Add Shared Parameter

Select parameters that will be added as a shared parameter:

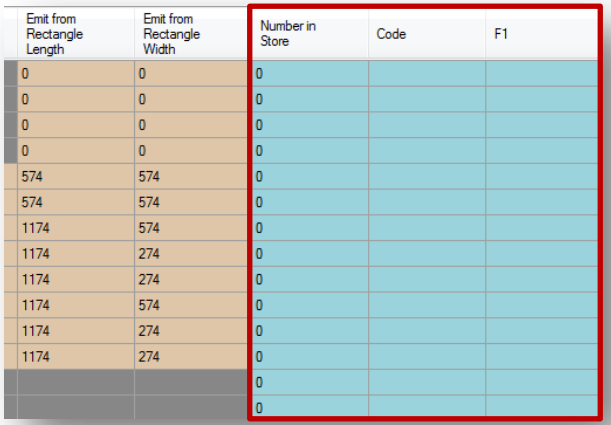


In this dialog, you can dictate whether the parameter should be an instance (check “Is Instance”) or a type, and you can change the parameter group (under “Parameter Group”).

Selected parameters will be displayed in green.

Modify Families – Add Shared Parameter

The three shared parameters (selected on the previous slide) will be added to selected families:

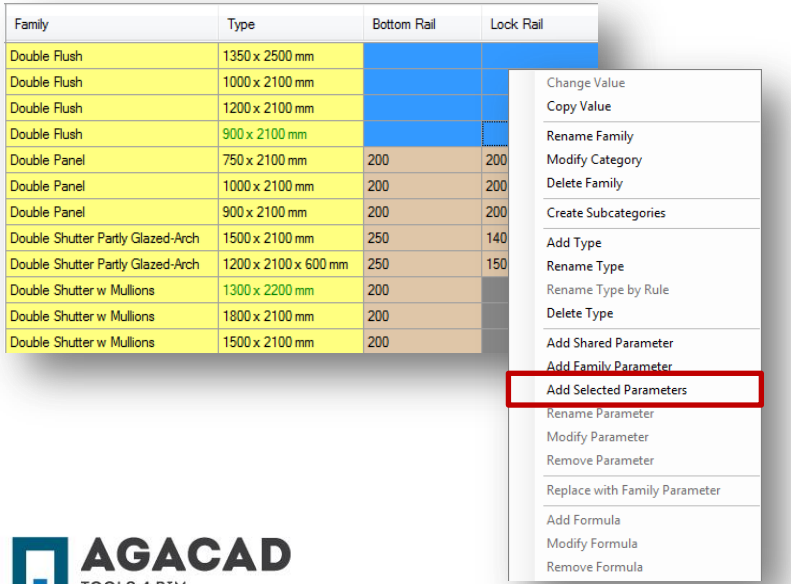


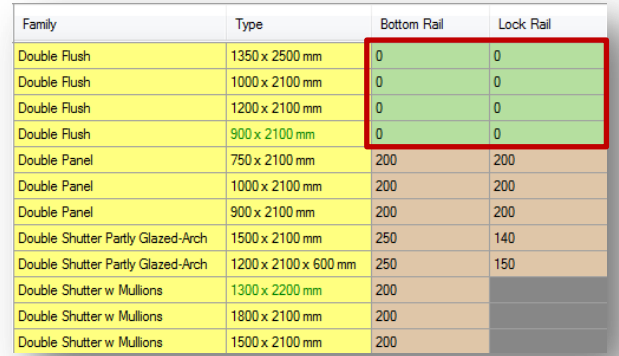
Emit from Rectangle Length	Emit from Rectangle Width	Number in Store	Code	F1
0	0	0		
0	0	0		
0	0	0		
0	0	0		
574	574	0		
574	574	0		
1174	574	0		
1174	274	0		
1174	274	0		
1174	574	0		
1174	274	0		
1174	274	0		
		0		
		0		

Cells of new shared parameters will be displayed in blue.

Modify Families – Add Shared Parameter

Add Selected Parameter – adds selected parameters with the same properties to selected families.

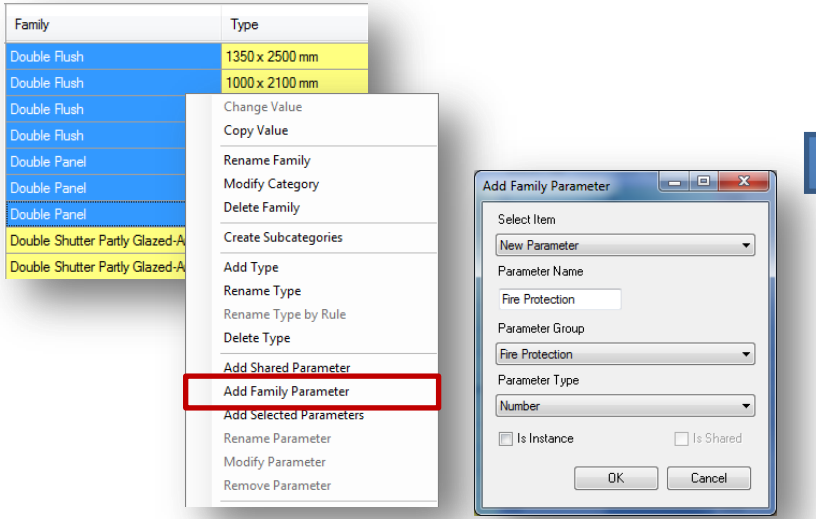




Cells of new parameter will be displayed in green.

Modify Families – Add Family Parameter

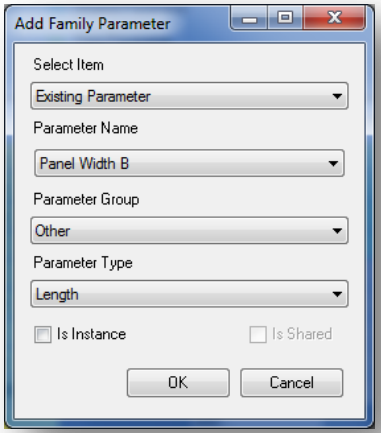
Add Family Parameter – adds new or existing parameters to selected families.



Family	Type	Fire Protection
Double Flush	1350 x 2500 mm	0
Double Flush	1000 x 2100 mm	0
Double Flush	1200 x 2100 mm	0
Double Flush	900 x 2100 mm	0
Double Panel	750 x 2100 mm	0
Double Panel	1000 x 2100 mm	0
Double Panel	900 x 2100 mm	0
Double Shutter Partly Glazed-Arch	1500 x 2100 mm	
Double Shutter Partly Glazed-Arch	1200 x 2100 x 600 mm	

Cells of new parameter will be displayed in green.

Modify Families – Add Family Parameter



Select Item – choose whether a New or Existing parameter will be created.

Parameter Name – add a new parameter name or select an existing one.

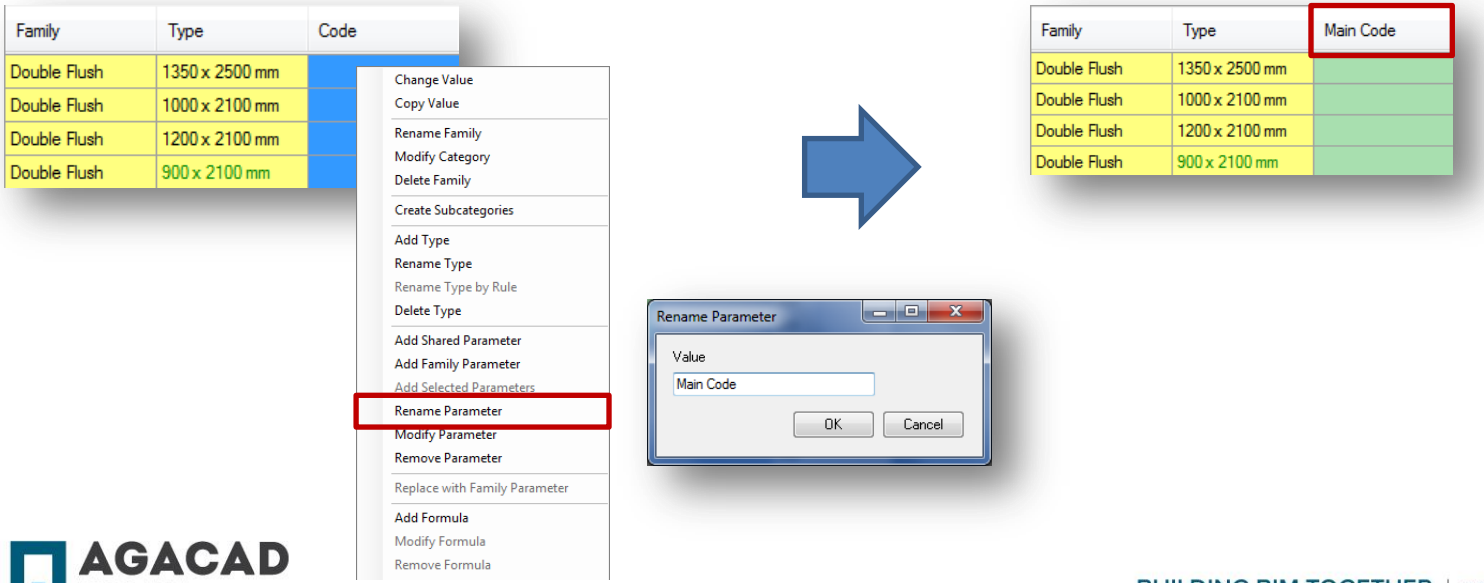
Parameter Group – select the parameter group. If an existing parameter is selected, then the group will be exactly the same as in the existing parameter. It can be modified if needed.

Parameter Type – select the type of parameter. If an existing parameter is selected, then the type will be exactly the same as in the existing parameter. It can be modified if needed.

Is Instance – select if parameter is an instance.

