Woodfold Roll-Up Doors

Note: The Woodfold Roll-Up door families were created and saved in Revit Architecture 2011. An Autodesk Revit product released after the 2010 version is required in order to utilize these families.

Content Discussed

Curtain_Wall_Panel-Woodfold-Wood_Slat

Door-Roll_Up-Woodfold-Face_Mount

Door-Roll_Up-Woodfold-Lintel_Mount

Door-Roll_Up-Woodfold-Stand_Alone

Electrical_Connector-Woodfold

Procedures for Loading

•Open the desired Revit.rvt file or create a new project

•Navigate to the Home Tab and select the Door Panel Button

•Select the Load Family Panel Button and navigate to the location where your Woodfold files are stored

•Select the desired family(s) and click Open (Revit does not allow door families to host electrical connectors, so if the project will require electrical data mapping you will need to load the Electrical_Connector-Woodfold family and place it on the face of the motor geometry in project)

•The selected families will now be located in the Families portion of the Project Browser under Doors. If the electric connector is also loaded it will be located in the Generic Models section of the Project Browser below the Doors portion.

Procedures for Placing

The door families were created on three different family templates, thus they will require three different methods of placement in a project. This provides the user with a great deal of flexibility in the project and allows for an accurate representation of mounting conditions.

 The Door-Roll_Up-Woodfold-Face_Mount and the Door-Roll_Up-Woodfold-Lintel_Mount families have an associated opening, and thus require a wall to be placed before the door family can be placed. Similarly, the Curtain_Wall_Panel-Woodfold-Wood_Slat family is based on a curtain panel, and will require the creation of a curtain wall with associated gridlines before the family can be placed. A stand alone family was created for mounting conditions that require installation between two walls with no

associated wall opening or lintel. The Electrical_Connector-Woodfold family can be placed on any geometric face in the project.

Wall-Based

•Click the Door Button in the Home Tab.   This will activate the Properties Dialog Box in the top right of your screen.

•Click the Tab in the top of the Properties Dialog Box.   Use the Slide Bar to scroll down until you see the desired family.

•Select the desired family type and hover over the wall in which you want to place the door. You may notice that if your cursor strays off the wall the family will not place.

•Once the door is placed, select the door and change the wall thickness in the Property Dialog Box. The wall thickness must be changed in the door family to match the wall it was placed in exactly. This is also a good time to confirm that the door is constrained to the proper level. The Sill Height parameter can also be adjusted if the door does not sit directly on the level (i.e. ramp to bottom of door). The lintel-based family has a Frame Inset parameter that allows the user to adjust how far the door recesses into the wall. The Face-Mounted family is limited to the outside edge of the wall, however there is a control placed in plan view that will flip the door 180 degrees.

•At this point it is likely that you will need to create a new type. Select the door and Click the Edit Type button in the Properties Dialog Box. Click the Duplicate button in the Type Properties Box. This is a good practice whenever you are attempting to create a new type(s). Create a new name for the new type that reflects the door features and follows the naming convention of the default type. You may need to adjust the name of this type once you become more familiar with all of the type parameters. These families allow the user to define the width and height dimensions, whether or not the door is exterior or interior, whether or not the motor(if any) is left or right mount, what kind of crank gear (if any) is utilized, and what materials are used for the various components.

•Once the necessary Type Parameter changes are made click OK at the bottom of the Dialog Box. You will now notice that **all** of the doors with the same **type** name have updated to reflect the changes. This is the important distinction between type properties and instance properties. The Woodfold families have instance properties that allow the user to include a key lock option, include a fascia/hood with or without end caps, or show the door in open or closed position.

•To access the instance properties simply click on the door and you will see the instance properties in the Properties Dialog Box. Changes made to the instance properties will only be applied to the selected door. This will allow the user to show differences in the door that may not necessitate the need to create additional types (i.e. one door of the same type could be shown in the open position, while an adjacent door is shown in the closed position).

Currtain-Panel Based

•To place the curtain wall panel hover over the panel to be replaced and press the Tab key on your keyboard until the panel is outlined. Then press the left button on your mouse.

•Once the panel is selected the Properties Dialog Box should appear in the top right of your screen. If it does not, right click your mouse and check Properties at the bottom of the dialog box.

•With the panel selected click the Tab at the top of the Properties Dialog Box and use the slide bar to scroll down until you see the desired type.

•Once selected the panel will update to the Woodfold family.

•The Width and Height can be adjusted by moving the Curtain Gridlines, however there are established controls set to ensure that the panel does not exceed the product's actual maximum width and height. If you move the vertical gridlines to a width greater than 12 feet you will notice that the opening reflects the space between the gridlines, while the panel remains at 12 feet. Likewise, the height will max out at 8 feet. Both the Width and the Height have a 1 foot minimum.

•Use the Door Inset parameter in the Properties Dialog Box to adjust how the panel aligns front to back with the rest of the curtain wall. A section view cut perpendicular to the panel may prove to be the best option for precisely adjusting this parameter.

•As was the case for the wall-based families, the curtain panel has associated type properties to identify certain characteristics like crank gear type (if any), materials, etc. In addition, there are a host of instance properties allowing the user to represent a variety of features available from the manufacturer without creating new family types.

•Once the panel is set to the desired width and height, duplicate the type and change the type name to reflect the size. With the panel selected, click the Edit Type Button in the Properties Dialog Box. Click Duplicate in the Type Properties Dialog Box, and then change the name to reflect the size, crank gear location, etc.

Stand-Alone Family

• As the name implies, the Door-Roll_Up-Woodfold-Stand_Alone family does not require a wall to be placed. It was developed to represent mounting conditions where there is an opening created by two parallel walls with no overhead lintel.

•To place the family, simply click the Door Button in the Home Tab. With the Properties Dialog Box activated click the Top Button and use the slide to scroll down until you see the desired family type. The door can now be placed anywhere in the project, but will automatically be constrained to the default Level 1. This is defined in the Instance Properties Dialog Box.

•The Width can be adjusted by changing the parameter value in the Type Properties Dialog Box. There is an associated Rough Width parameter that can be used to accurately create the required size. The Width parameter only reflects the panel size, while the Rough Width includes the side rail width and in

some instances the packout width. Adjust the Width Parameter in the Type Properties Dialog Box until the Rough Width Parameter equals the measured distance between the two walls in the project.

•The Height parameter can be adjusted in the Type Properties Dialog Box up to 8 feet and down to 1 foot.

•The Type Properties can now be changed to reflect the actual manufacturer's product line. Select the door and click the Edit Type in the Properties Dialog Box. Click the Duplicate button and change the name to reflect the properties of the new type. As was the case for the previously covered families, there are parameters that define the width and height, the crank gear (if any) orientation, the materials used, etc.

•In the same manner as the previous families, the Instance Properties can be changed to visually represent the various features available from the manufacturer.

Electric Connector Family

•The Electrical_Connector-Woodfold family was created to represent the actual power requirements of the door if it is to be equipped with an electric motor.

•Ideally, the connector should be placed on the outermost face of the motor in a 3d view. A certain degree of caution should be taken because the family will place on any geometric face.

•To place the family open a 3D view and click the Component Button in the Home Tab. Click the Top Button and use the slide to scroll down until you see the Electrical_Connector-Woodfold and its associated Standard Type.

•With the type selected, hover over the outermost face of the motor geometry. You should see highlighted edges of the motor as you hover over the geometry. If this is not the case, hit the Tab key on your keyboard until the appropriate face is highlighted. Left click your mouse and the family will place.

Thank you and good luck!