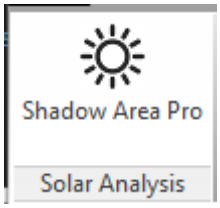
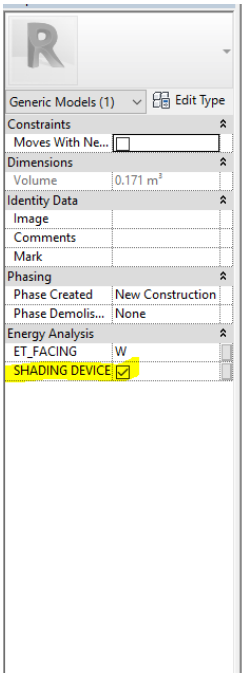
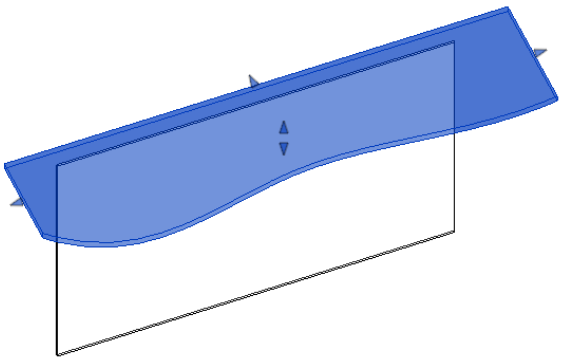
Shadow Area Tool.

Here is a quick guide how to using this tool:



Step 1: Specify which object is the shading device, select those objects and turn on (tick) to the "Shading Devices" parameter.

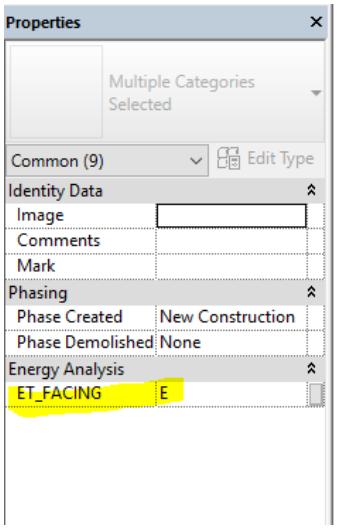


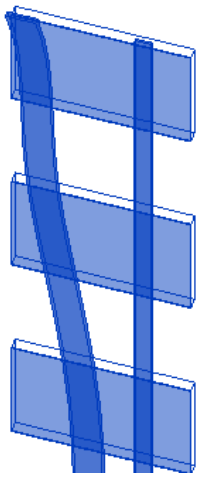


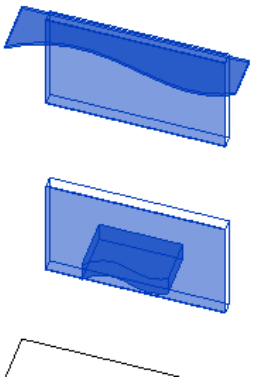
Step 2: Specify windows direction and shading device direction.

- Method 1: Select elements and assign them to their correct directions.

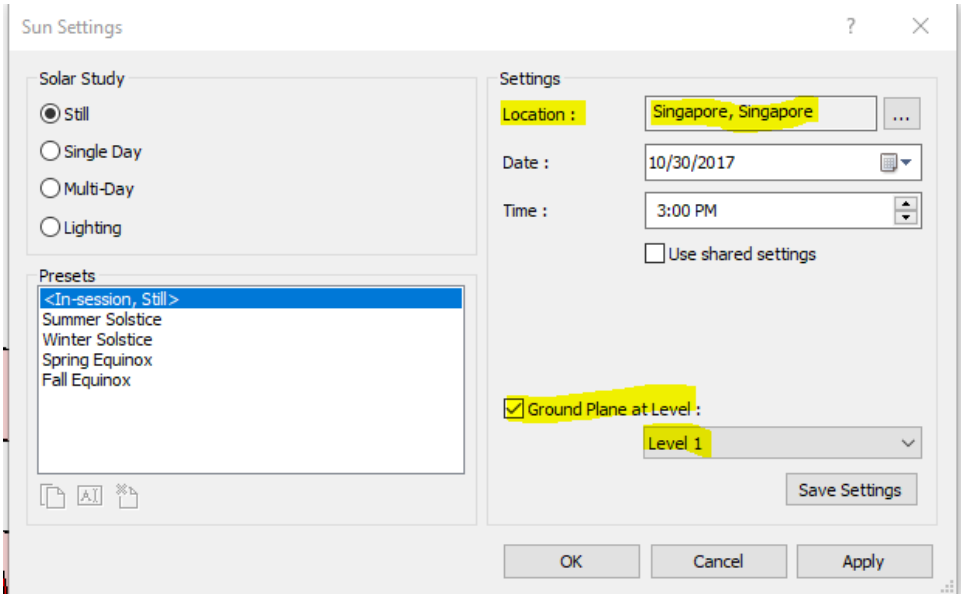
- Method 2: Use the Hicas tool. As previously discussed, this tool can work on window elements only for now. The shading device is not applicable. In addition, if walls are incorrectly classified as exterior/interior, the windows will not be correctly identified.