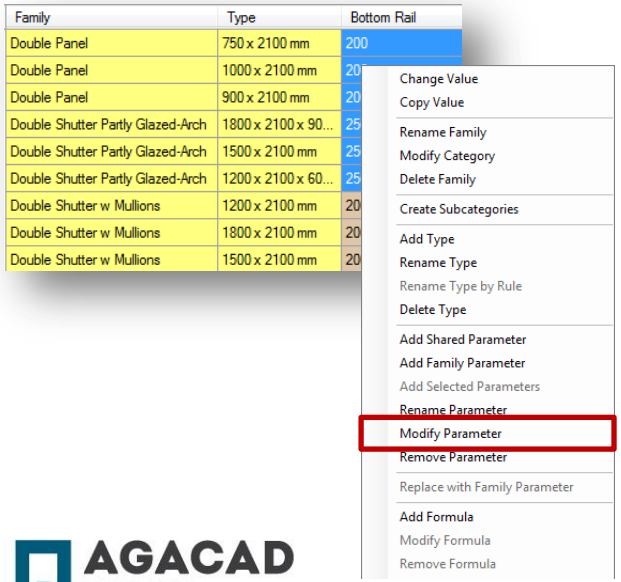
Modify Families – Rename Parameter

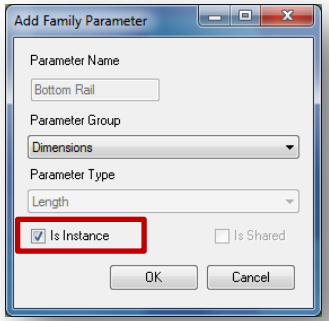
Rename Parameter – renames parameter name for selected families.

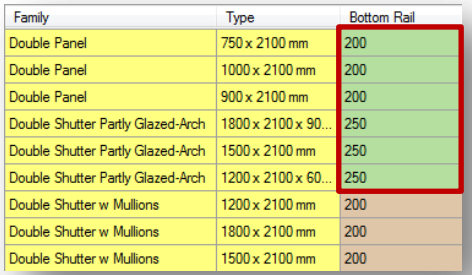


Modify Families – Modify Parameter

Modify Parameter – modifies parameter settings for selected families.



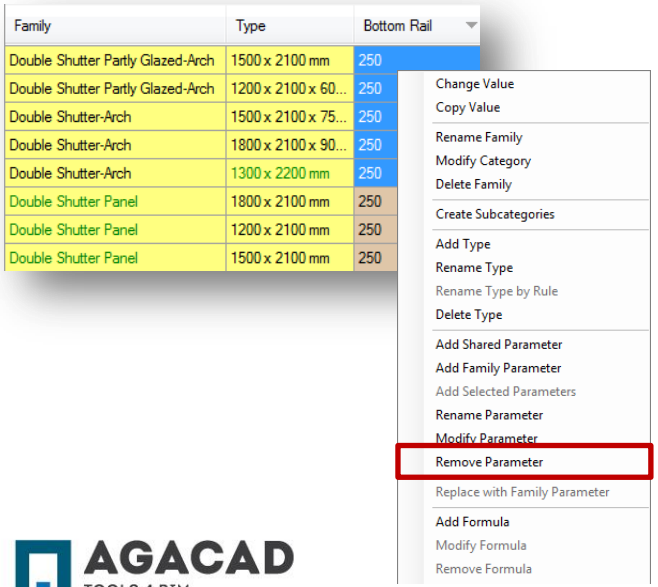


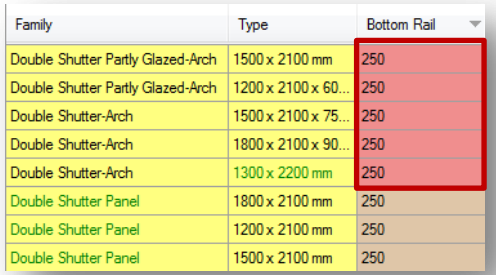


Cells of modified parameter will be displayed in green.

Modify Families – Remove Parameter

Remove Parameter – deletes parameters for selected families.

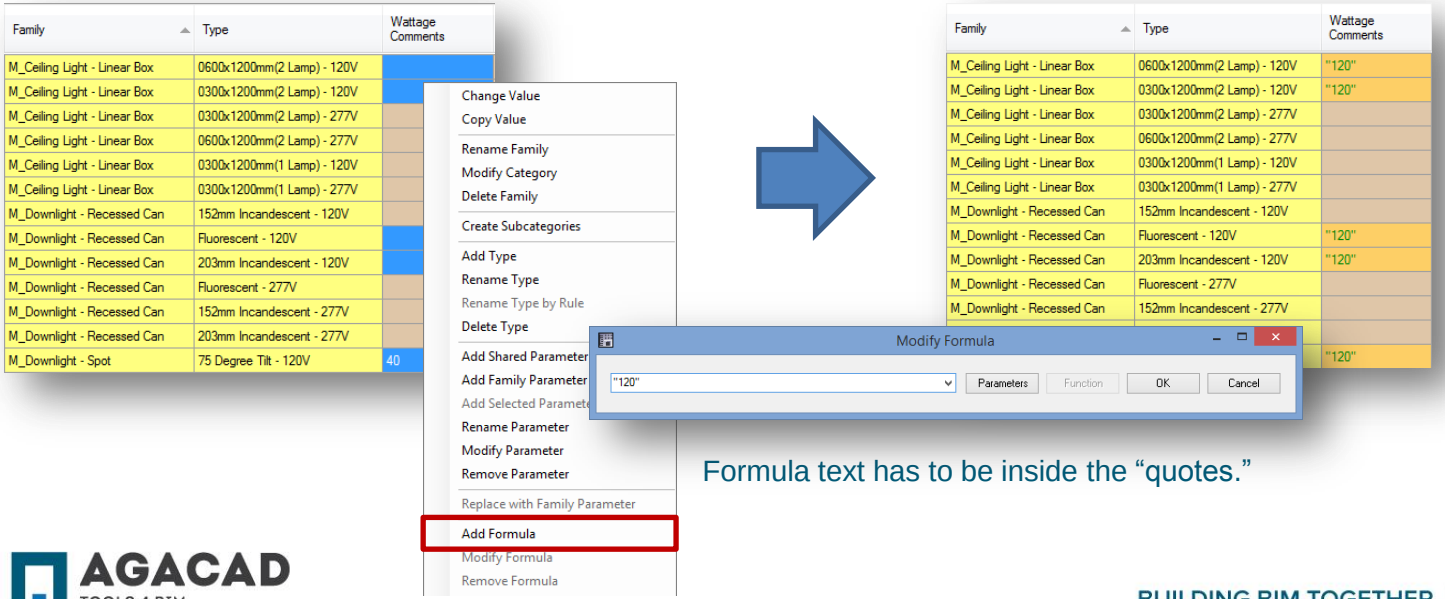




Cells of deleted parameters will be displayed in red.

Modify Families – Add Formula

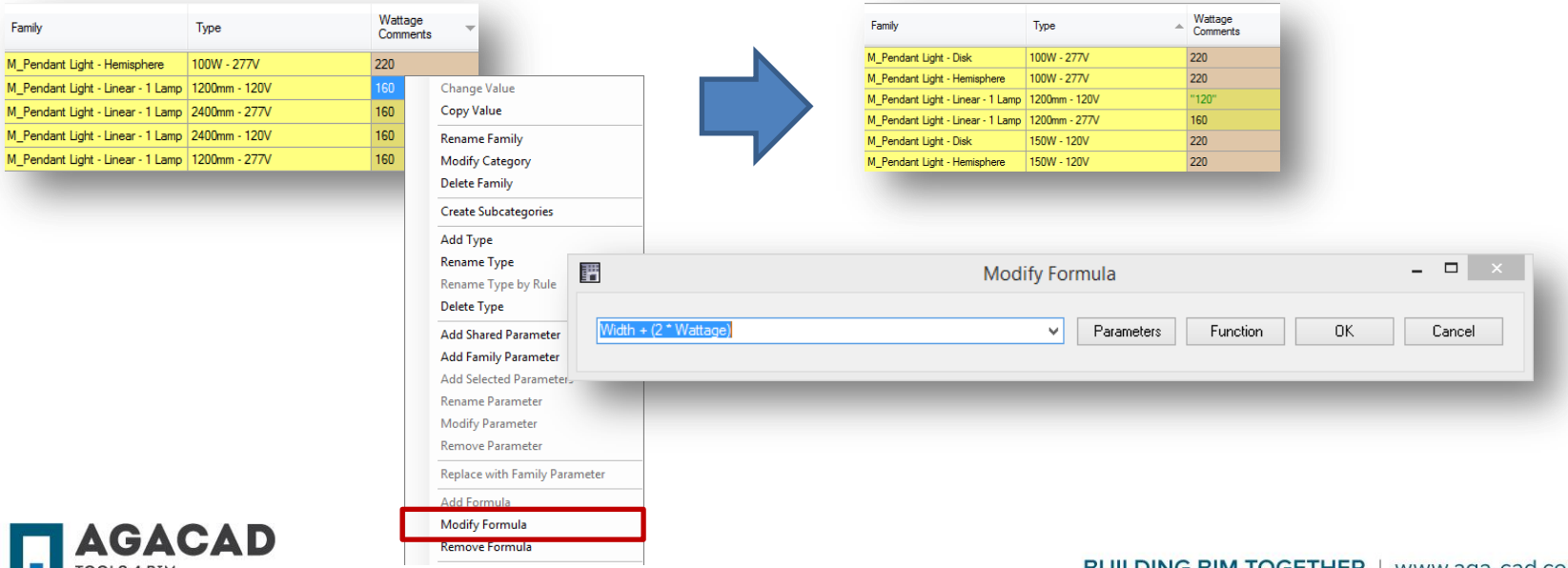
Add Formula – adds formula values for selected cells.



Formula text has to be inside the “quotes.”

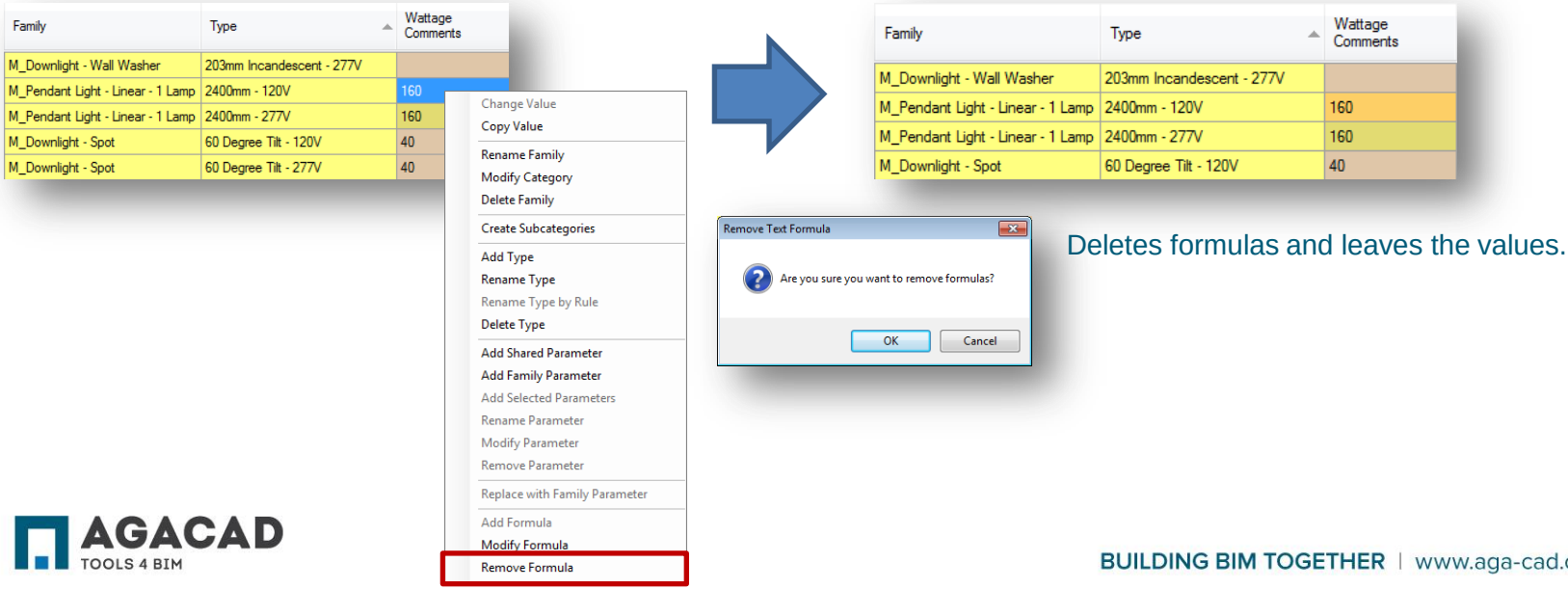
Modify Families – Modify Formula

Modify Formula – changes formula for selected cells.



Modify Families – Remove Formula

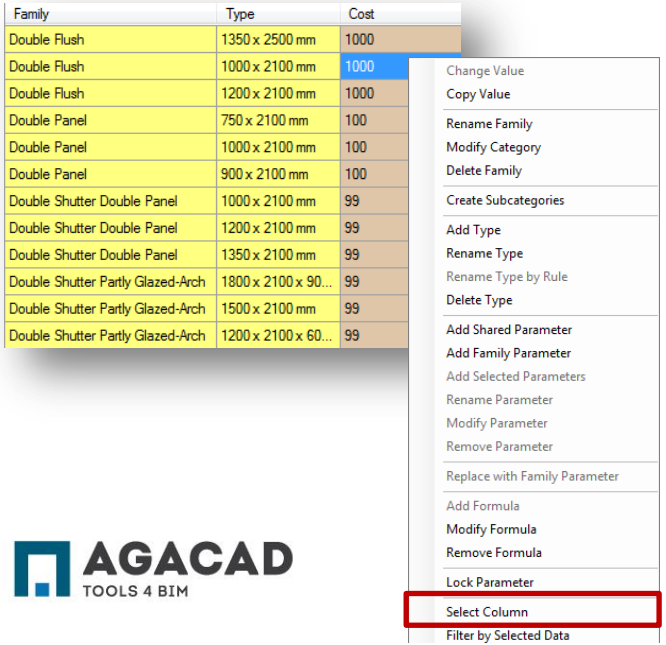
Remove Formula – removes text formulas from selected cells.

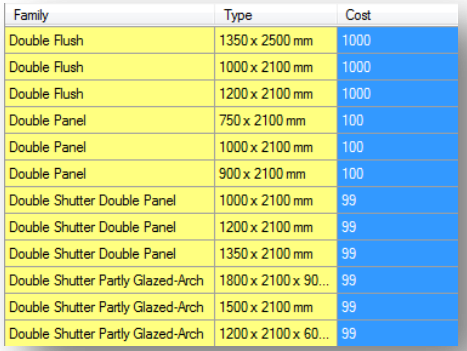


Deletes formulas and leaves the values.

Modify Families – Select Column

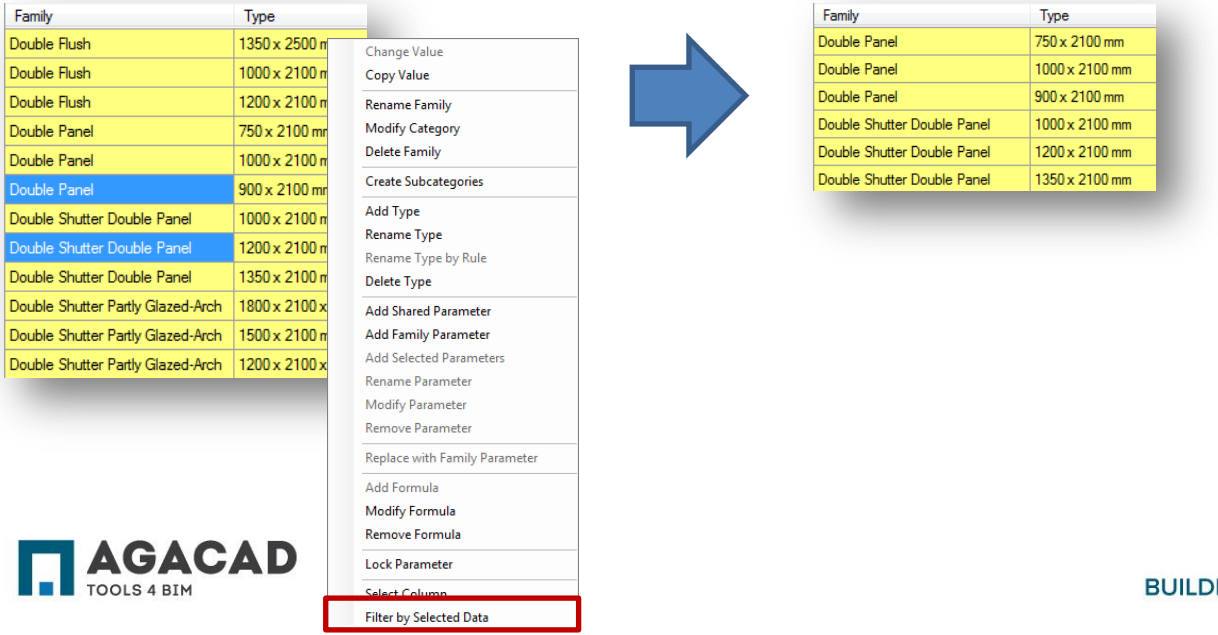
Select Column – selects the entire column for later modification.





Modify Families – Filter by Selected Data

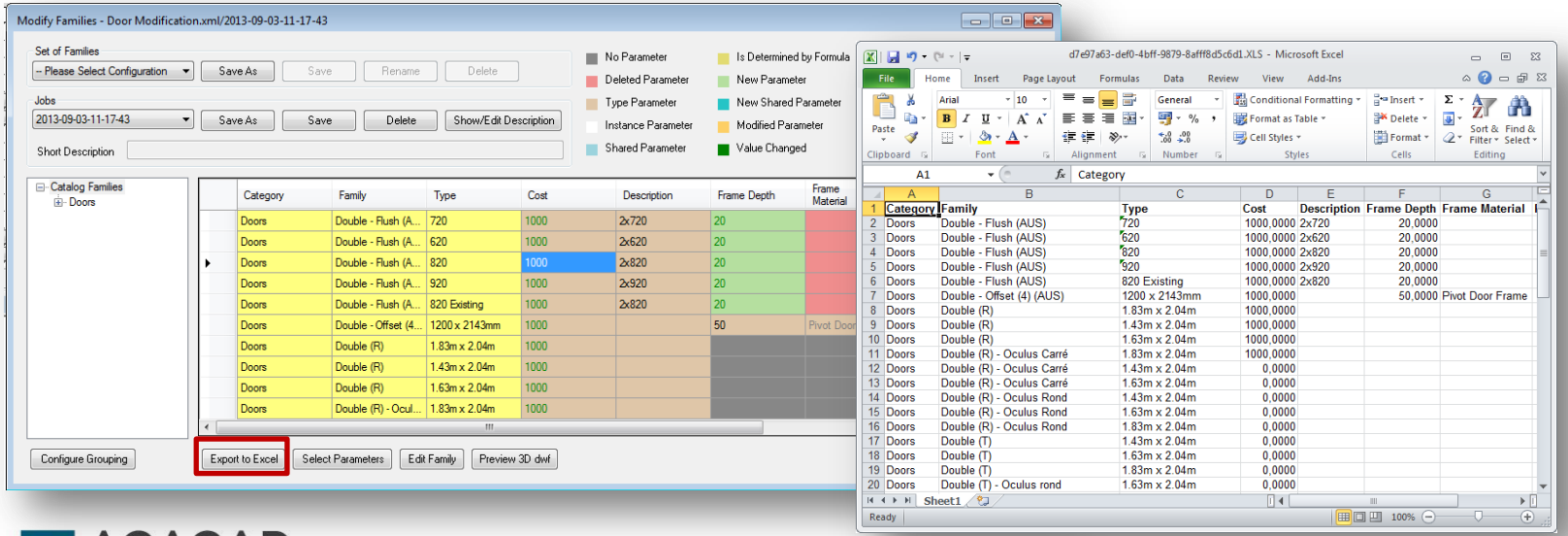
Filter by Selected Data – filters elements according to the selected values.



