Intech Ribbon How To

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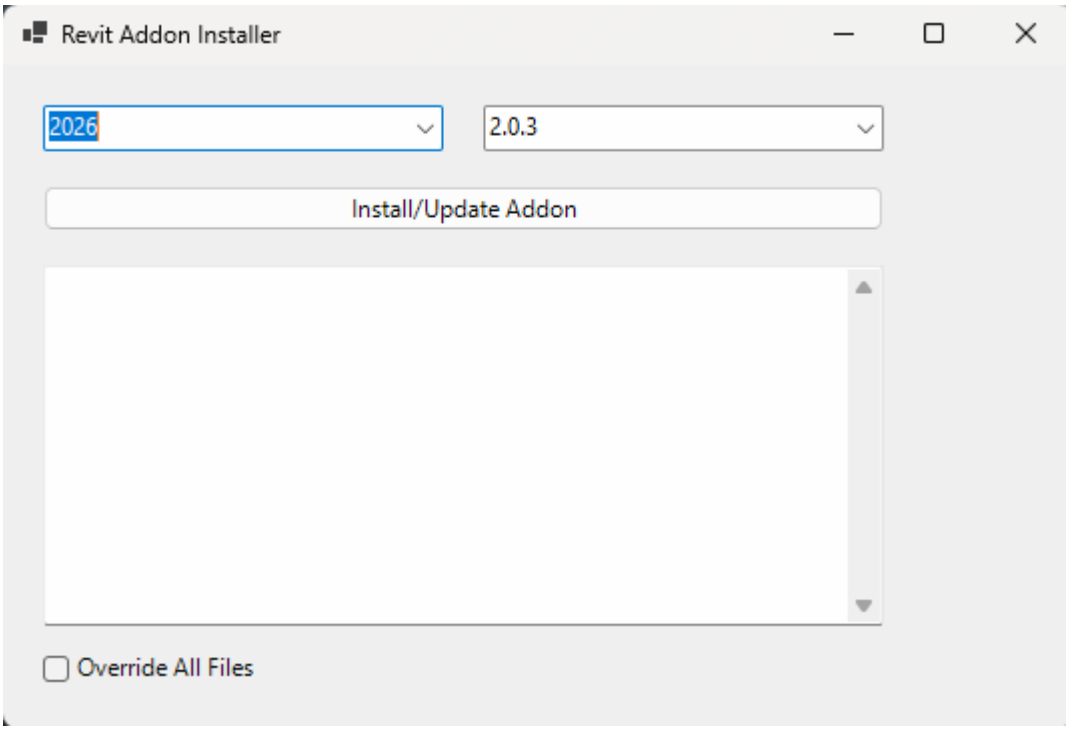
Importing

Installer

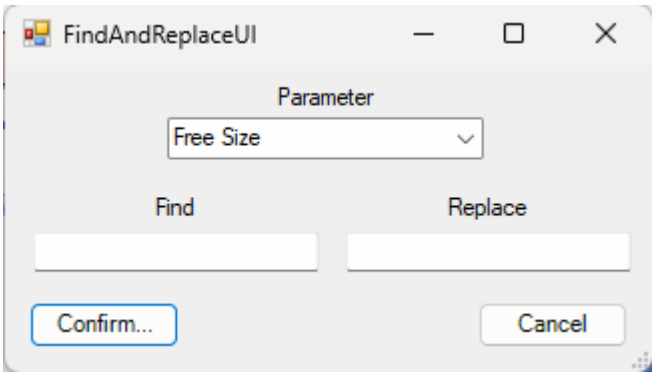
This addon uses a custom installer



It pulls any Revit you have an addon folder for and you select between them. Then you select the version, but you most likely want the most recent release which will already be selected. Then click install. The only other setting is to override all files which will give you a fresh installation while normally it retains settings. If you are upgrading from a version before 1.0 you will have to do this and to retain any setting you will need to save old setting file which is in the Intech addon folder on the respected years addon folder and make sure you match the new formatting before copying back over but this should not be an issue in the future due to code file structure changes. You will also need to restart Revit for installation to take effect.

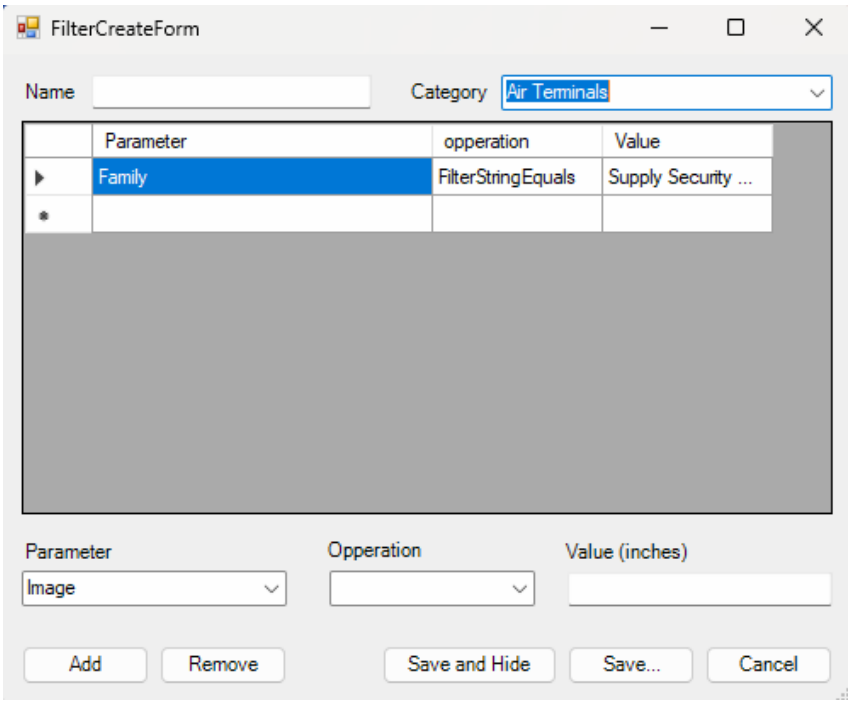
Quick Tools

Find and Replace



Finds common parameters between current selected items and opens this UI. It lets you find a specific set of characters or a word in a parameter and replace it. Just enter what you are looking for in find and enter what you want to replace it with in replace. A few other conditions is if replace it blank it will delete that word or set or character and if find is empty it will add the replace to the end of the parameter. This only works on text parameters.

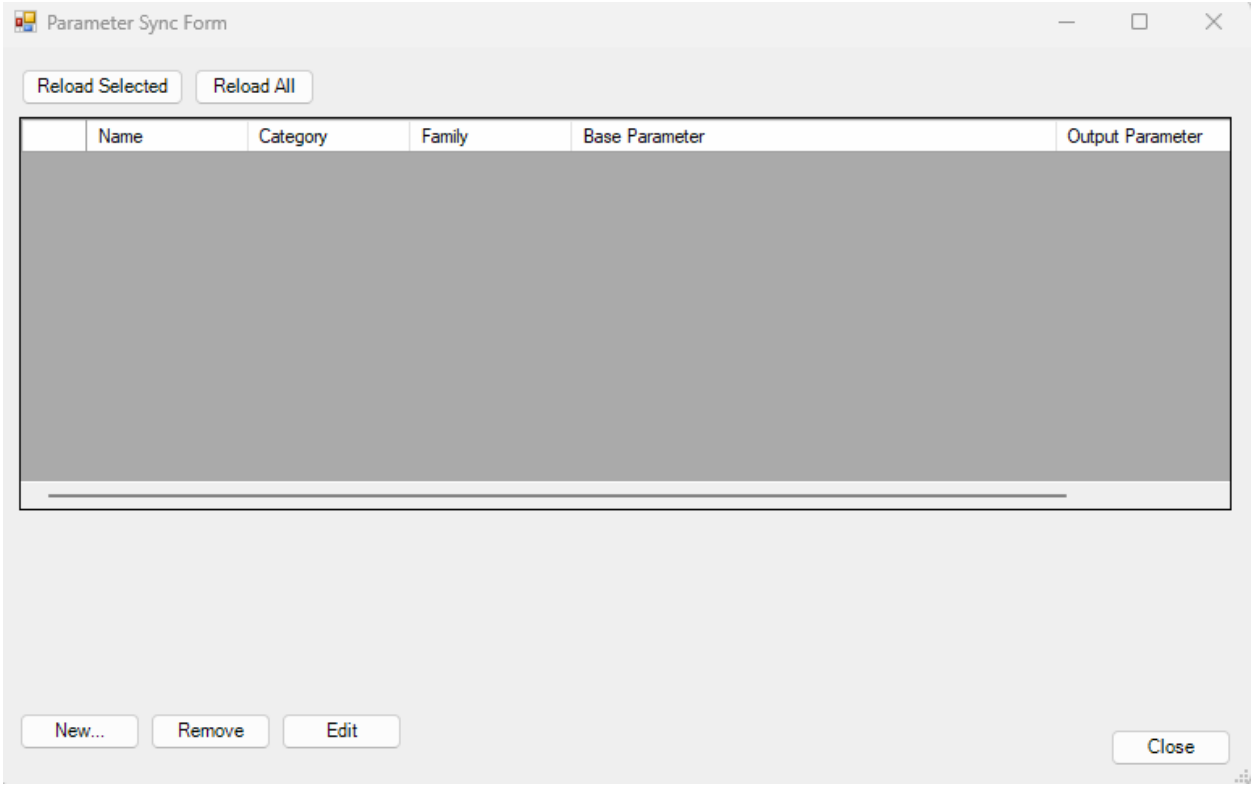
Create Filter



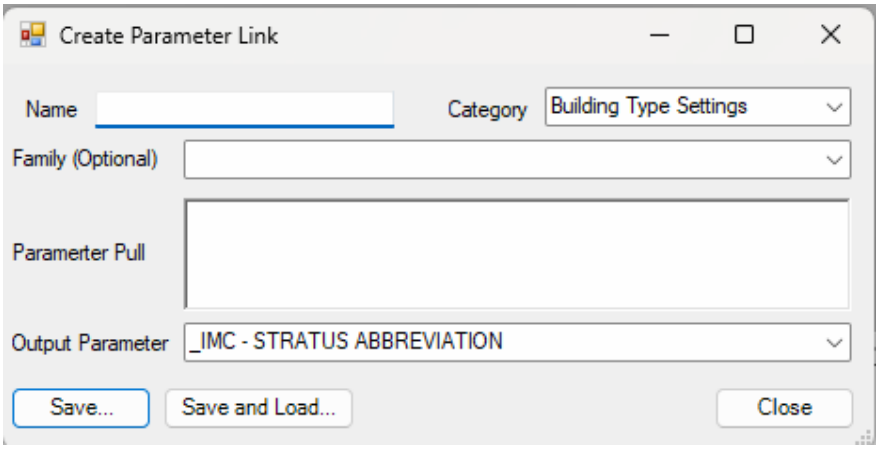
The filter creates tool lets you create filters from a selected object. It will automatically try to filter to the specific family unless it's a unique part like pipe and duct which do not store families normally. Then you can add more parameters by entering them in the bottom and clicking add. You can then choose between save and hide which will create the filter and automatically set it to hide on the current view or just save which will create the filter and activate it but leave it on for the current view.

Parameter Tools

Parameter Sync

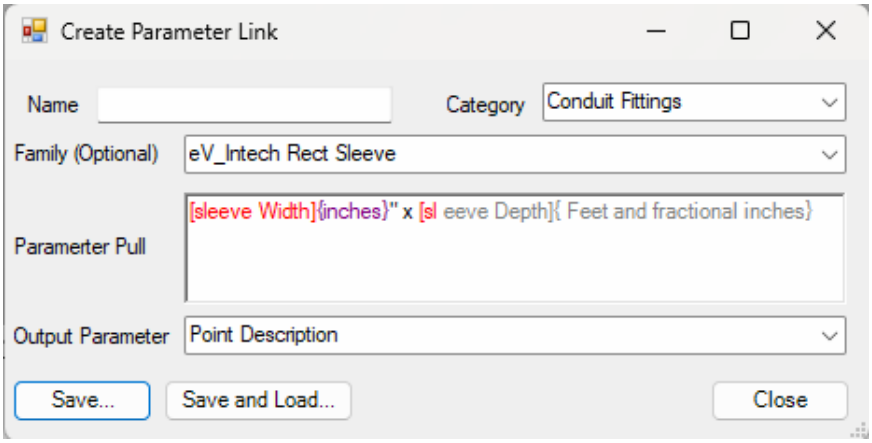


The parameter sync tool is mainly used for parameters you would like to pull text from another parameter, but Revit text formulas have very little capability. This lest you use multiple parameters, format units, and divides or filler words etc.…
The menu above is mainly for management but a bulk of the features are built into the New/Edit Menu.



