

Conservatory Roof in Revit Architecture

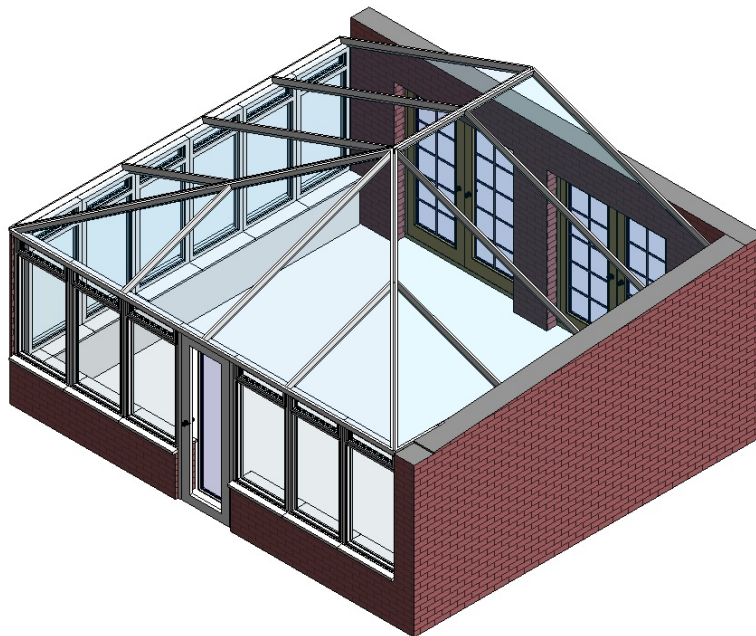
This White Paper looks at a problem with mullion orientation on Conservatory Roofs in Revit Architecture.

All Revit Users

Sloped Glazing and Mullion Orientation

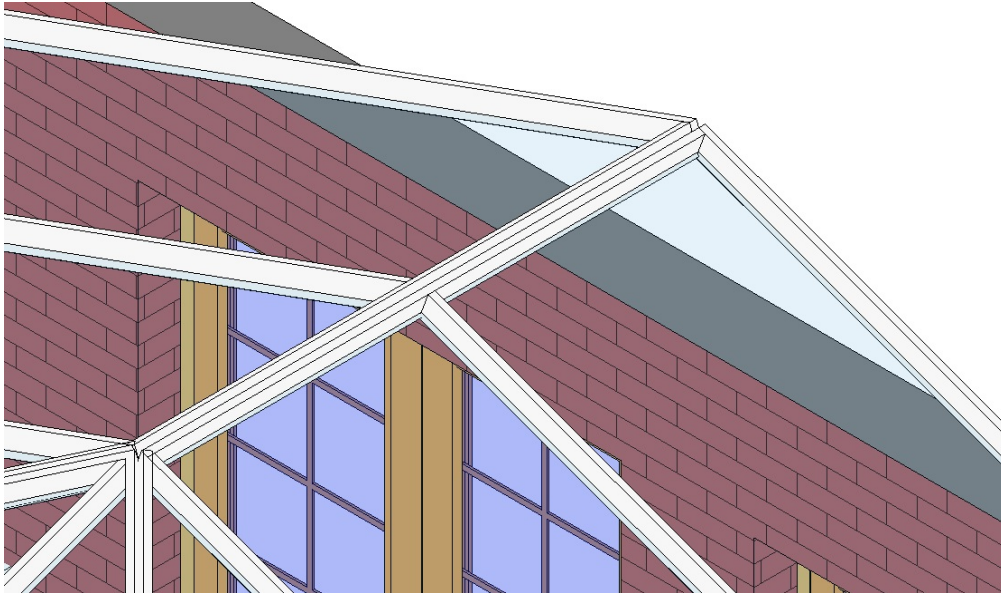
Figure 1 below shows a typical glazed roof construction for an external conservatory.

Fig 1: Conservatory with sloped glazed roof and mullions attached.



Initially the conservatory looks fine but on closer inspection we can see that there is an issue with the mullions running along the apex of the roof. Refer to figure 2.

Fig 2: Sloped glazed roof apex detail.