Family	Type
Double Panel	750 x 2100 mm
Double Panel	1000 x 2100 mm
Double Panel	900 x 2100 mm
Double Shutter Double Panel	1000 x 2100 mm
Double Shutter Double Panel	1200 x 2100 mm
Double Shutter Double Panel	1350 x 2100 mm

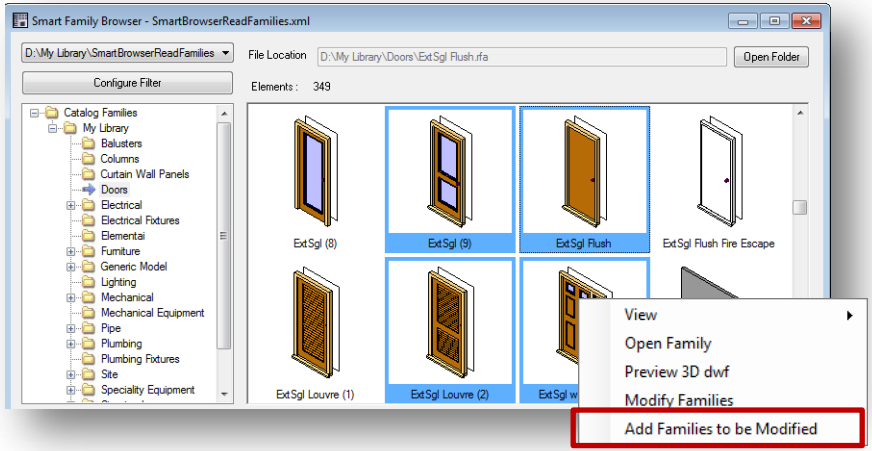
Modify Families – Export to Excel

Export to Excel – exports all visible data to MS Excel spreadsheet.



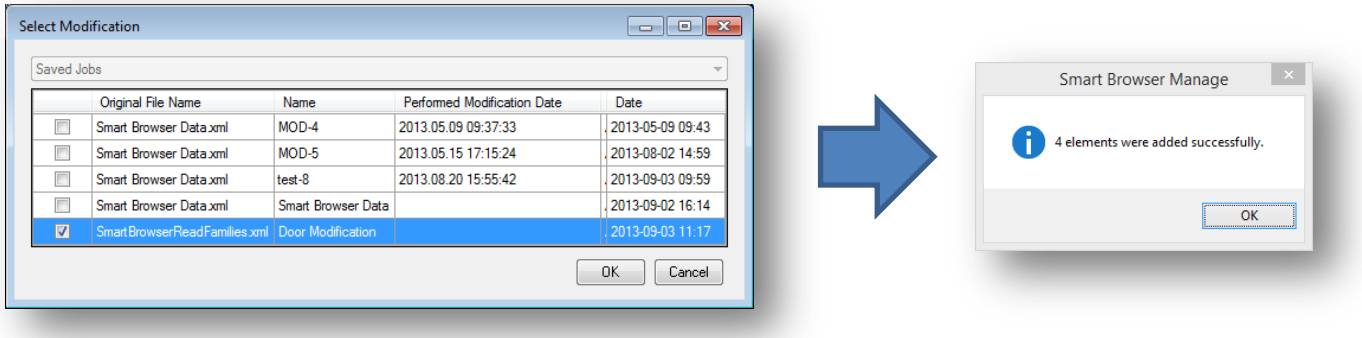
Smart Family Browser

Add Families to be Modified – adds families to the group of families to be modified that was created earlier using “Modify Families”. This is now an opportunity to add to that group.



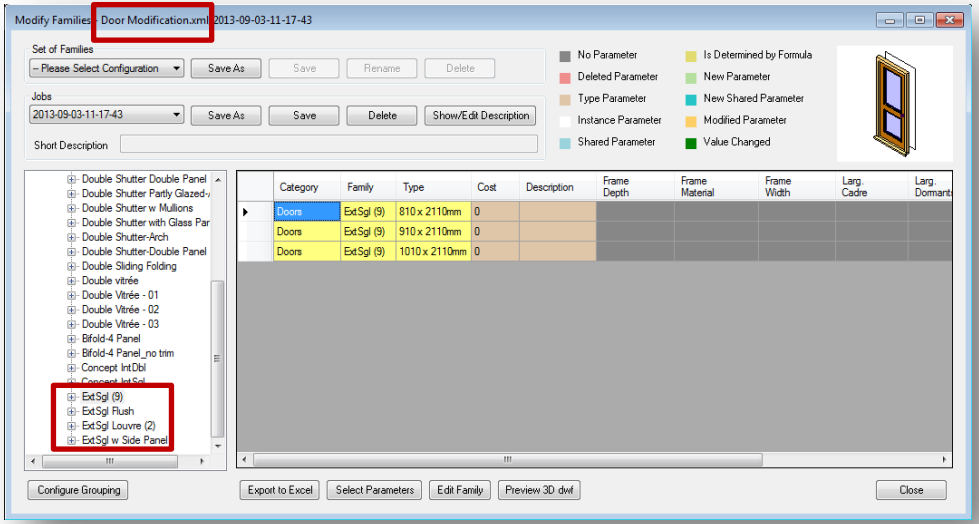
Smart Family Browser

Select modification:



Smart Family Browser

To continue working with the families, go to **Modify Families**, and select the same group:



Run Saved Modifications

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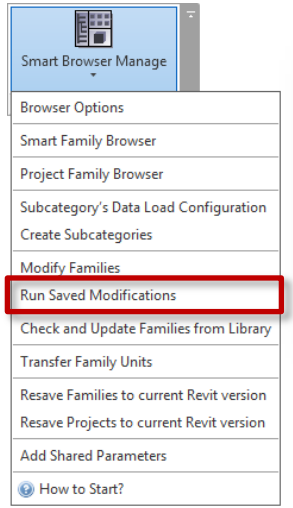
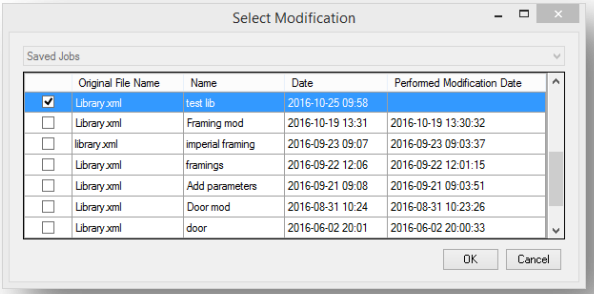
Run Saved Modification

Run Saved Modification – runs the process of modifications that were added before.

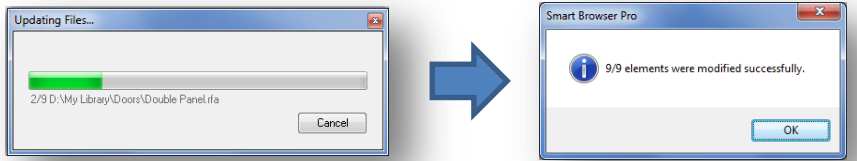


Select modification according to its name:



*After modifications, you can go to **Smart Family Browser** and all families will be updated. No need to do any synchronization!*

After pressing OK, the tool will open every family and do all modifications that were predefined with **Modify Families**:



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Check and Update Families from Library

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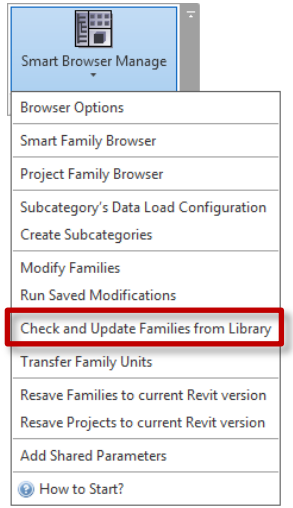
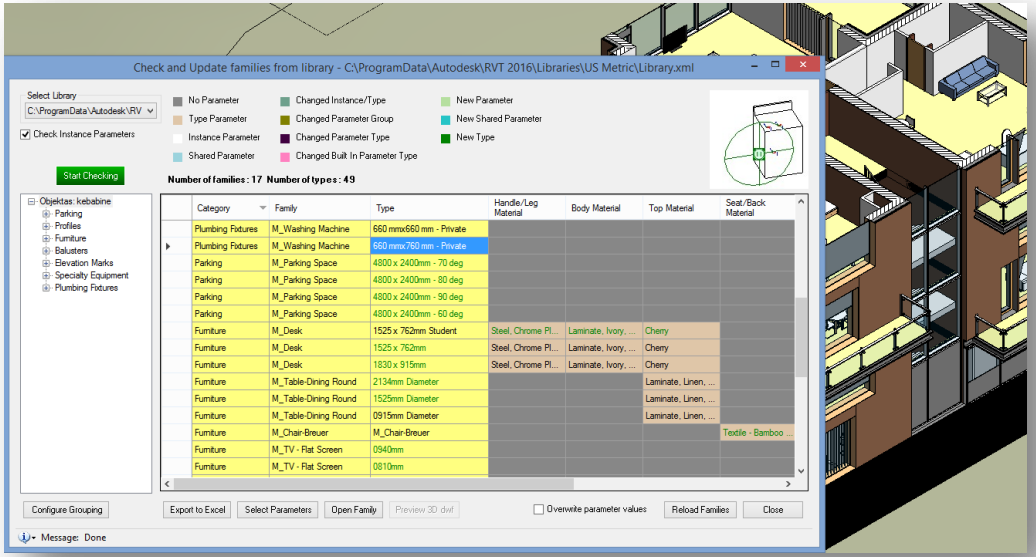
Check and Update Families from Library

Finds the difference between project families and families from the library. Your project will always be up-to-date!





