

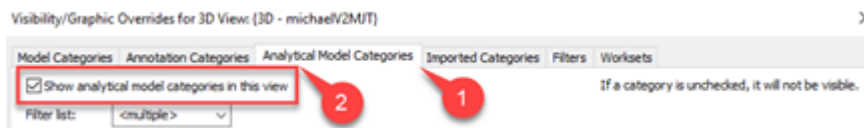
PROKON Support Portal

Portal > Knowledgebase > CAD and Detailing > D04: Prodesk Suiite Revit Extension > Analytical Model Categories for SUMO/Frame Model Generation

Analytical Model Categories for SUMO/Frame Model Generation

Michael - 2020-07-21 - 0 Comments - in D04: Prodesk Suiite Revit Extension

In Autodesk Revit, Analytical Model Categories are important features to note when exporting a model to SUMO/Frame. Revit automatically adjusts (Auto Detect in the properties tab) the analytical model to certain analytical boundary positions and therefore it's important to note to which position Revit has automatically adjusted the model to. To change or modify the analytical line positions in Revit, toggle to View > Visibility/Graphics and turn on the Analytical Model Categories as follows:



*To clearly view analytical model categories, it is suggested that the model categories be turned off when adjusting the analytical line boundary positions

Once the analytical graphics have been turned on in Revit, the analytical lines of various structural elements within the Revit model can be manually adjusted which would ensure a seamless export to PROKON's structural analysis modules. The following analytical line adjustments are suggested:

Analytical Floors (Slabs):

- Select the analytical lines of the slab elements and in the Properties tab, ensure that

the projection is set to 'Center of Element':

Analytical Alignment	
Alignment Method	Projection
z Projection	Center of Element

Analytical Beams:

- Select the analytical lines of the beam elements and in the Properties tab, ensure that the yz projection is set to 'Center of Element':

Analytical Alignment	
Start Alignment Method	Projection
Start y Projection	Center of Element
Start z Projection	Center of Element
End Alignment Method	Projection
End y Projection	Center of Element
End z Projection	Center of Element

Analytical Columns:

- Select the analytical lines of the column elements and in the Properties tab, ensure that the yz projection is set to 'Center of Element' and that the z projection is set to

Analytical Alignment	
Top Alignment Method	Projection
Top y Projection	Center of Element
Top z Projection	Center of Element
Top Extension Method	Projection
Top x Projection	Top Of Column
Base Alignment Method	Projection
Base y Projection	Center of Element
Base z Projection	Center of Element
Base Extension Method	Projection
Base x Projection	Bottom Of Column

the 'Top and Bottom of Column':

Analytical Walls:

- Select the analytical lines of the wall elements and in the Properties tab, ensure that the z projection is set to 'Center of Element' and that the y projection is set to the

Analytical Alignment	
Alignment Method	Projection
z Projection	Center of Element
Top Extension Method	Projection
Top y Projection	Top Of Wall
Base Extension Method	Projection
Base y Projection	Bottom Of Wall

'Top and Bottom of Wall':

Analytical Wall Foundations:

- The wall foundation elements do not contain analytical lines and therefore these elements will not be exported to either of the Structural Analysis Modules.

Once the analytical lines have been adjusted, the Analytical Model Categories can be turned off and the Model Categories can be turned on. The Model Categories in the Revit Model Space can be selected and exported using the ProDesk extension to PROKON's Structural Analysis Modules as follows:

