

Crealco Evolution

Bottom Hung Open-In Window



Figure 1 - Crealco EVOL1209DB Render

Overview

This brochure outlines some of the features of the Crealco Evolution Revit Family. This Revit Family represents the latest iteration of custom families and has been optimised for user-friendliness while following standard Revit conventions.

Changes from last Iterations

- Standard models and custom models have been combined into one Revit Family. Standard sizes are denoted by the frame dimensions, while the custom models appear as 'User Defined.'
- The model name appears with the word 'Crealco' in Revit.
- Both the size and the Crealco standard size code appear in Revit.
- For specific parameters that a user can change, a tooltip will appear when hovering the mouse over the parameter name.



Figure 2 - Changes from last iterations

Model Properties	*	
Enforce Size Limitations		
Frame Centered In Wall		
Frame Offset From Exterior	30.0	
Glazing Thickness	4.0	
Mullion 1 Sp Frame Offset From Exterior		
Mullions Equ Window offset from the exterior surface of the wall to the nearest		
Show Inertia surface on the window frame.		
Show Opening Lines		

Figure 3 - Example of the tooltip that pops up

Important Features and Functions

In addition to the standard features and function developed with previous Revit families, these are some of the new and noteworthy features:

• Inertia calculation and automatic mullion selection: For models that contain mullions, the required inertia is calculated, and then the correct mullion is selected. If there is no mullion strong enough, the mullion will be set to the strongest model possible but will appear red in the model. Displaying the mullion in red can be turned off in the *model properties* section.



Figure 4 - Example of the strongest mullion exceeding the required inertia

 Size limitations: The Revit model will enforce all size limitations possible such as maximum sash width and height. This is mainly applicable to custom models and helps prevent users creating a window that exceeds limitations or will cause Revit to crash. This option can be turned off in the model properties section, but then the user takes all responsibility for the design.

Setting Frame Finish and Glass

Under the *properties* dialog, there is a section called *Materials and Finishes*. This is where the user can choose the appearance of the aluminum and glazing.

Materials and Finishes	*
Aluminium Finish	White Powder Coated Aluminium ANP 1
Glazing Finish	Glass

Figure 5 - Material and Finished selection

Included as an additional file with the Revit families is a Crealco Standard Material Library. This can be loaded into Revit and allows the user to choose an aluminum finish that accurately represents one of the Crealco standard finishes with regards to colour. It has previously been documented how to add the Crealco Standard Material Library to Revit.

Model Properties Section

The *Model Properties* within the *Properties* dialog that appears when a user clicks on a window can be used to change individual parameters and options for that frame. Some of these parameters will only be applied to custom models. To get more information on each parameter, hover your mouse cursor over the relevant parameter until the tooltip is displayed.

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Model Properties	\$
Enforce Size Limitations	
Frame Centered In Wall	
Frame Offset From Exterior	30.0
Glazing Thickness	4.0
Mullion 1 Spacing	300.0
Mullions Equally Spaced	
Show Inertia Warnings	
Show Opening Lines	
Transom Top Spacing	295.0
Wind Load	1000.000000
Window Height	890.0
Window Width	1190.0



Profile Details

Taking a cross-section of the model will reveal an accurate representation of the profiles used and the spacing between profiles and glazing. There is not hardware, gaskets, or seals represented in this view.



Figure 7 - Example of a cross-section of a mullion