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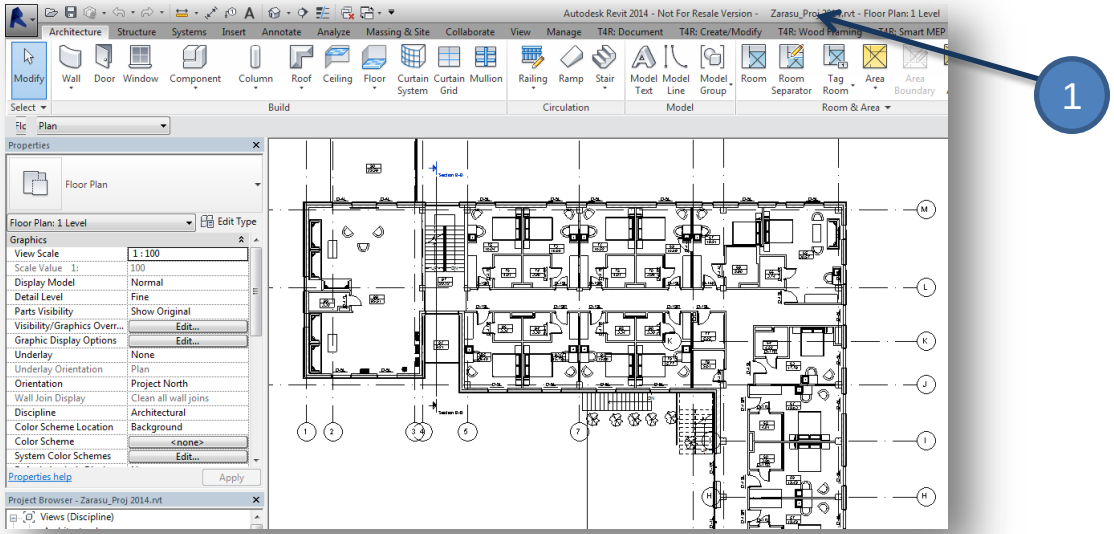
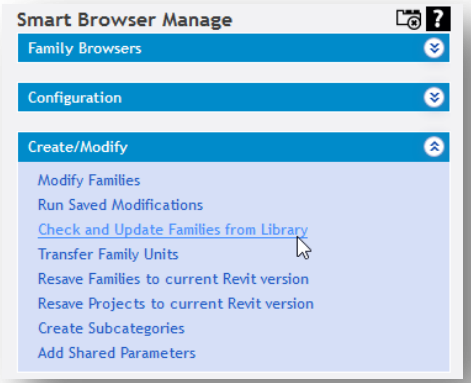
Check and Update Families from Library

Step 1 – Open the project that has to be updated.



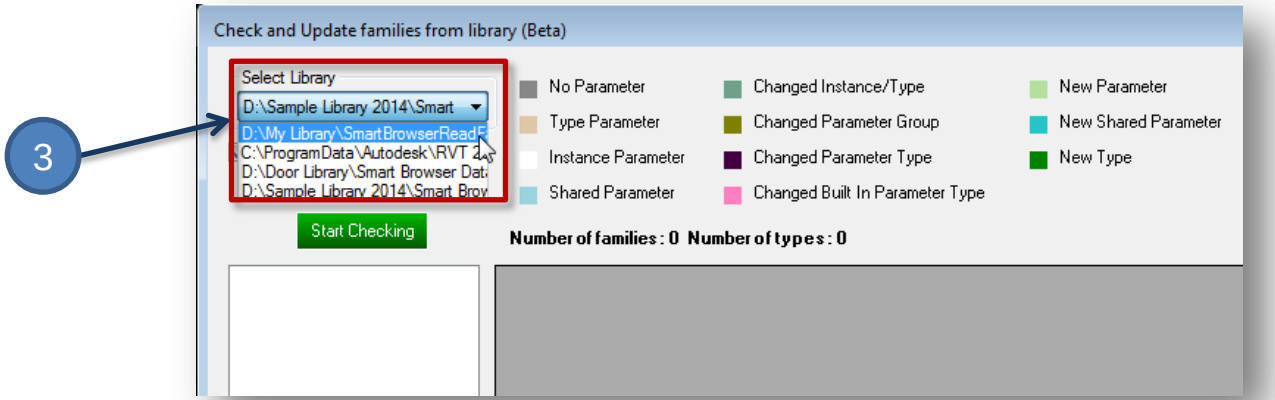
Check and Update Families from Library

Step 2 – **Smart Browser Manage → Check and Update Families from Library.**



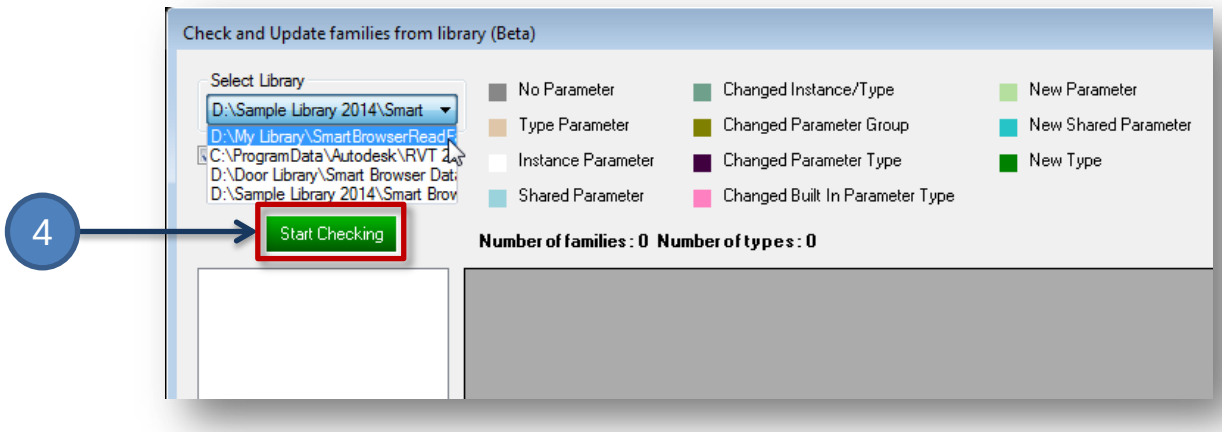
Check and Update Families from Library

Step 3 – Select the library. (The library can be defined through **Browser Options**.)



Check and Update Families from Library

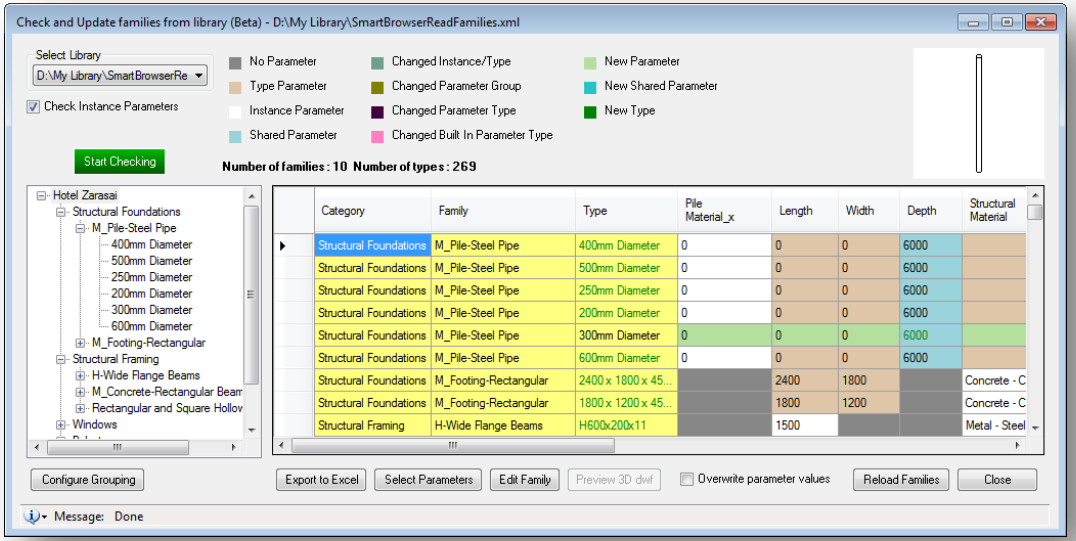
Step 4 – Click **Start Checking**



Step 5 – Wait for the results. Checking time depends on the number of elements in the project and library.

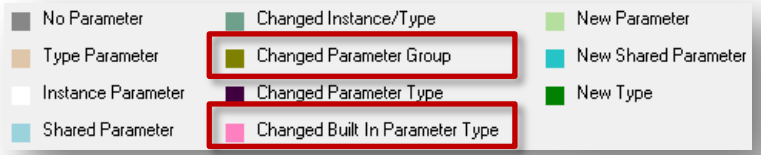
Check and Update Families from Library

Step 6 – Review the results. The updated families (rows) and parameters (columns) will be displayed with different colors in cells.