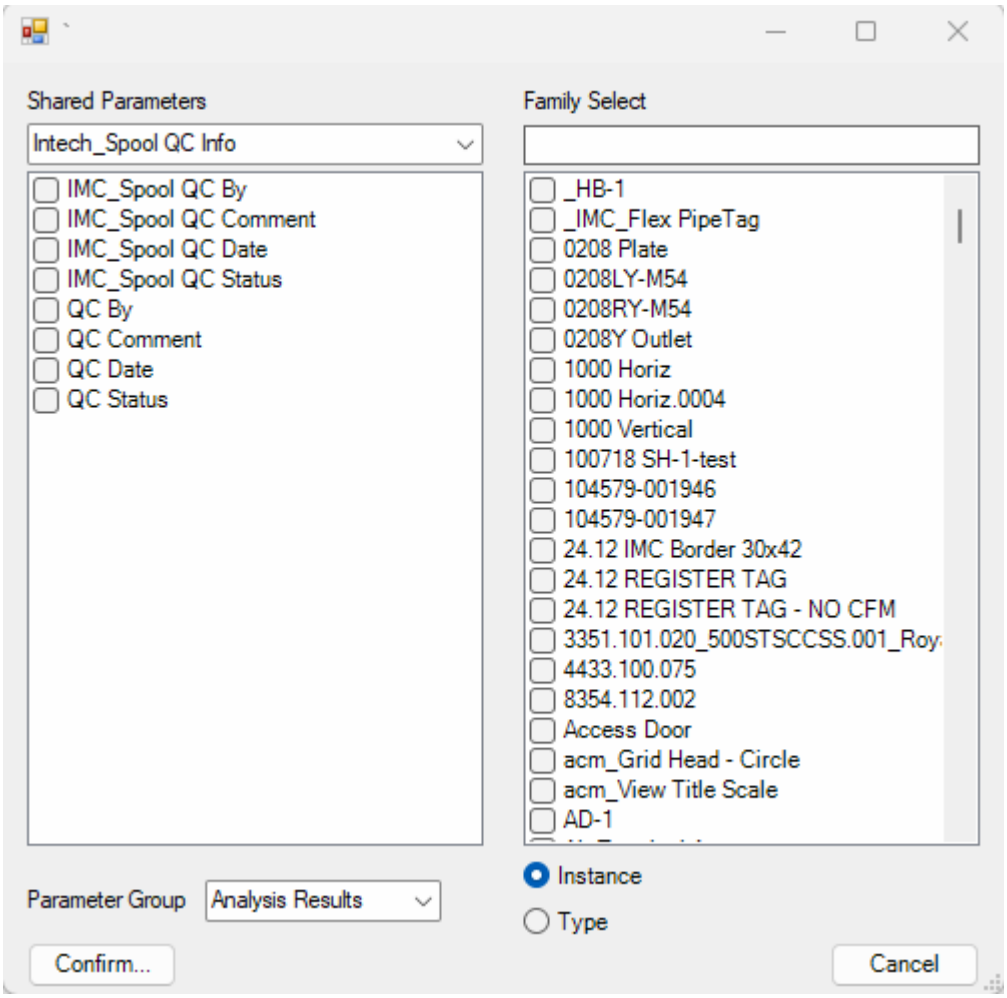
First step is to choose a category. You can also add a secondary filter of family but due to fabrication parts not having Revit families like normal Family is optional. But the

secondary filter is highly recommended if you are trying to push a parameter into large categories like generic models. The secondary filter that is less apparent is any parameters used must exist in the element for this to do anything. But this filter is not a quick filter like the family filter, but it does mean that if the output parameter exists in one part, but it doesn't contain the inputs it will be skipped or vice versa.



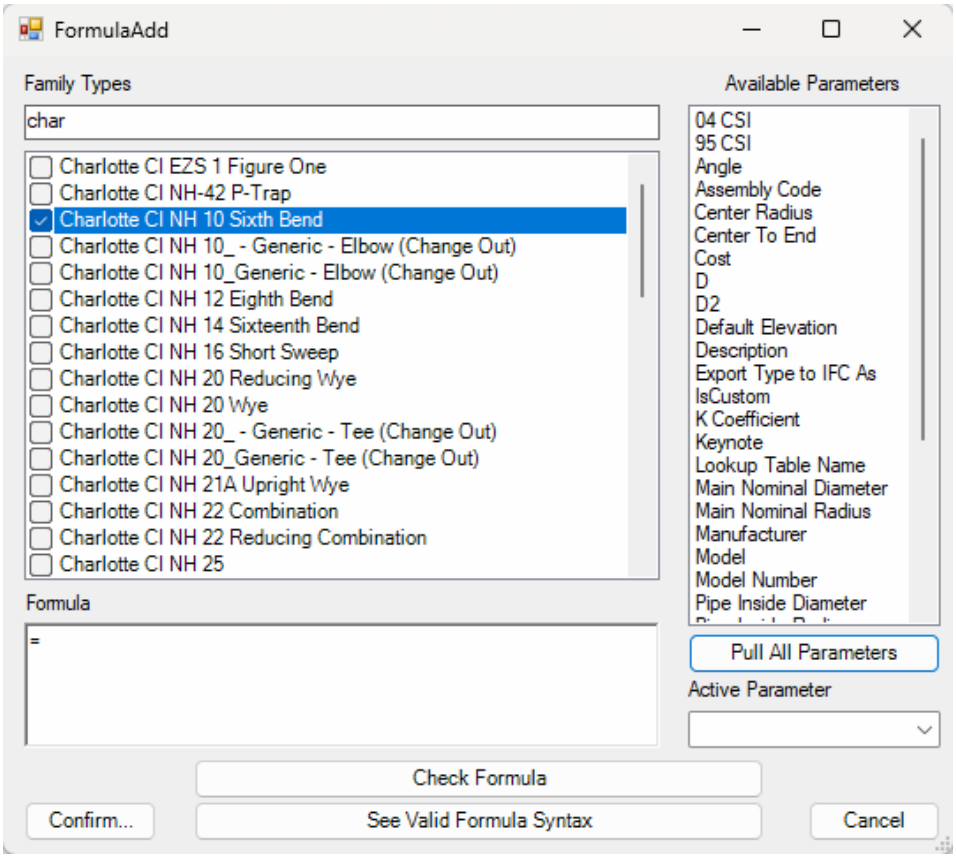
Here is an example of an almost complete form. To start a parameter, use a square bracket. Once a square bracket is places ghost text will appear with options the up and down keys cycle the options, and tab enters you can also start typing to narrow down. After pressing tab if the parameter is a unit typed parameter you can change between different units in squiggly brackets. But this will not take on the new formatting of that unit due to Revit weirdness meaning if you want to just pull the parameter without change do not add a squiggly bracket after the parameter as is example (no squiggle 1' 2 1/2" vs {inches} 14.5). Once you save back in the menu just select the tab the element is on in the grid and click reload at the top. This will not automatically change in new elements, but it will save onto the menu.

Add Shared Parameter



The Shared Parameter tool is meant to be able to bulk add shared parameters to families. The left side mimics the normal Revit shared parameter tabs where you can select from your shared parameter file. The right then allows you to select the families you want to add shared parameters in (you can shift click newer UI with checkbox lists to select multiple) Then you select what group to insert the parameter in on the family itself. Do not use Other for some reason it's not working but I haven't had problems with other groups. Once you click confirm it will add the parameter.

