

MB-79N E/ST/SI/SI+

Window & door system with thermal insulation



Thank you for your interest in Aluprof's products.

Welcome to the group of professionals using BIM models in Autodesk® Revit. All of our Revit families are created on the basis of our company's real products.

In this document we would like to present the possibilities of the BIM models of MB-79N windows and doors.

1. Technical parameters of MB-79N E/ST/SI windows.

AIR PERMEABILITY	Class 4, EN 12207
WATERTIGHTNESS	Class E1950, EN 12208
WIND LOAD RESISTANCE	Class C5/B5, EN 12210
THERMAL INSULATION ¹	$U_w = 0.64 \text{ W/m}^2\text{K}$
CONTENT OF THE ALUMINUM RECYCLATE	69,2%

2. Technical parameters of MB-79N ST/SI/SI+ doors.

AIR PERMEABILITY	Class 3, EN 12207
WATERTIGHTNESS	Class 5A (200 Pa), EN 12208
WIND LOAD RESISTANCE	Class C1/B1, EN 12210
THERMAL INSULATION ²	$U_d = 1.13 \text{ W/m}^2\text{K}$
CONTENT OF THE ALUMINUM RECYCLATE	69,2%

² The U value has been calculated for MB-79N SI with the following assumptions:

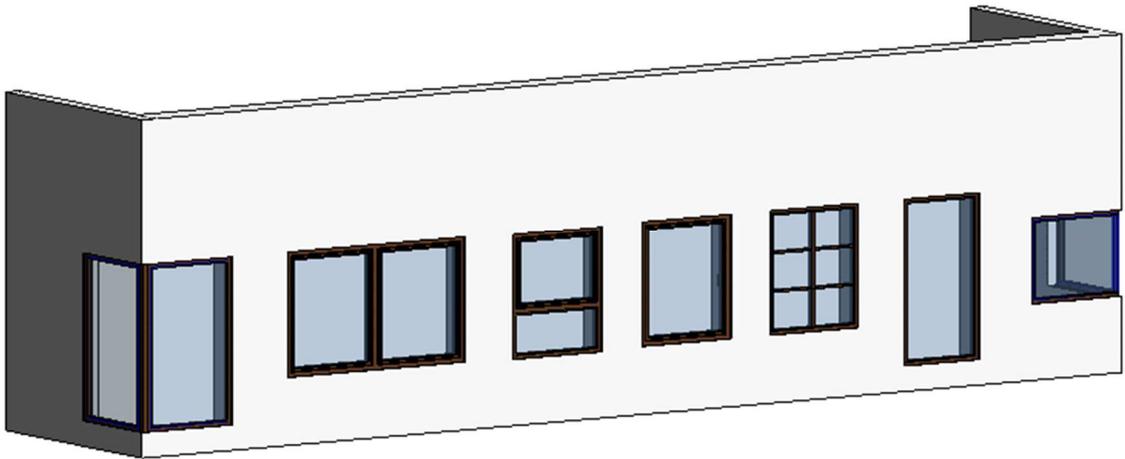
- two-chamber glazing with $U_g=0,5 \text{ W/m}^2\text{K}$
- a warm edge space bar
- window dimensions: L x H = 1300 x 2700 mm (single sash)
- door dimensions: L x H = 1105 x 2170 mm (single sash)

For other calculation variants please contact the Aluprof's Technical Support Department.

3. The MB-79N windows.

There are seven Revit families for three variants of thermal insulation (E/ST/SI) available for download, created according to the configuration of sashes and opening type:

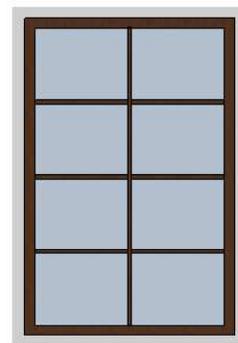
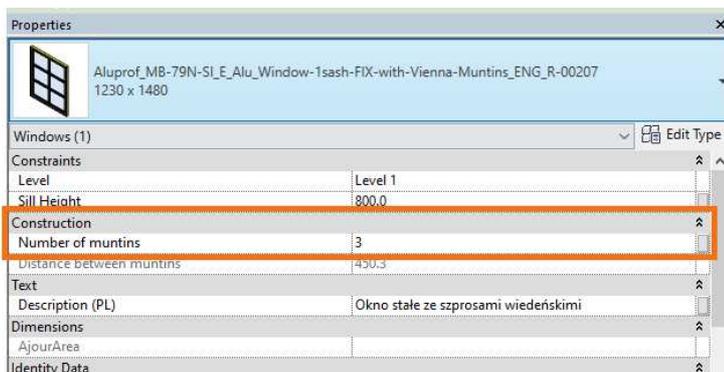
- Single FIX window
- Single FIX window with Vienna muntins
- Single Tilt and Turn window
- Double vertical window FIX + Bottomhung Casement
- Double Tilt and Turn + Side-hung window
- Corner FIX window
- Corner FIX window with structural glazing



In Edit Type under Dimensions group, there is also a parameter called **Exterior wall face offset** which controls the value of the structure offset from the outer wall surface (20 mm by default) and a **Mounting space** parameter, which determines the depth of the mounting space (15 mm by default).

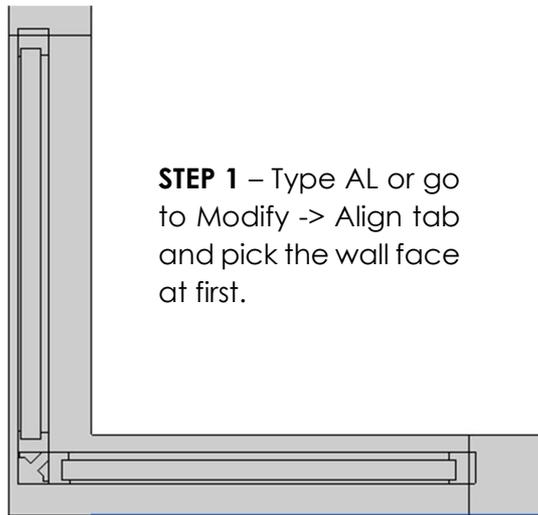
3.1 The window with Vienna muntins.

There is a possibility to set the amount of horizontal muntins in a project (minimum value is 2). To do this, enter the required number in an instance parameter called **Number of muntins**.



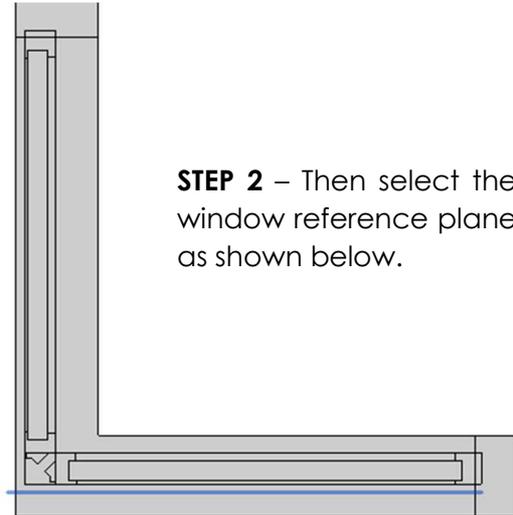
3.2 Inserting the corner window.

With the corner window in place on the wall, lock the window reference plane to the external wall face:



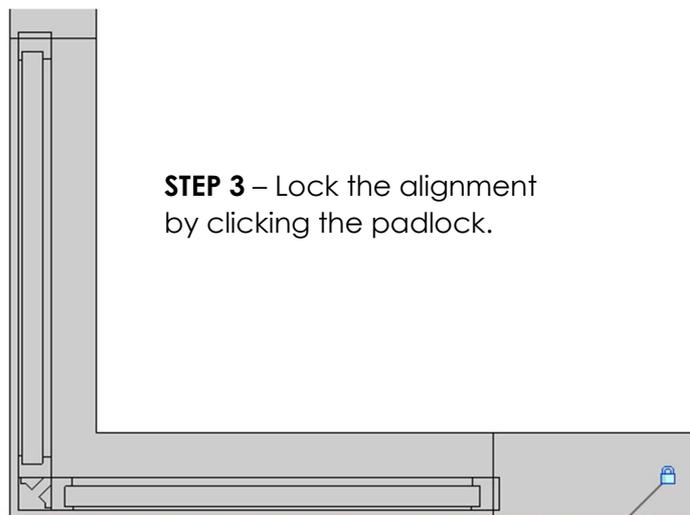
STEP 1 – Type AL or go to Modify -> Align tab and pick the wall face at first.

Walls : Basic Wall : Wall 1 : Reference



STEP 2 – Then select the window reference plane as shown below.

Windows : Aluprof_MB-86-SI_E_Alu_Window-Corner-2sash-FIX-FIX_ENG_R-00045-S1 : 1230 x 1480 : Reference



STEP 3 – Lock the alignment by clicking the padlock.

Thanks to this, when changing the wall type, the window will remain in the same place and will move according to the specified value of **Exterior wall face offset** parameter as well.

4. The MB-79N Door.

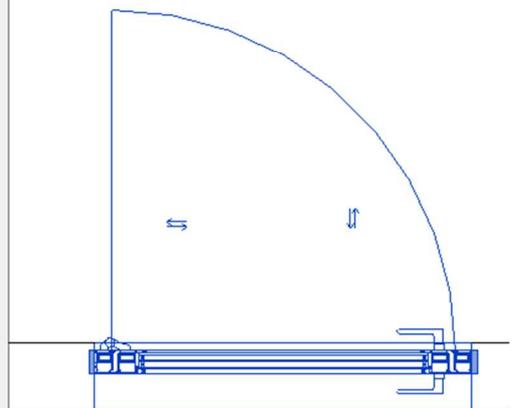
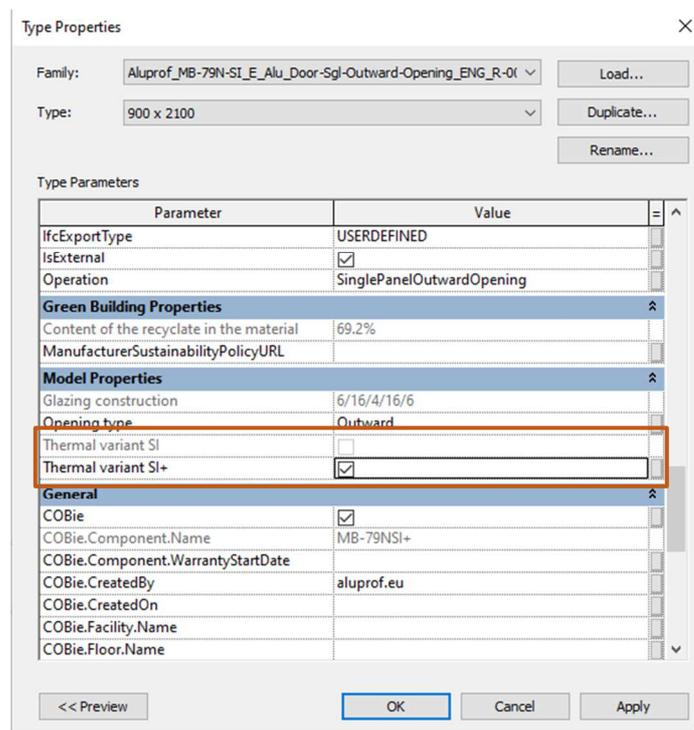
There are four Revit door families for three variants of thermal insulation (ST/SI/SI+) available for download, created according to the configuration of sashes and opening type:

- Outward opening single door
- Outward opening double door
- Inward opening single door
- Inward opening double door

For both windows and doors, in Edit Type under Dimensions group, there is a parameter called **Exterior wall face offset** which controls the value of the structure offset from the outer wall surface (20 mm by default) and a **Mounting space** parameter which determines the depth of the mounting space (15 mm by default).