Check and Update Families from Library

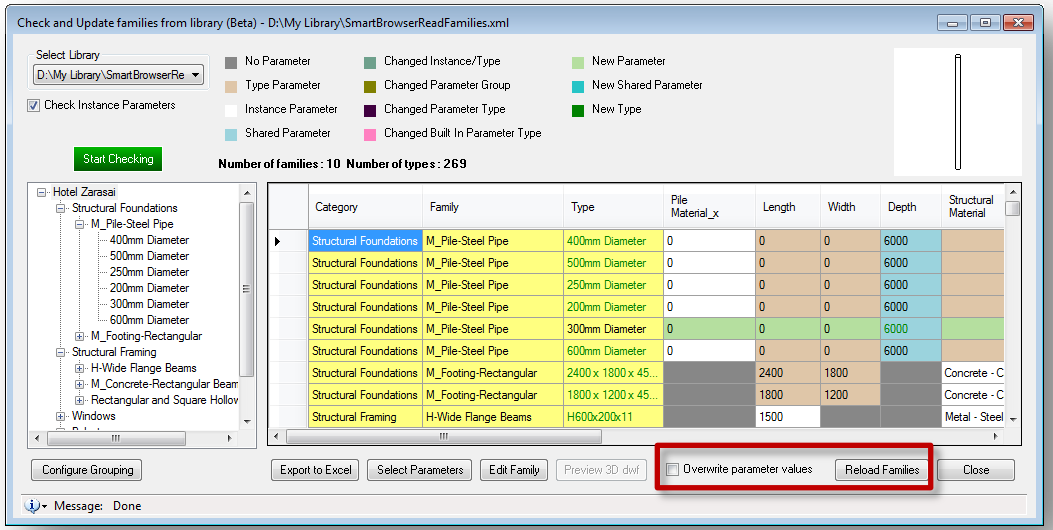
Some cells may be displayed with two colors, for example, in cases where a family parameter type and group were modified:



	Type	Width	Structural Material	Pile Material_x	Length	End Extension	Work Plane-Based	Start Extensic
▶	200mm Diameter	0		0	0		☐	
	300mm Diameter	0		0	0		☐	
	600mm Diameter	0		0	0		☐	
	H600x200x11		Metal - Steel - 34...		1500	-12	☐	-12
	H300x305x15		Metal - Steel - 34...		1500	-12	☐	-12
	H350x175x7		Metal - Steel - 34...		1500	-12	☐	-12
	H198x99x4.5		Metal - Steel - 34...		1500	-12	☐	-12
	H300x150x6.5		Metal - Steel - 34...		1500	-12	☐	-12
	H250x125x6		Metal - Steel - 34...		1500	-12	☐	-12

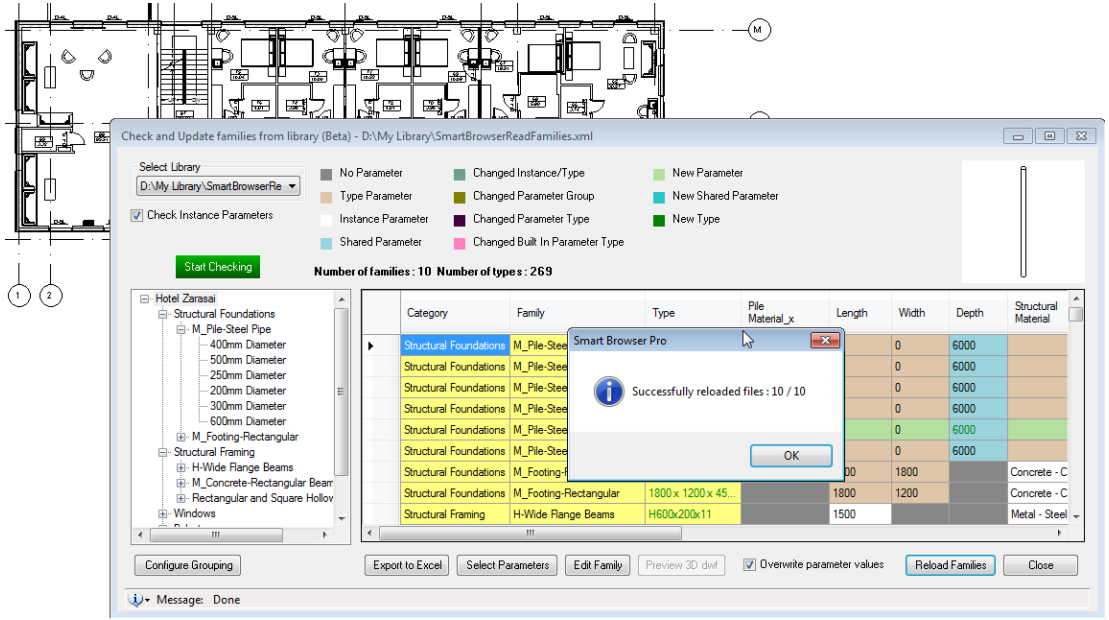
Check and Update Families from Library

Step 7 – Reload families to the current project. There is an option to overwrite parameter values if needed.



Check and Update Families from Library

Result – Opened project families will be updated with families from the library.



Create Subcategories

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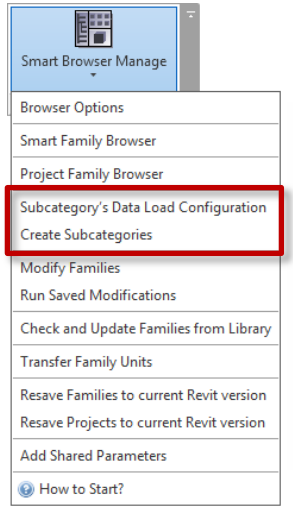
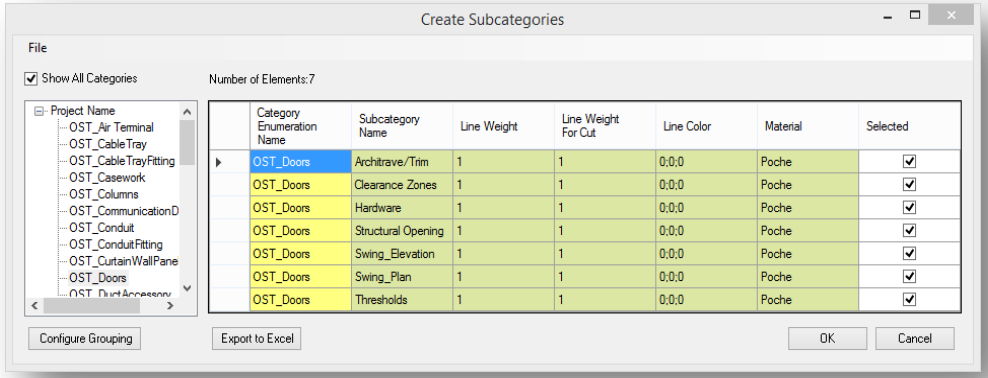
Create Subcategories

Create Subcategories – creates subcategories in an open family. The list of subcategories comes from an external text file, which can be easily modified in accordance with company or country standards. The default list of subcategories comes from ANZRS!

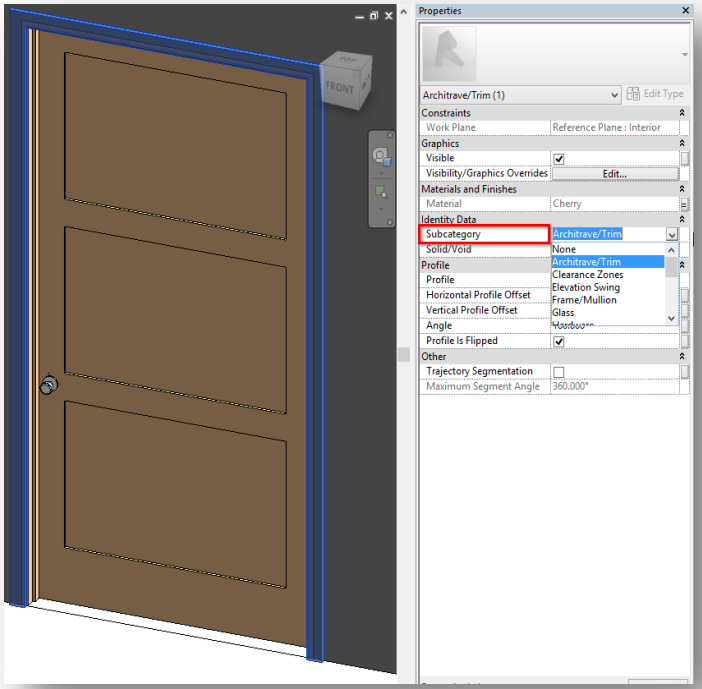


Here you can select the subcategories from the list:



Create Subcategories

After pressing OK, the family will have a list of subcategories, which can easily be assigned to solids:



Transfer Family Units

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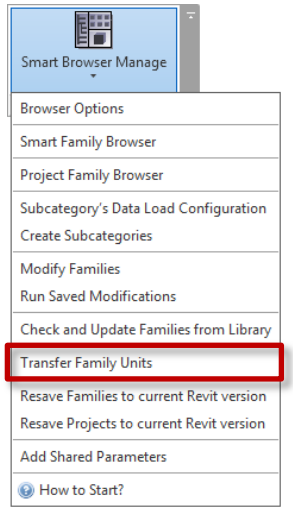
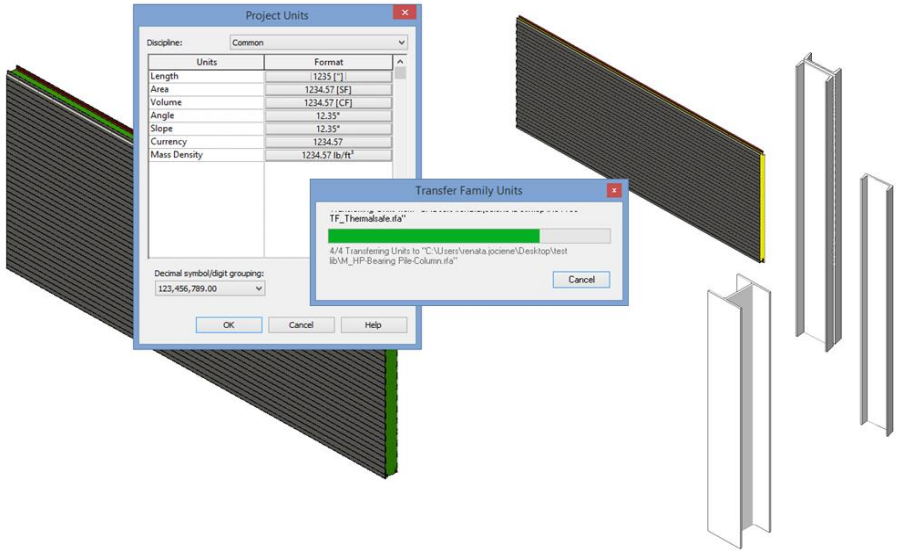
Transfer Family Units

Use “Transfer Family Units” to transfer units from one template family to other selected families. This saves lots of time when standardizing families in the library.