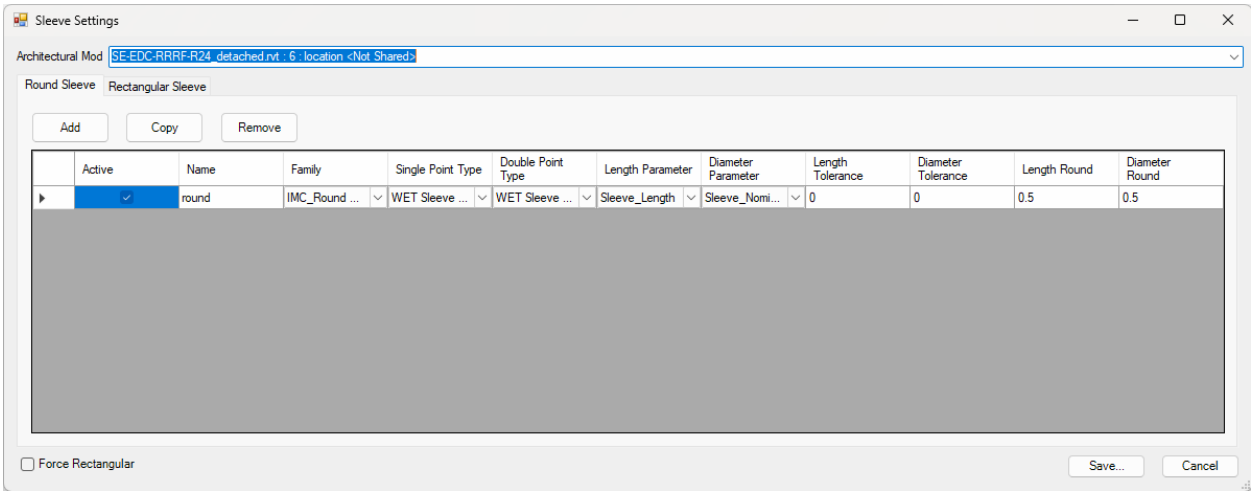
Formula Push



Formula push if the final current parameter tool. This tool you first select the families you want to push a parameter into. There will be a list of parameters on the side that are half accurate. I can't see all the true parameters without opening the families which is what the "Pull All Parameter" button does. After clicking that button the available parameter list is used only for reference and not for selection but if you do click on a parameter name it will copy it to your clipboard for easy pasting into the formula. The active parameter is where you want to push it into. If you want more info on how to format formulas press the See Valid Formula Syntax button . The check formula mostly works but it has had some problems recognizing valid equations, especially with text parameter formulas. But it's good for numerical but even if it fails a text parameter push it might still work. Just note text parameters cannot be combined or edited directly pushed in from one parameter to the new one. Clicking confirm will push that formula into the selected parameter.

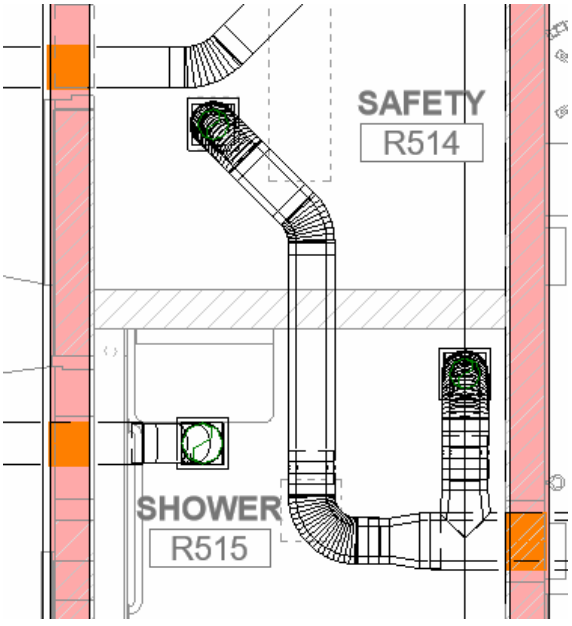
Sleeve Place

Sleeve Settings



The sleeve placement setting is where you set up the sleeves and project for automatic placement of sleeves. One note is to make sure you have the wanted sleeves imported. Make sure at the top to set your Architectural model to the model with the walls you want to clash with. Then go fill out settings how you want. If you don't care about double and single point just set them as the same family type. Tolerance will add that to that dimension in inches and round will round that side to that dimension so 0.5 will round up to the nearest half inch. There is also a button on the bottom left which will make it always be a rectangular sleeve that places which in the past way used for CMU walls.

Placing Sleeve



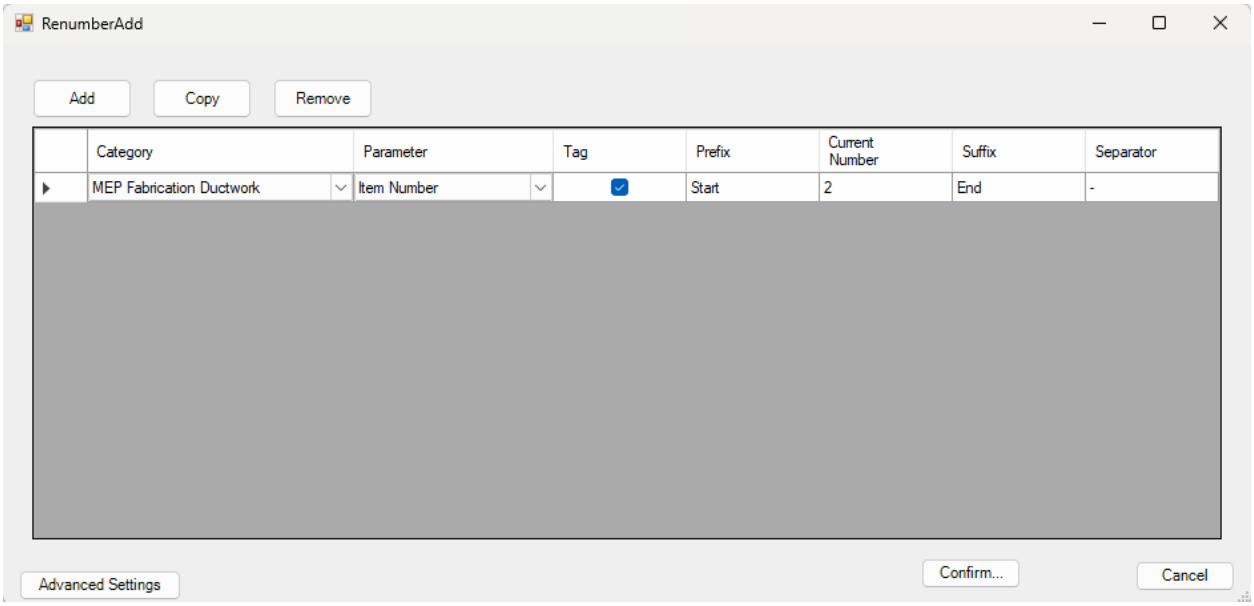
The place sleeve tool is easy: you can either select parts before or when you click. Just make sure that if you select beforehand to click filter and make sure nothing you don't want to collide is selected. Once you have what you want selected it will run a clash with the walls in the selected model and place sleeves. The main current problem is due to

the optimization make the tool fast it currently can no see holes in walls so I have seen some cases where large holes in walls duct or pipe should just go through registers as a clash, but this is a probable future fix. The sleeves also now detect how many times they intersect a wall to be able to orient single point sleeves correctly.