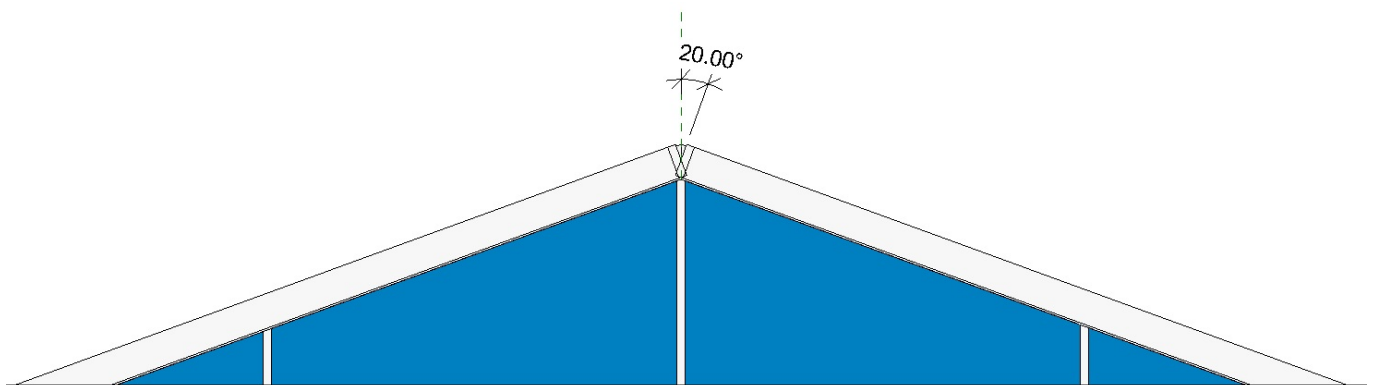


The mullions running along the apex of the glazed roof are splayed at an angle but they should be perpendicular.

To rectify this we need rotate the apex mullions. Refer to figure 3.

- Find the angle between the mullion and the vertical plane. This can be done in a section view.
- Draw a vertical reference line up from the roof apex and measure the angle between the reference line and the mullion

Fig 3: Sloped glazed roof apex detail (Section View).



Now that we know the angle of displacement from vertical the mullion properties can be changed. To modify the mullion angle follow the steps below:

- Select the splayed mullions as highlighted in blue in figure 4 below.
- In the Type Properties Dialogue duplicate and rename the selected mullions. Refer to figure 5.
- In the Type Properties under constraints change the angle to 20 and click OK

Fig 4: Sloped glazed roof apex mullions selected.