Project Family Browser

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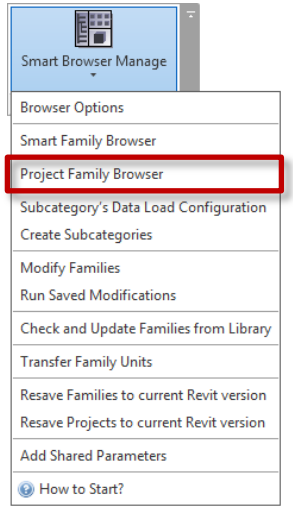
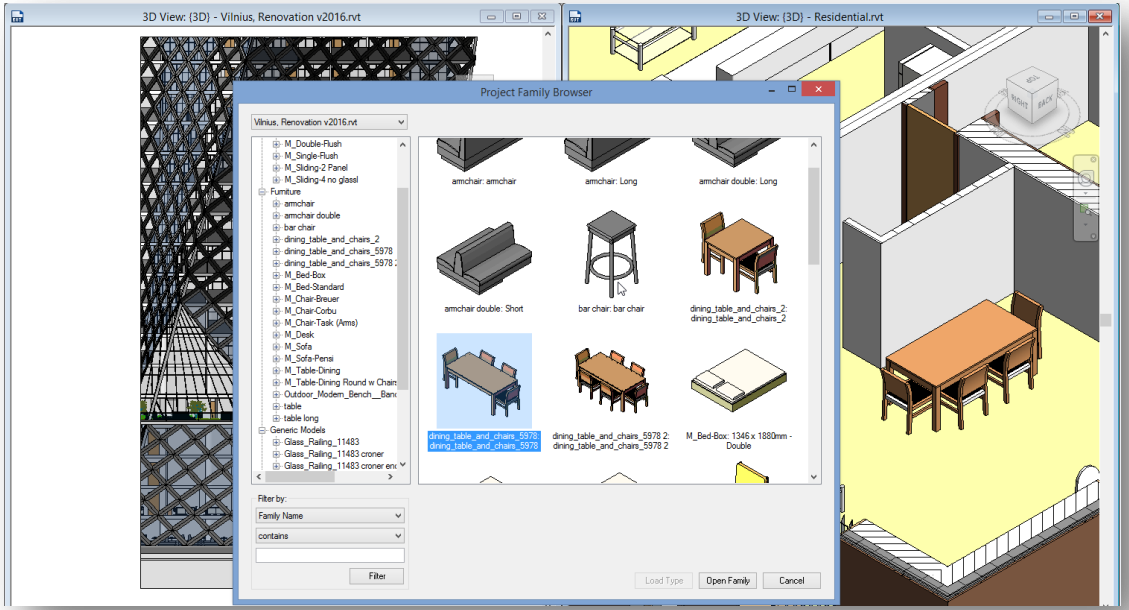
Project Family Browser



Project Family Browser – opens the browser with families from the current project.

The convenient dialog allows you to filter and find elements. Use **drag-and-drop** to insert something into the model.

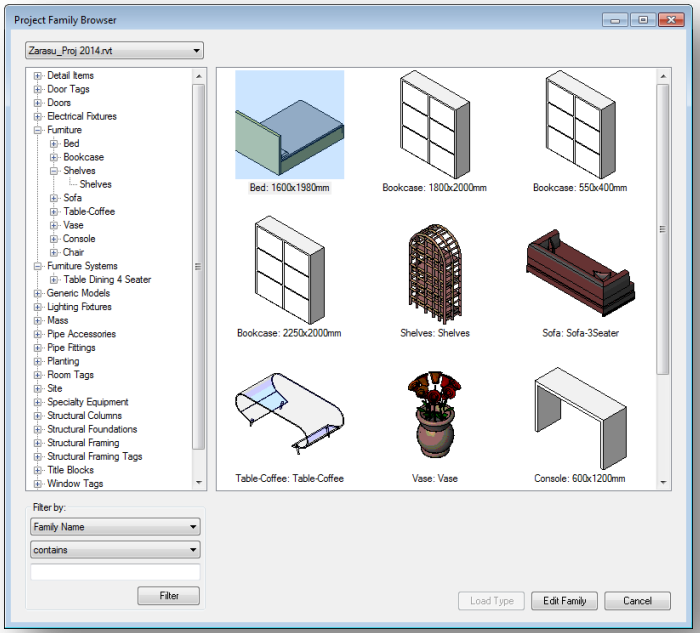


Project Family Browser

Filter by – choose to filter elements by family name or family type.

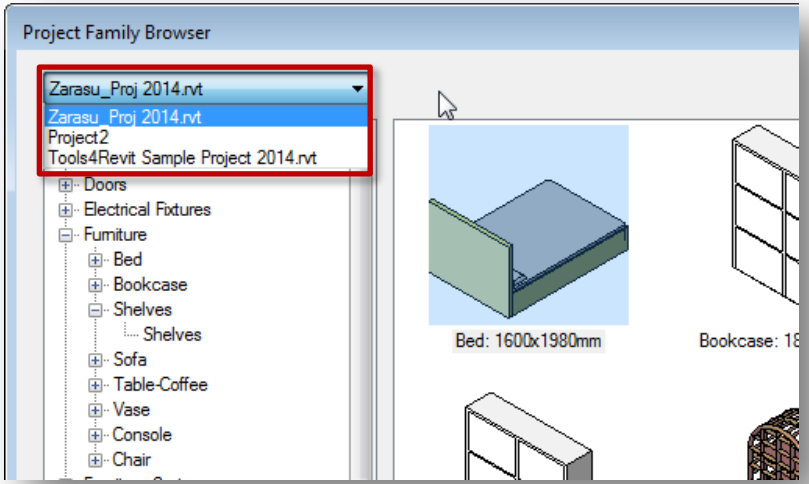
Edit Family – opens selected family in editing mode.

Browser works like external application, so you don't need to close it.



Project Family Browser

Project Family Browser allows you to switch between open projects. It even gives the option of transferring families from one project to the other.



Resave Families to current Revit version

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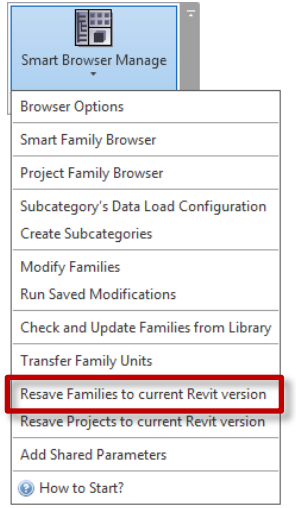
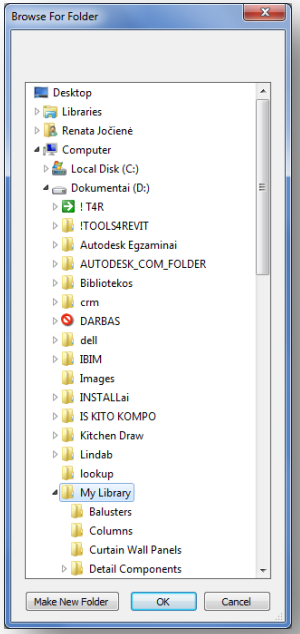
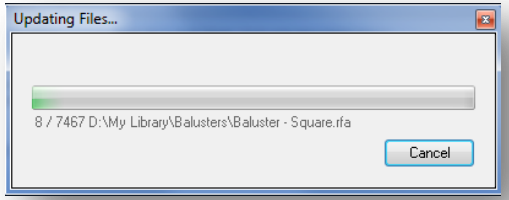
Resave Families to current Revit version





Resave Families to current Revit version – resaves families to the current Revit version from selected catalogue and deletes backup files if necessary.



Resave Projects to current Revit version

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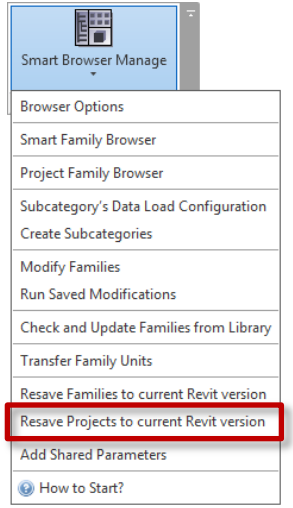
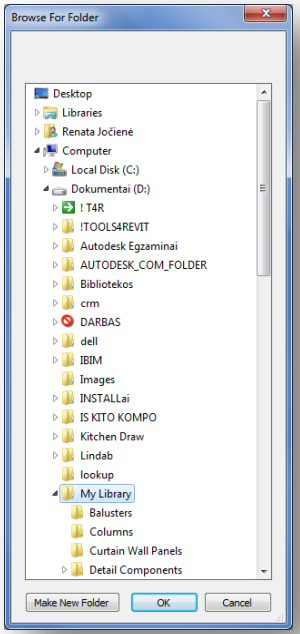
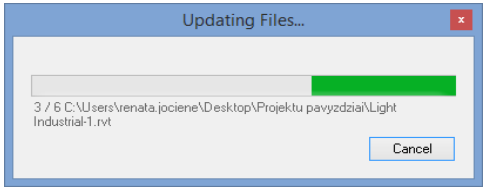
Resave Projects to current Revit version





Resave Projects to current Revit version – upgrades selected projects to the current Revit version.