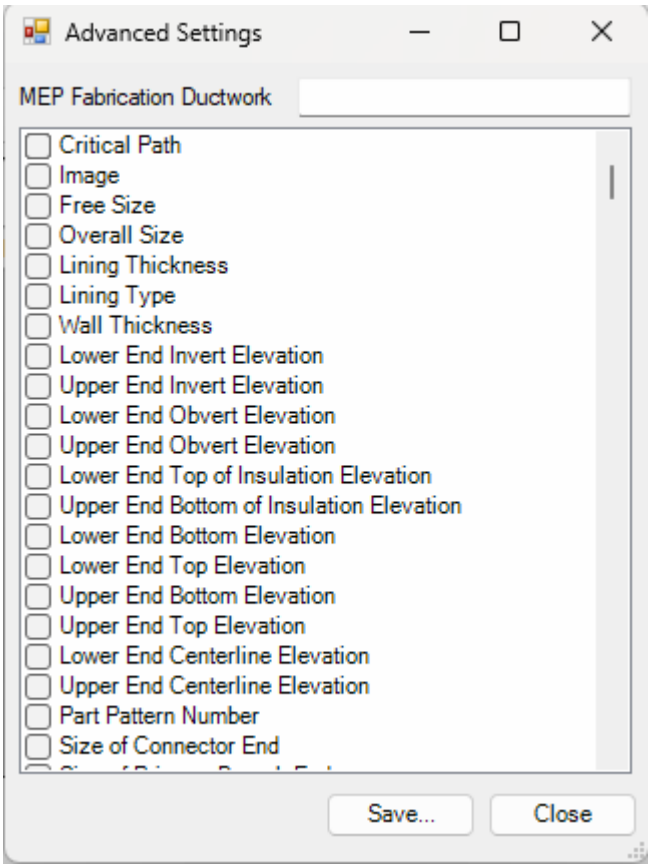
Tag Tools

Numbering

Numbering Settings



In this setting you select the category parameter and basic info for numbering. In this example the next MEP Duct will be numbered (Start-2-End) then the number will auto incremented. You may also notice the advanced settings. By clicking on a row and selecting the advanced settings it opens this menu below.



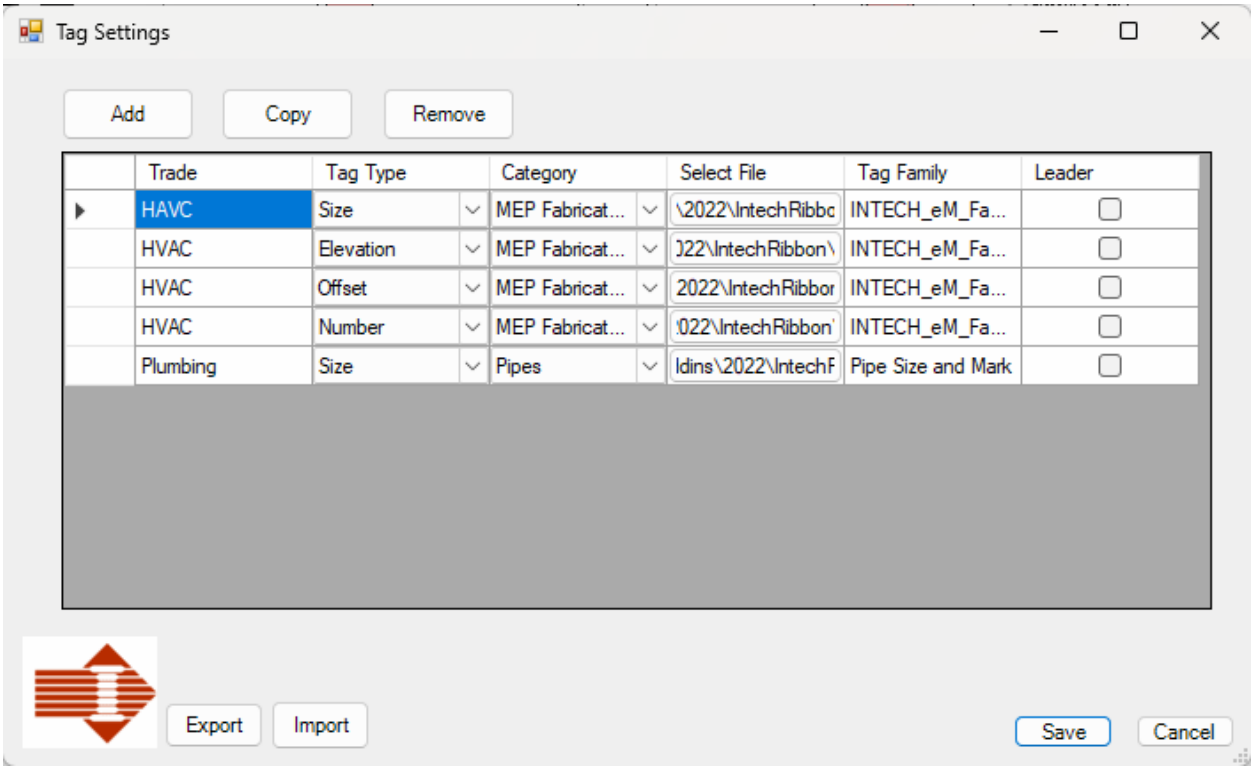
This lets you select parameter of parts then if they match while running the same numbering process it will number them the same. Such as if you want duct the same height, length and width to number the same.

Numbering Tool

This tool will auto filter to only let you select elements you have the numbering setting set up for. By clicking on a part, it will place a tag and push into the selected parameter. One addition is while running the process if you want to change anything you just need to click “s” to open settings (it may take a second to open). Note these settings are not live meaning you will not see the number increment as you click. You will only see a change if you close and click s again, but this does allow you to change the number then press save and it will allow you to number with that change.

Generic Tag

Tag Settings



These settings set up the link between the tag button and what tag they use. The trade column is not actually used for any computation and just organization. The second tab pulls a list of buttons including the 10 numbered tag button meant for you to be able to store any tag you want under quick access. Then you select the category and the filter for the tag. After that you put what tag family in that file you want to place. You can also turn on and off auto leader for each tag. Like the sheet created, this also has the export and import button allowing for easy sharing.