4.1 Thermal variants of the MB-79N doors.

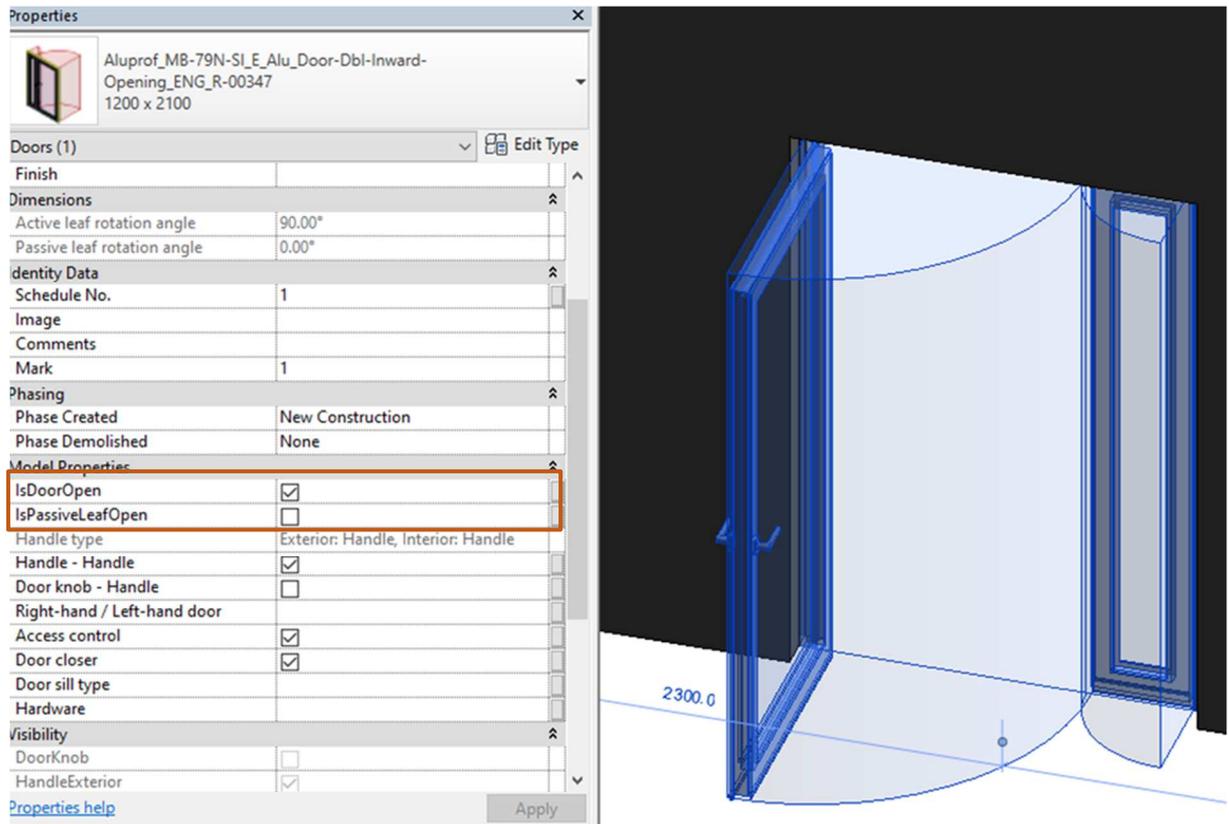
The doors of the MB-79N system are available in three thermal variants (ST/SI/ SI+). The models of **ST** and **SI** variants are created as individual families. In order to get the **SI+** thermal variant, firstly open the desired model of MB-79N SI door and then in Edit Type under Model Properties tick a **Thermal variant SI+** parameter. The details of the model and parameter's values will adjust automatically.



