Preview of the Florim series

Florim’s ventilated curtain wall solutions have been digitised in three Revit files. Specifically:

- “Florim_S1 System” contains the S1 Magnum model;
- “Florim_S4-S4 Light System” contains the S4 and the S4 Light models;
- “Florim_V2 System” contains the V2 model.

Each Revit file is presented at the opening with a simple preview of the product; however, it is possible for the user to navigate through the model as he sees fit.

The curtain wall element is divided into panels, which are defined within a grid system and therefore differentiated according to their position within the curtain wall system. The modeling of each panel includes the Florim components foreseen and determined by the location of the panel itself, such as brackets, hooks and uprights.

The specific position of the different panels is related to the starting and ending point of setting the curtain wall inside the model.

Import and basic setting of the curtain wall system

To use the digitized models of one of the Ventilated Facades the user must copy the Curtain Wall element in the desired project from the Revit Florim file (Figures 1. and 2.).
2. Once the desired element has been loaded, curtain wall element can be created by following the path Architecture>Wall and selecting the item “Curtain Wall” from the properties drop-down menu.

3. After setting the height of the element, the user can place it in line with the reference wall. The first input generated by the cursor during the insertion operation will represent the “start point” of the curtain wall, while the second will be the “end point” (Figure 4.). Once defined, the two points will act as indicators for the correct positioning of the individual panels and their components within the curtain wall system.
The next step is to go to the 3D view or to a Section view. Once the curtain wall element has been identified, positioning the pointer over it and pressing the TAB key will automatically highlight the curtain wall panel defined by the element’s geometry (the name of the highlighted elements can be verified before selection on the bottom bar).

Once the panel has been selected, from the properties menu the user can specify the desired panel type for the curtain wall; a panel called “System Panel - Glass” is set as the default one.

Please note that each type of Florim panel is defined on the basis of its position inside the curtain wall system and is consequently modelled with specific Florim hooks.

In order to better observe the panel and its components, once selected, the user can left-click on the glasses icon at the bottom of the Revit interface and select the “Isolate element” item. The object is thus visible without the other elements of the project. To return to the overall normal visibility settings by clicking on the icon again and then “Reset Hide/Isolate temporarily”.
Once a panel belonging to a Florim Solutions series has been selected, there are a series of Instance Parameters that can be modified by the user (Figure 6):

- The Distance Wall Slab and the anchoring point is set within a range of values (min 9, max 21 cm) beyond which the element automatically sets itself to the nearest limit value. The brackets between the wall and the slab vary and automatically adjust in size.
- The option Insulating Show (check) activates the insulation between the wall and the slab. The user can specify its desired thickness by a further parameter called Insulation_Thickness.
- The slab’s uprights can be modified with three different parameters. Profile_Final offset and Profile_Initial offset can offset the first and last element, while Profile_Show final makes the upright associated with the final edge visible, since it is hidden by default.

**Composition of the curtain wall panel**

Clicking the "Edit Type" button from the properties palette opens an interface layout from which the user can set the curtain wall type and size of the desired series.

Depending on the size of the panel, the visibility of the profiles and brackets is automatically activated according to the pre-established rules.

Each Series (V2, S1 M, S4 and S4 L) has its own settings and composition limits as shown below.
**V2 Series**

The V2 series has four different types of Curtain Wall, composed by panels with fixed dimensions:

- Florim_CWP_V2_Pannello 60x120
- Florim_CWP_V2_Pannello 120x60
- Florim_CWP_V2_Pannello 80x180
- Florim_CWP_V2_Pannello 180x80

Depending on the Curtain Wall there are very precise layout rules, NOT CHANGABLE by the user.

**S1 Magnum Series**

The S1 Magnum series has a single type of facade, consisting of panels called “Florim_CWP_S1M_pannello”. These panels are available in a maximum linear size of 3.2 metres and can be modified at the customer’s discretion. The user is free to use Revit’s layout rules for the curtain wall, to be set through the “Edit Type” icon from the Properties window (Figure 7.) or by manually drawing the grids with the “Curtain Wall grid” command, located in Architecture>Build (Figure 8.).
When the width changes, the uprights supporting the panels are automatically switched on or off. The maximum distance between the uprights is 80cm. Following the same principle, when the height changes, the vertical hooking brackets will be visible.

**S4 Series**
The S4 series has two types of curtain wall:

- Florim_CWP_S4 Pannello
- Florim_CWP_S4 Light_Pannello

The panels making up the curtain wall of the series can be modulated in size at the customer’s discretion, similar to the S1 Magnum series. The maximum dimensions allowed are 1.80 m.
**Unplanned dimensions**

If you have a surplus or a non-rectangular area to cover, you can use a special panel in all Revit files. This is a Revit system panel modified to follow the graphic style of the Florim Ventilated Facades.

By choosing this item from the drop-down menu in the Properties window, the panel will adapt to the size expected by the user.
Type of curtain wall panel

After modelling the curtain wall in Revit and subdividing it according to the desired dimensions, selecting the single panels lets the user change the Florim’s panels from the drop-down menu in the "Properties" window.

Each panel has the same type name according to the position in which it will be installed. Here is a sample scheme:
If the facade has an opening, Florim suggests to follow these steps:

Starting from the typical case in which there is a central window, model the dimensions of the panels so that they match with the opening;

Select the lower row of panels and from the properties window menu change the type to "Central upper panel";

For the upper row, choose the "Bottom central panel" instead;
Replace the panels that coincide with the opening with the “Empty” system panels, making the window visible.

The purpose of these steps is to divide the curtain wall panels as if they were split rows of elements. It is now necessary to replace the remaining panels so that the row stops right before the opening and starts again just afterwards. Therefore, in the example shown below, the user must place:

the upper central panels;

the lower central panels;
and the remaining angle panels, clockwise from the one selected in the image,
   lower final
   upper final
   upper initial
   initial lower

By following and adapting the described procedure and using the instance parameter Mount_Show Final, the user is free to customize any desired configuration.

For further information on our all ventilated façades system, please contact Florim Solutions Staff at customercare@florimsolutions.com. Florim Solutions will be happy to offer you the most functional building solution for your project.

Florim Solutions staff