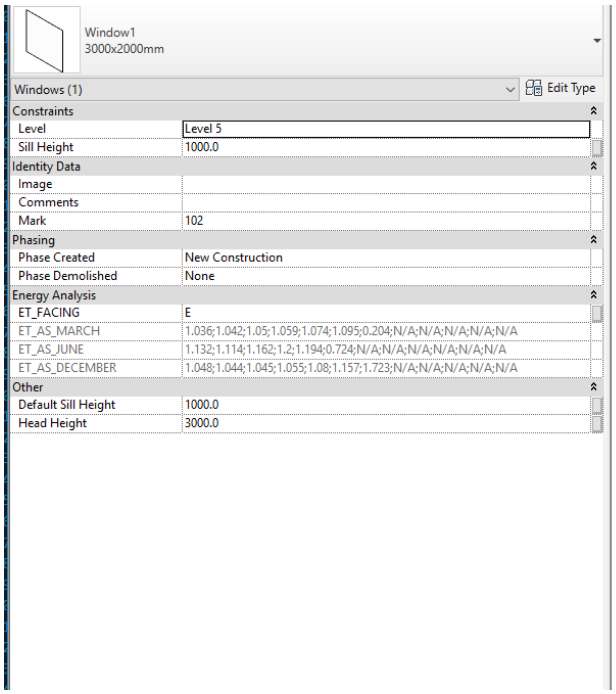
Step 3: Go to "Sun settings", this includes project location (i.e. Singapore), and Ground Plane in the below dialog.

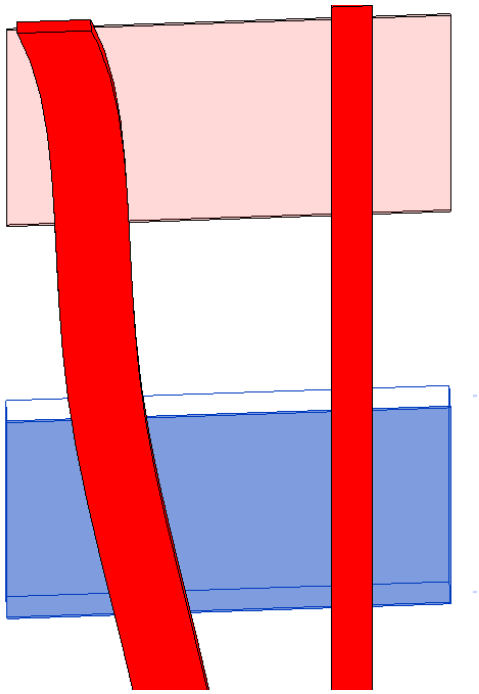


Step 4: Run Shadow Area Tools.

Note: *This tool is designed for calculating of irregular/complex devices, therefore, it will treat all devices in model as complex one and the calculation time will be longer as well. It is better to run this tool for 1 or 2 directions at a time first, if the calculation time is fast, we then can run all 8 directions at once.*

Step 5: See results, take values needed for next step of calculation.





*** Note1: the windows must be modeled from window family as windows category in Revit. Other cases will not be considered in this calculation.**

****** Note2: value N/A in window means in this time, the sun does not project on it.