Simply select the folder with projects and all of them will be updated. Also, the backup files may be deleted automatically.



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Add Shared Parameters

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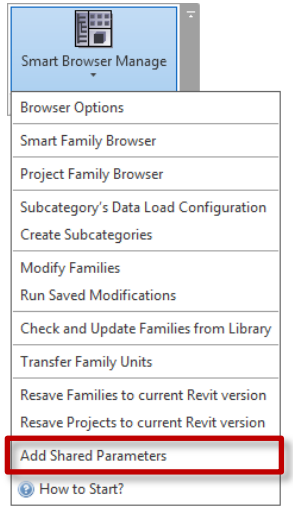
Add Shared Parameters



Create Shared Parameters – creates shared parameters for selected category in the project.

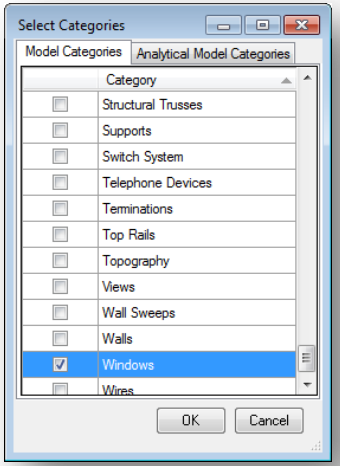
With Revit, you need to create shared parameters one by one. The “Create Shared Parameters” function, however, allows you to create them much more quickly.

Add Shared Parameters

Step 1 – Open project in which you need to create parameters.

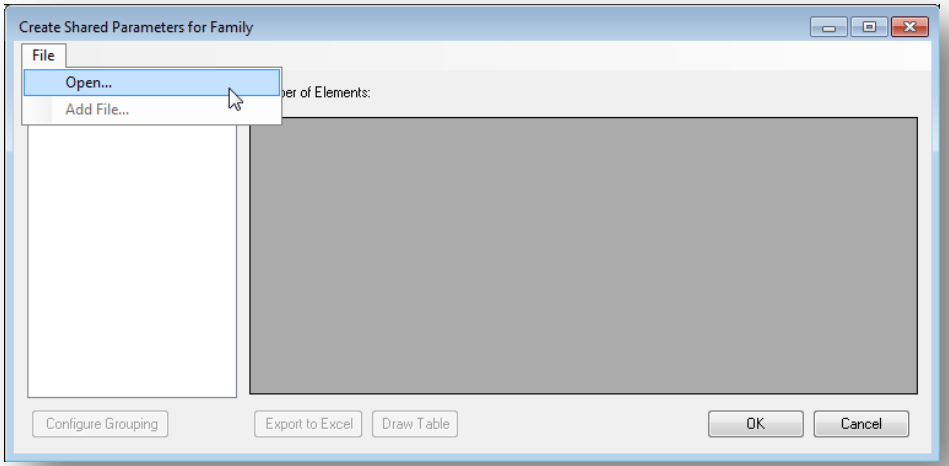
Step 2 – **Smart Browser Manage → Create Shared Parameters.**

Step 3 – Select the category. The list of categories comes from the project:



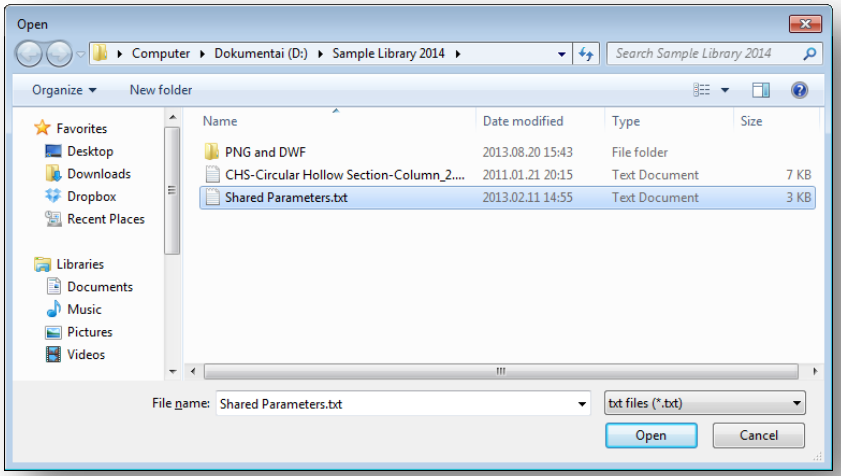
Add Shared Parameters

Step 4 – Open the shared parameter file:



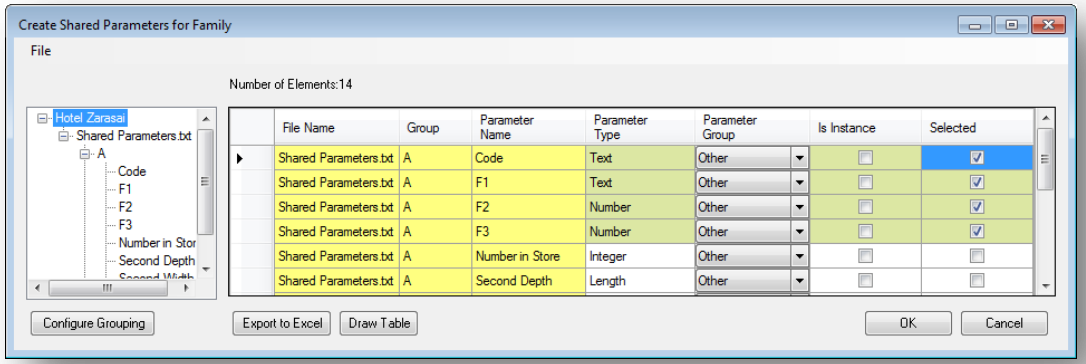
Add Shared Parameters

Step 5 – Select the shared parameter file:



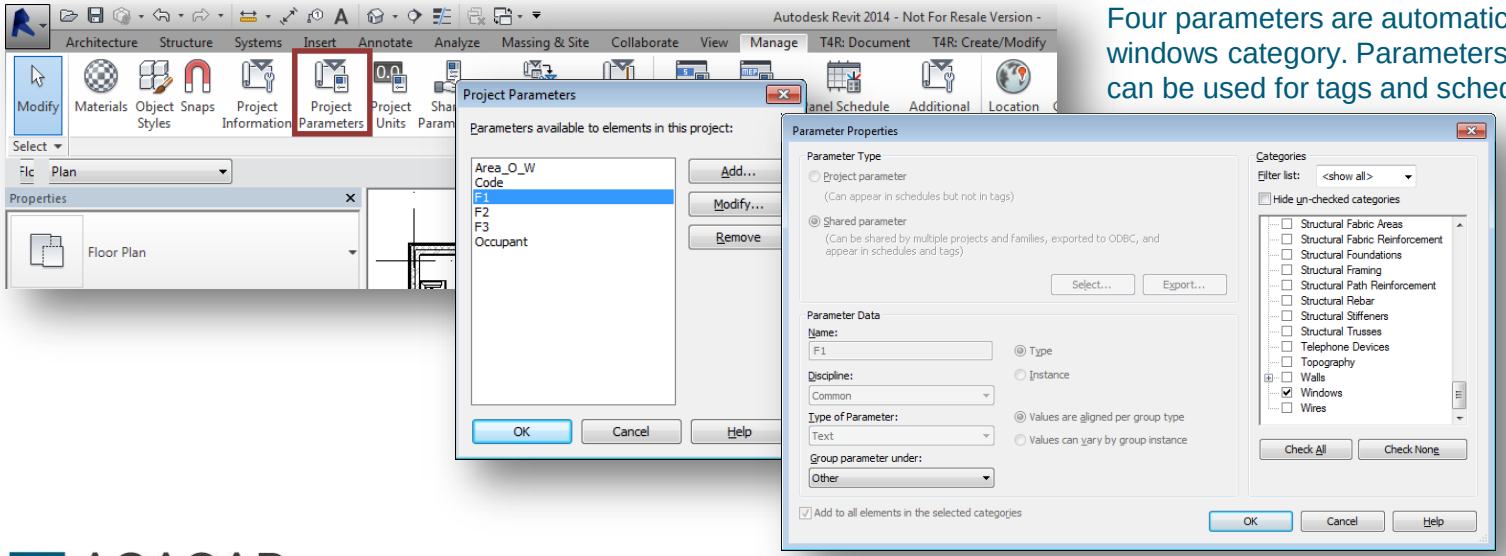
Add Shared Parameters

Step 6 – Select the shared parameters and their properties:

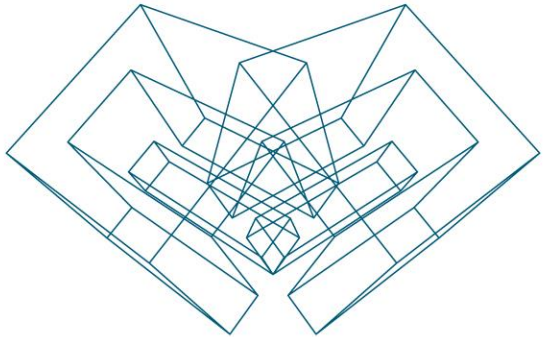


Add Shared Parameters

Result can be found under **Manage** → **Project Parameters**:



Four parameters are automatically created for the windows category. Parameters are shared, so they can be used for tags and schedules.



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