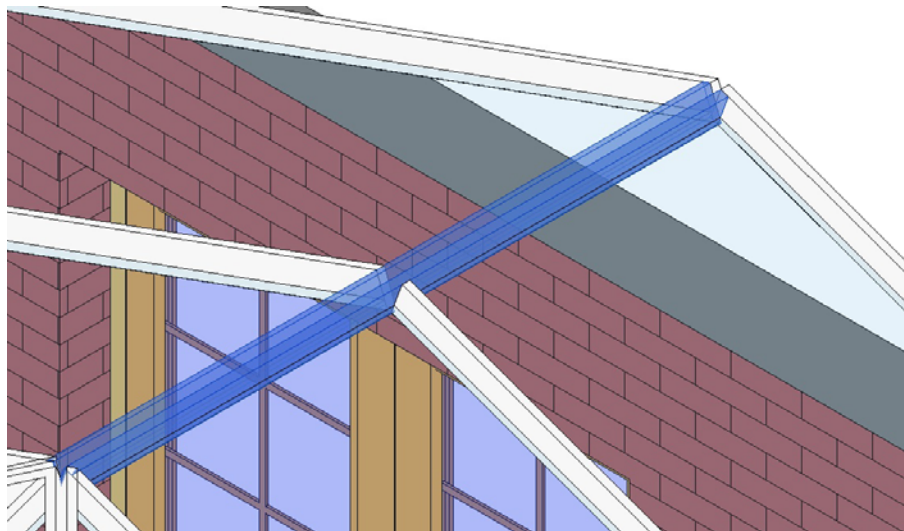
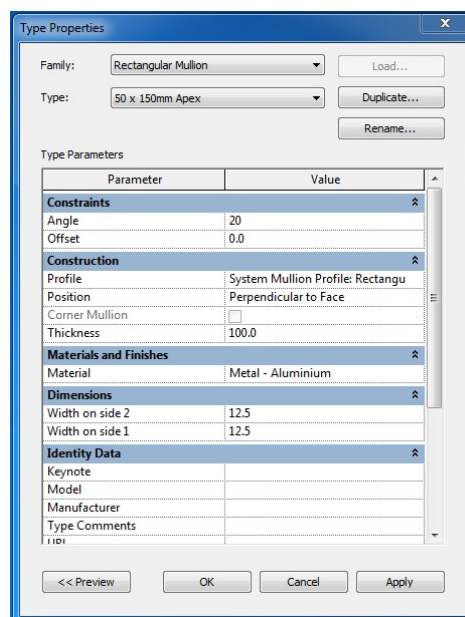
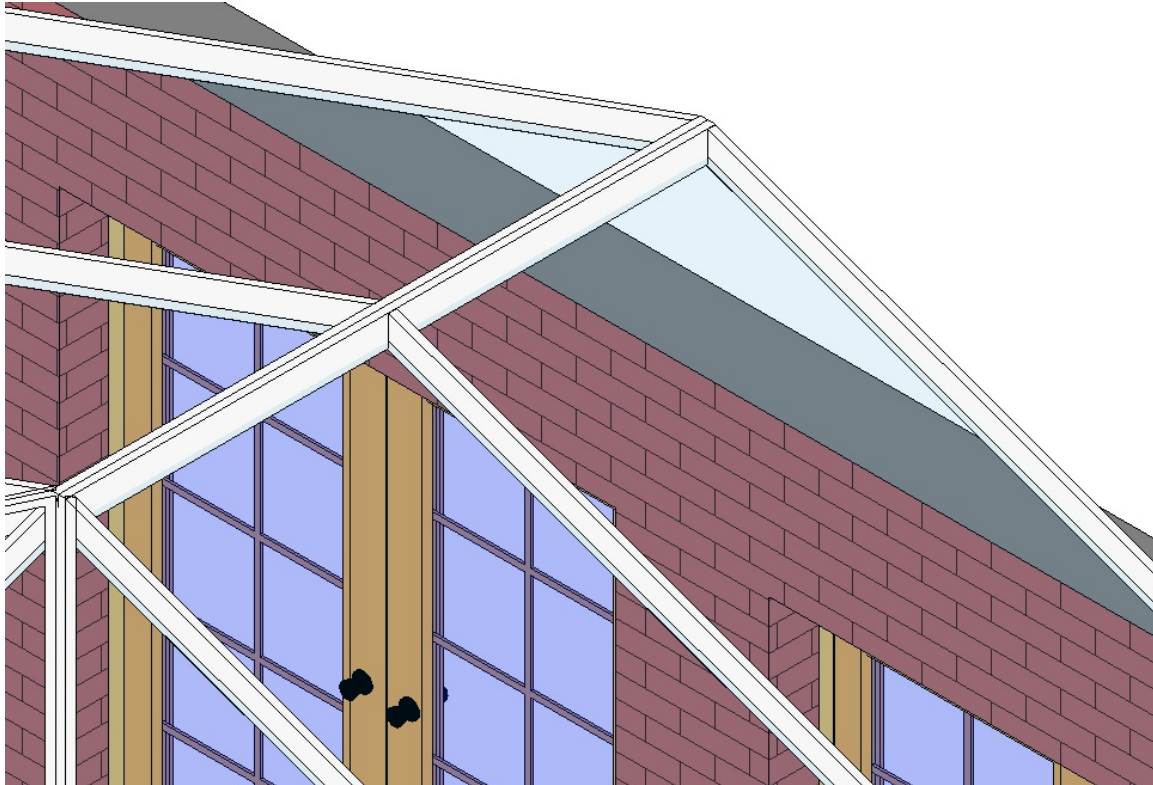


Fig 5: Type Properties Dialogue.



The mullions at the roof apex will now be perpendicular without any gap between them as illustrated in figure 6.

Fig 6: Amended Mullions.



Note: It is necessary to duplicate and rename the mullions whose angle properties are to be changed otherwise the angle of all the conservatory roof mullions would change.