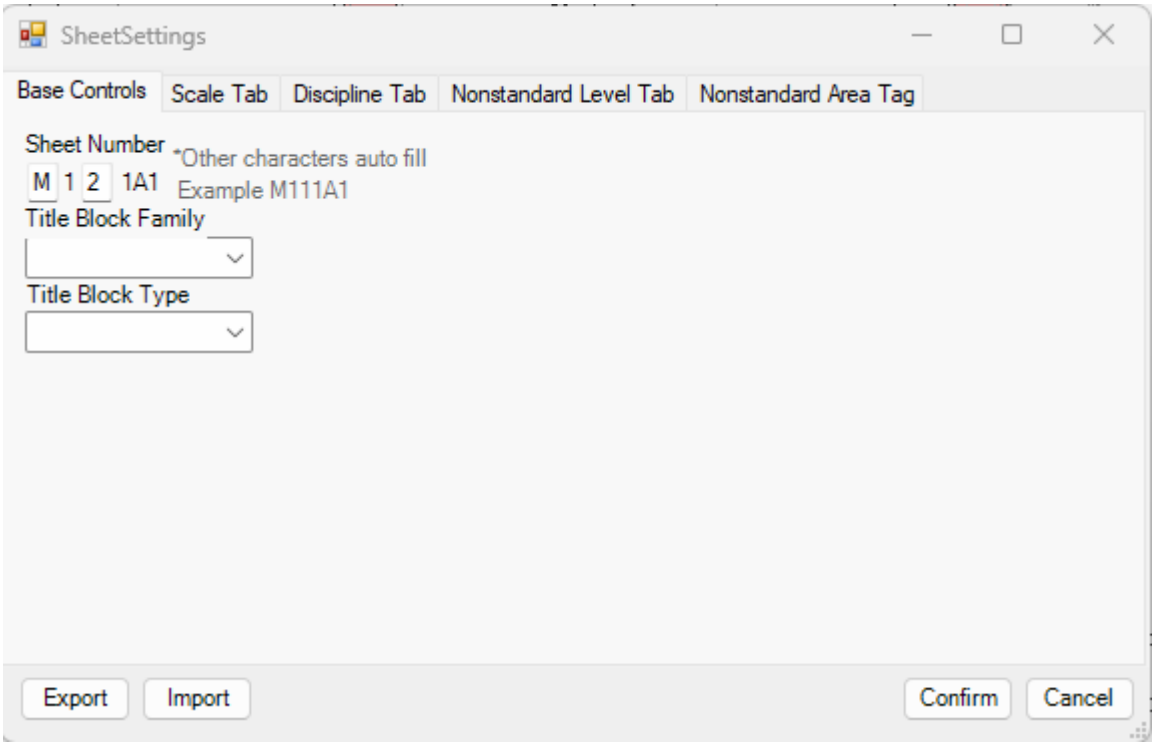
Other Tags

All other Tags act the exact same. They pull their assigned tag and place it. But one thing you can do is in Revit setting you can set short cuts for these buttons including the 10 extra tag buttons.

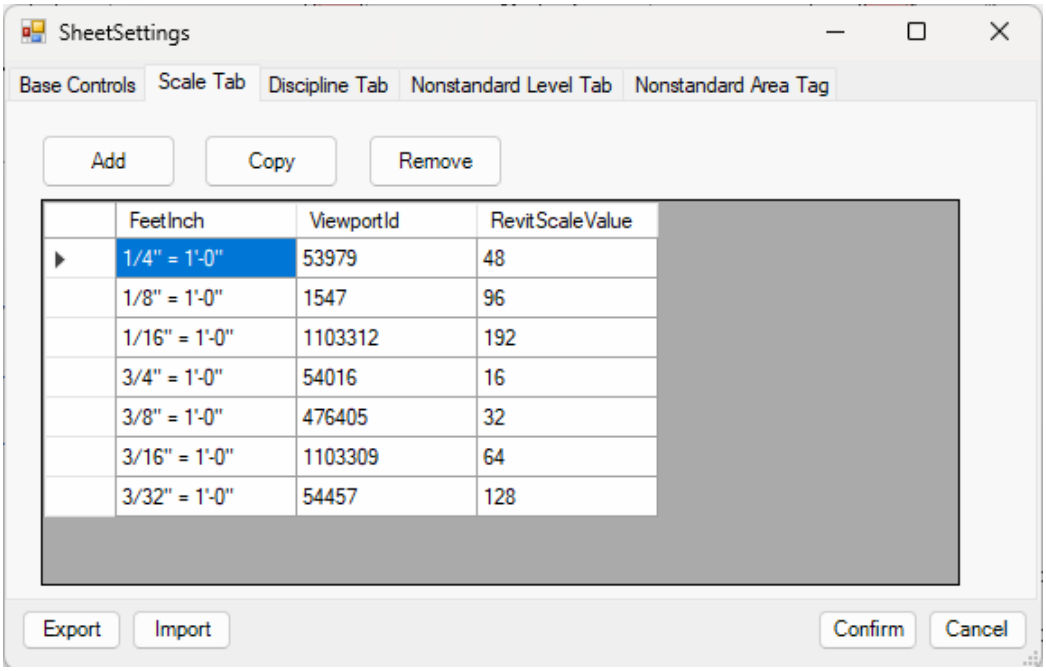
Sheet Tools

Sheet Creator

Sheet Settings

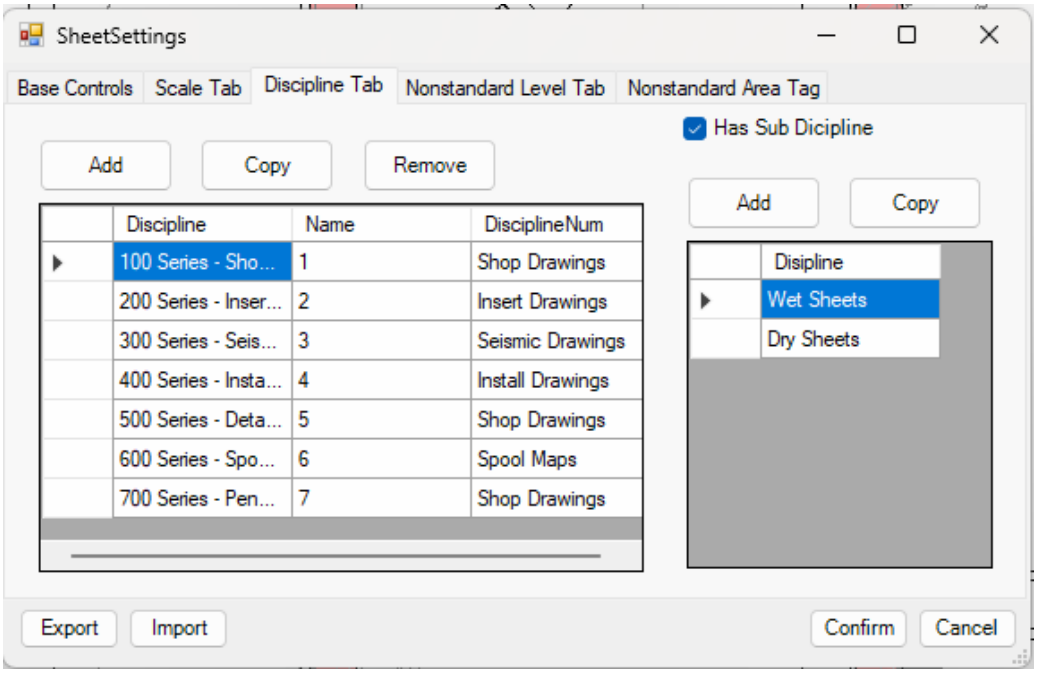


Sheet settings are one of the most complicated settings in the addon. When set correctly they can create very accurate sheets. Even when not don't perfectly they can still create the sheet but will occasionally mess up on names, levels and area names and automatic setup. The first tab shown is only for base controls. None of them make a huge difference just will automatically fill out part of the sheet creation form.