4.2 The geometry of the door models.

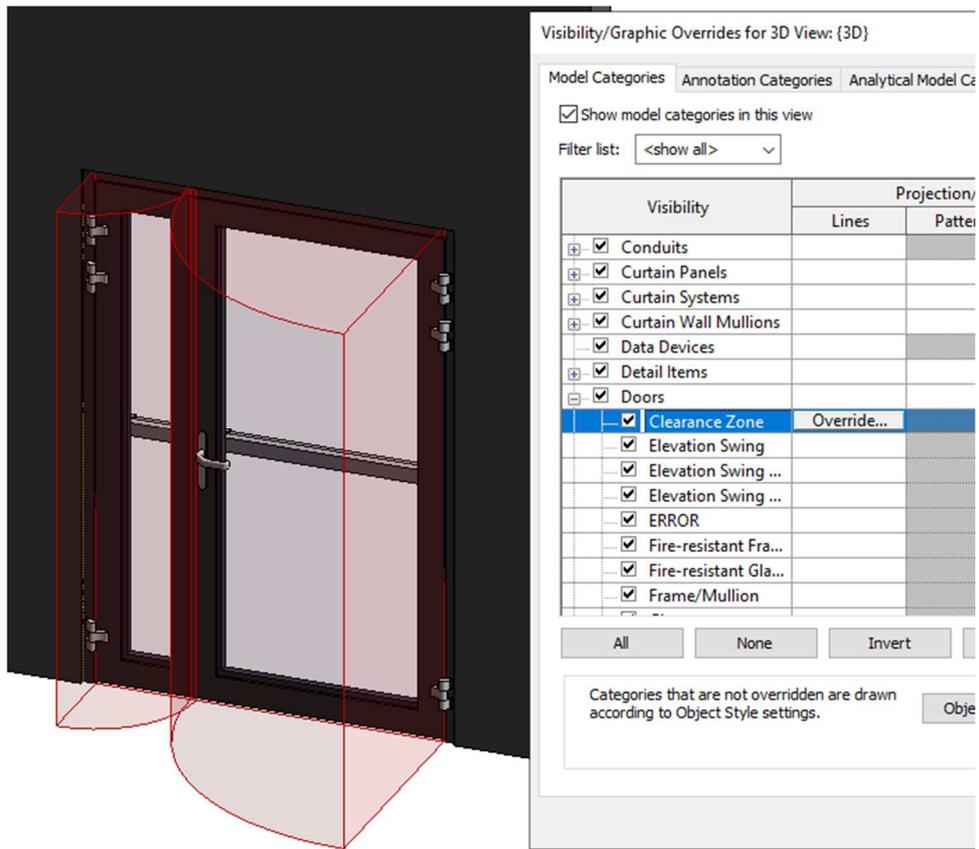
The door models contain a parameter **IsDoorOpen/IsPassiveLeafOpen** that allows to open one or both sashes. However, the passive sash can only be opened after opening of the active sash first.

Window models do not contain an opening parameter.



4.3 Clearance Zone

The Clearance Zone is visible by default. To turn it off, go to Visibility/Graphics Overrides (VG keyboard shortcut) → go to the Door section → uncheck the Clearance Zone.



4.4 Door handles configurations.

The availability of door handle configurations depends on the door opening type (inward or outward). The following configurations can be found in our models:

- Handle - Handle
- Touchbar - Handle
- Door knob – Handle

Handle - Handle	<input type="checkbox"/>
Handle - Touchbar	<input checked="" type="checkbox"/>
Door knob - Handle	<input type="checkbox"/>

If there is more than one handle configuration checked at once, red alert zone will appear.

5. Additional parameters.

The MB-79N Revit families have a number of additional parameters that can be included in schedules:

DOOR	Access control Door Closer Door sill type Hardware Handle type Right-hand / Left-hand door Schedule No.
WINDOW	Hardware Handle type Schedule No.

These parameters have been left blank to be filled by the user.

In addition to the parameters directly related to the model properties, our Revit families include information about the **COBie**, **IFC** and **Uniclass 2015** standards.

We hope this short tutorial will help you use our BIM models more effectively in your projects.

If you have any questions or concerns, please do not hesitate to contact us.

BIM Technology Department
Aluprof S.A.