

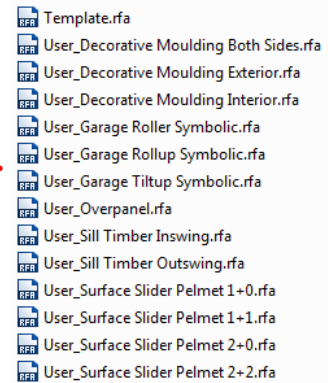
# Door Factory 2020

## Create New User Components

This process requires a very good understanding of Revit's in-built family editor techniques - please email [support@revitworks.com](mailto:support@revitworks.com) for help if required.

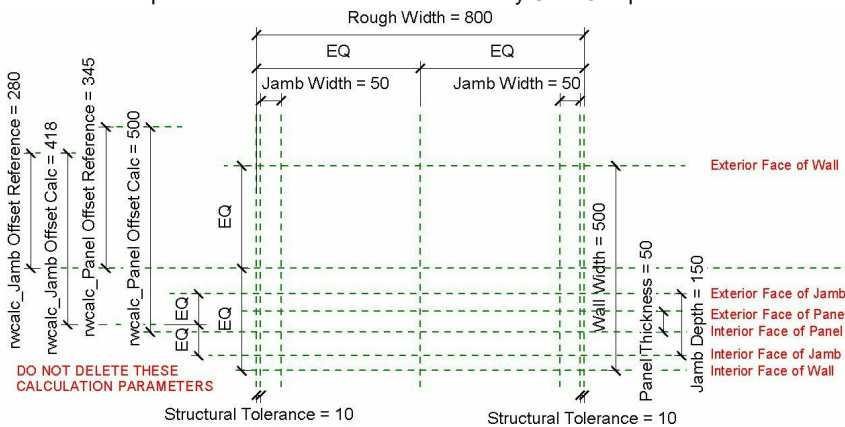
### 01 Open an Existing RevitWorks User Component

- Go to the Door Factory component installation directory, sub folder "User Components". Default path: C:\Program Data\RevitWorks\Door Factory 2020\Components ("Metric" or "Imperial")
- Open "Template.rfa" or an existing component that is a similar type to the one you want to create.



### 02 Use of Reference Planes

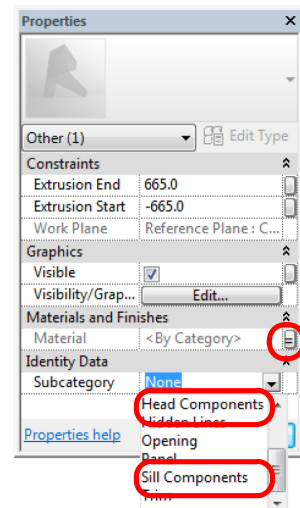
- Before modelling your new component, become acquainted with the Reference planes that come with the Door Factory User Components.



- The comments in red are there to help you understand what the different Reference Plane's are for (the Reference Planes are named correctly as well).
- Do not delete any of these Reference Planes.
- The Door Factory automatically links through the Rough Width, Rough Height, Panel to Base Gap, Panel Height, Panel Tolerances, Panel Width, Secondary Panel Width, Panel Protrusion into Opening, Pivot Offset, Clear Opening Width, Jamb Width, Doorstop Width, Structural Tolerance, Panel and Jamb location parameters to the final door family.
- Do not delete any calculation parameters - they are required for the correct placement within the door family.
- New Reference Planes can be created as required for your new extrusions etc. Ensure they are set to "Not a Reference".
- New parameters can be created as required for your new extrusions etc. These new parameters can then have formulas that tie back to the parameters which are linked through to the final family as above (ie: "Pelmet Extension = Rough Width+50mm" will ensure that the pelmet's extension past the door jamb grows when the Rough Width increases).

### 03 Model New Component

- Do not work in (or change) 3d view:Preview. This is preset for generating the preview icon.
- Modify the existing extrusions and voids if possible to create the desired component or create new extrusions etc if required.
- New reference planes can be created if required for your new extrusions etc. Ensure they are set to "Not a Reference".
- Build your component and lock onto correct Reference Plane(s) so they flex with the final door family (refer 02 above).
- Ensure all modelled elements are on the correct subcategory: especially "Sill Components" for components below or "Head Components" for components above. This ensures that you can, say, turn off all the Sill Components in a ceiling plan through visibility graphics.
- Ensure all modelled element materials are linked through to Material Parameters.
- Create new Material INSTANCE parameters as required, delete existing if not required.
- Ensure relationship of modelled elements to reference planes are retained correctly.
- Amend the extrusion's 3d/plan/elevation visibility settings to your requirements. If the extrusions visibility in plan is ticked, the extrusion will show up in both plans and ceiling plans. ie: By default BOTH the head and sill components will show in your floor AND ceiling plans (this is a limitation in Revit). To overcome, you can either:
  - Within the Family: Turn off the plan visibility settings for the components (so they never show in any floor or ceiling plans).
  - Within the Project: Setup your projects view templates so they have the visibility graphics subcategory "Head Components" turned off in your floor plans, and "Sill Components" turned off in your ceiling plans.
  - Recommended: A combination of the above: "Head Components" visibility settings off in plan, "Cill Components" on in plan but subcategory turned off within ceiling templates.
- Note that the visibility settings of the User Components provided by the Door Factory are as per c. above - amend to suit your own decisions on how you want to control this.



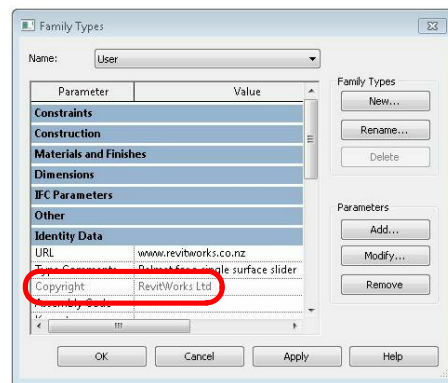
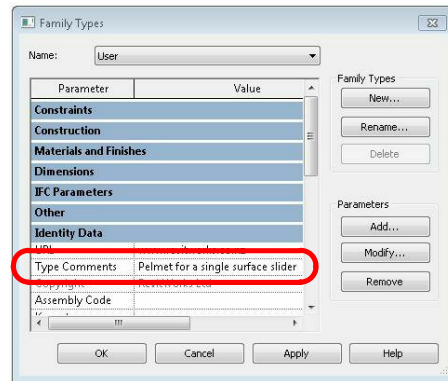
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# Door Factory 2020

## Create User Components (continued)

### 04 "Saveas"

- Edit the user component's "Family Types" and enter a description into the "Type Comments". These comments will show within the Door Factory.
- "Saveas" the new user component into the "User Component" directory and give it a new name starting with "User\_".



### Important Notes

- Do not add more family types, or change the family type name "User".
- Family name MUST begin with "User\_".
- Do not change the families "Project Units".
- All material parameters created need to be INSTANCE based.
- Do not delete the copyright parameter, the Door Factory requires this to know that this is a Door Factory component.
- 3D view "Preview" is used by the Door Factory for the components icon, so please leave as-is.
- Remember to flex your family to ensure that your modelled elements are constrained properly.
- Please contact support@revitworks.com for help if required.

### 05 Run the Door Factory

- Your new user component will now be selectable under the "User Component" tab, including the 3d preview icon and comment descriptor.