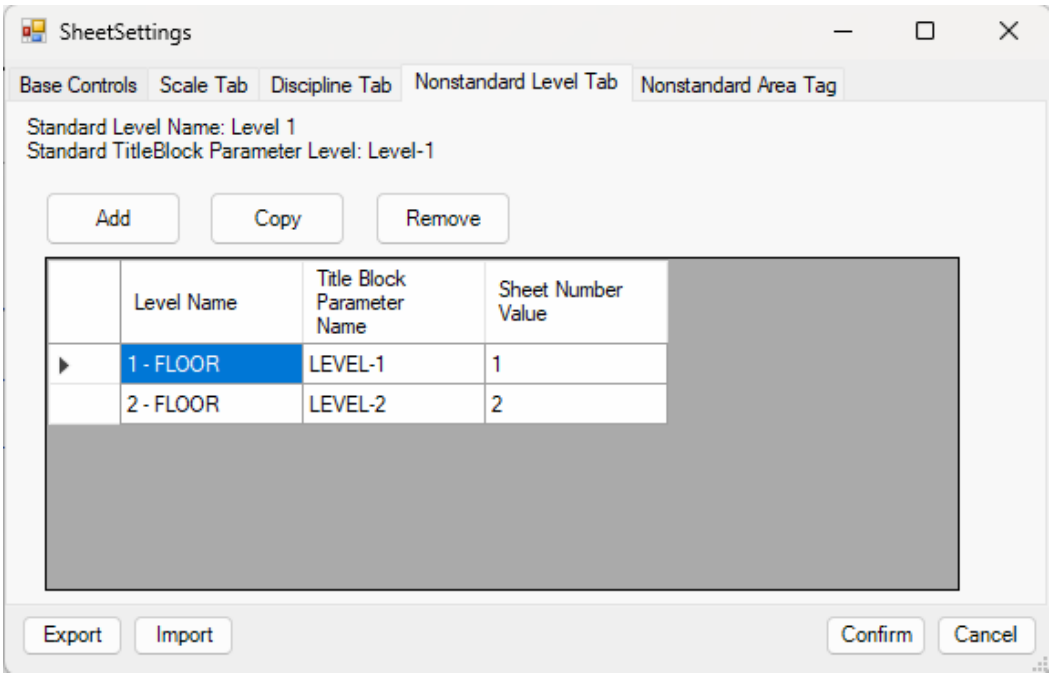


View scale tab till be able to collect the scale of the view and apply the correct view port. If you are getting an error for the viewport this is where you will fix it and it most likely

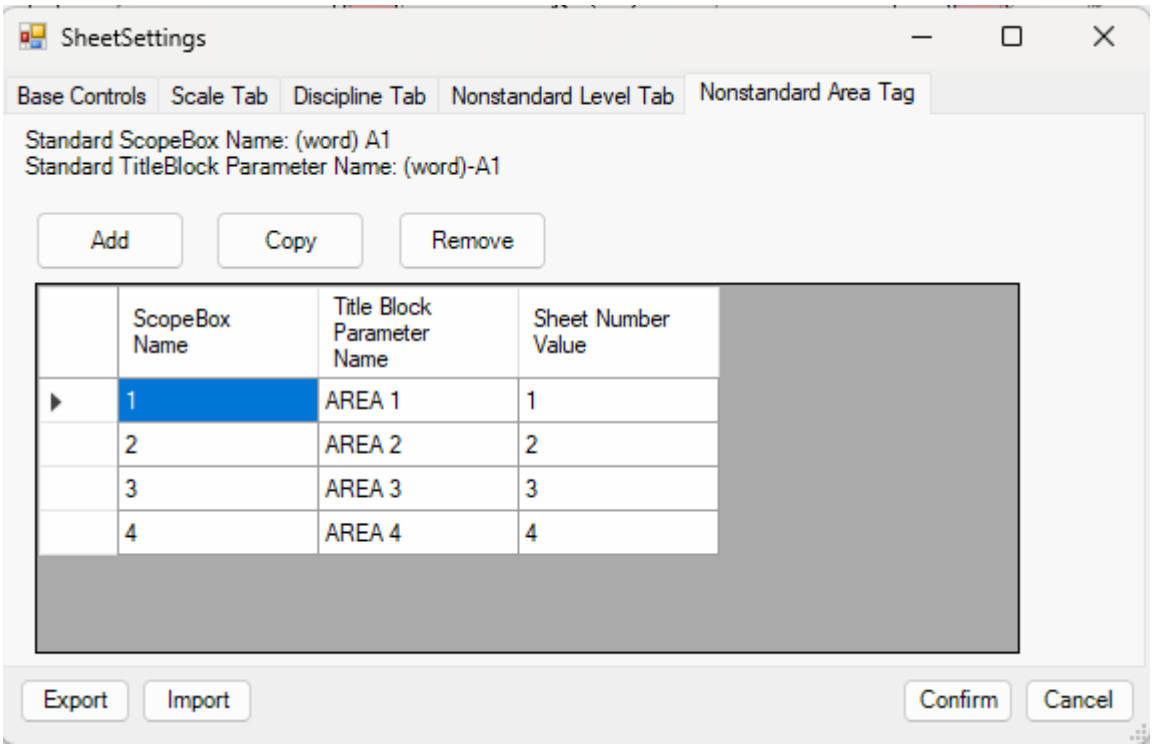
means the viewport element Id has changed. Also, whenever you look in a views parameter it has the scale name but under it has a scale number. This is the value I check for the scale so just make sure that it corresponds properly.



This is where you can change discipline names, number and sub discipline.



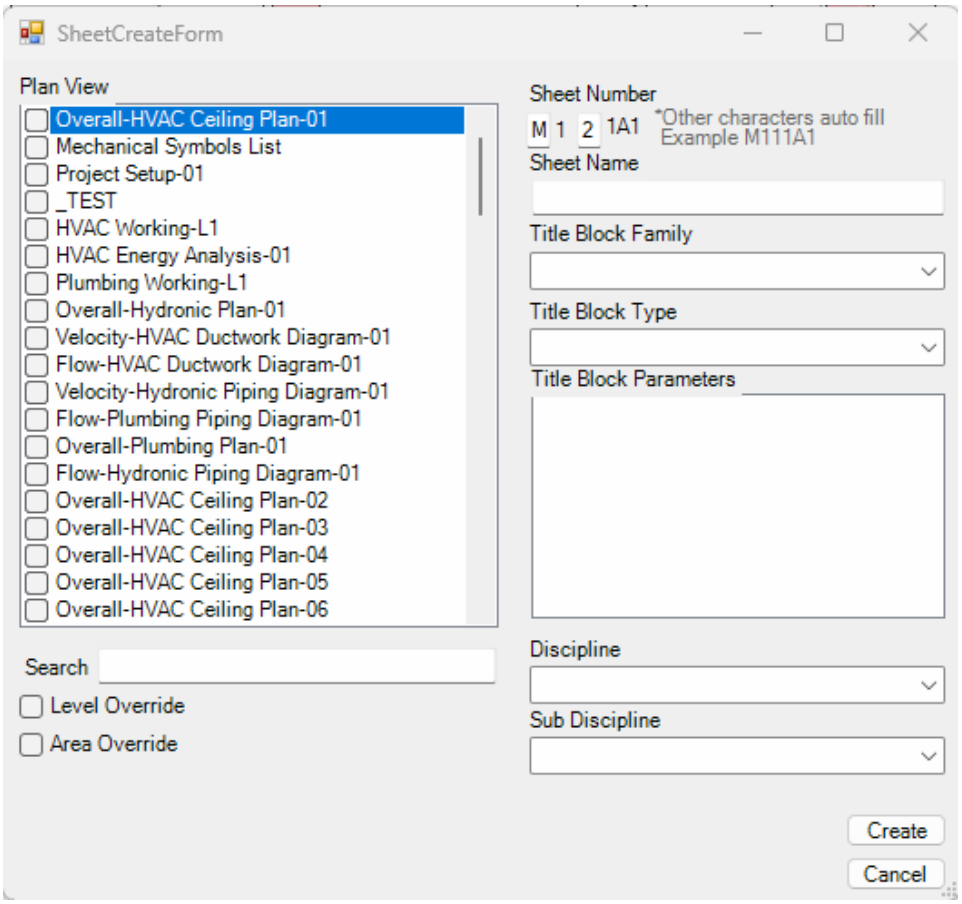
This is where you can add floor settings. The first column is the project side level name. The second is what the parameter is called in the sheet and the third is the value in the sheet number. Note the sheet number value does not need to be a number for example on capital you can do plaza level as PL etc.



Finaly, very similar to the levels the first column is project scope box name. Then second is sheet parameter name and finally third is for the sheet number.

Once made I would recommend exporting somewhere for others to be able to import instead of needing to reset it up.

Sheet Create

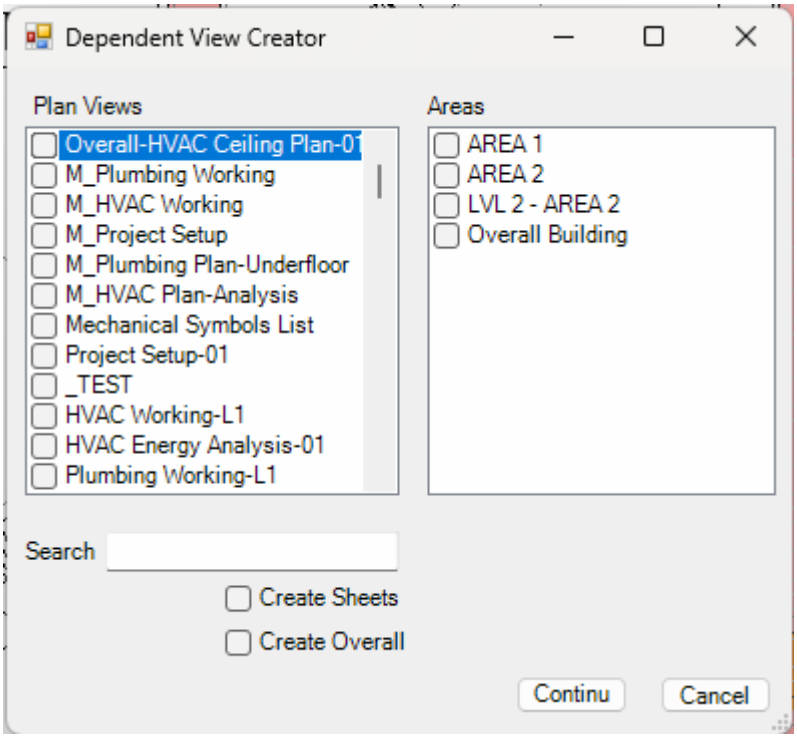


If settings are set up this menu is pretty simple. You will first select the plan views you want. Note there is a search bar below it. You can almost always ignore level and area override. It will just force the sheets to generate as if they were on a specific level or area. Once selecting the Title block type the title block parameters will populate which will pull from the default which lets you set the yes/no parameters before hand such as turning on stamps, set the name or notes that should be on the sheet. This is a slow tool due to many of the operations in the process forcing Revit to reload but it is faster than manually making the sheets.

Title Block Select

A powerful tool which you select sheets on your project browser then when you click this it will go open every sheet and select the title block allowing you to change the properties in bulk instead of individual opening sheets and changing. This tool is a very powerful combination with the Find and Replace tool since that tool is able to look at the currently selected items making you able to bulk find and replace title blocks for less simple parameters.

Dependent View Tool



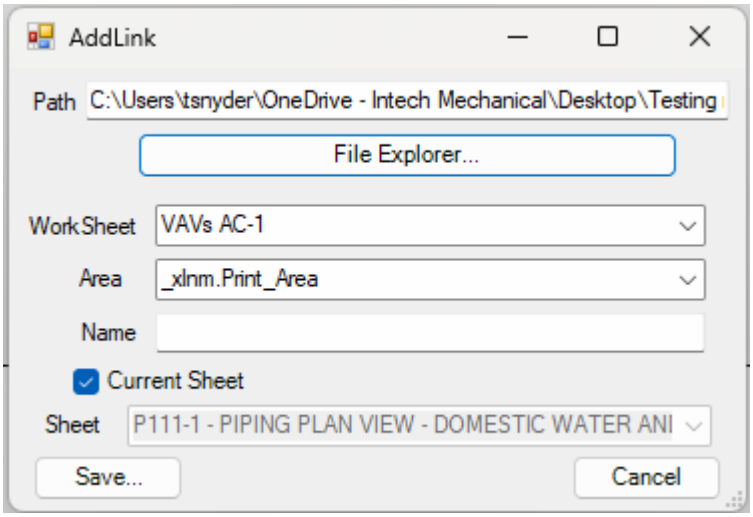
While I realize this probably shouldn't be under sheet creation it is a very helpful tool for creating bulk dependent views. You select the views you want to create dependent views for then select the areas you want to generate a view for. You can also tell is to create a Overall which will create a nondependent copy as well with a – Overall at the end of the name. Also, if you check create sheets it will open up the sheets in the sheet creator tool pre-selected.

Import

Excel Import

Linked Excel Manager

This tool is able to import excels and reformat them into a schedule. This menu tells you all the information about the excels inserted. Such as who Imported, where it is and much more. You can quickly open the excel by selecting it in the grid then clicking open. It can also open sheets the excel schedule got placed on. You also have the ability to reload if the excel is out of date which will be told on the status column. Just note if you made changes on Revit side it will be undone by reloading, so it is recommended to fix issues on excel side. Also, it is recommended to use the remove button to remove the excels from the project or else it causes issues when you try to reload a deleted schedule since this side does not recognize the schedule no longer exists.



When adding an excel all you need to do is pull the path, select the work sheet and set the area. You do not need to set the name; it will fall back on the work sheet name if not

selected. Then you also can select the sheet but if you are already on a sheet, you can just check the current sheet.
Revit and excel do treat their grids very differently causing problems of things excel can do but Revit cant so please look over the Excel To Revit Import Button Formatting doc in the engineering template folders if you are having problems.