INTRODUCTION

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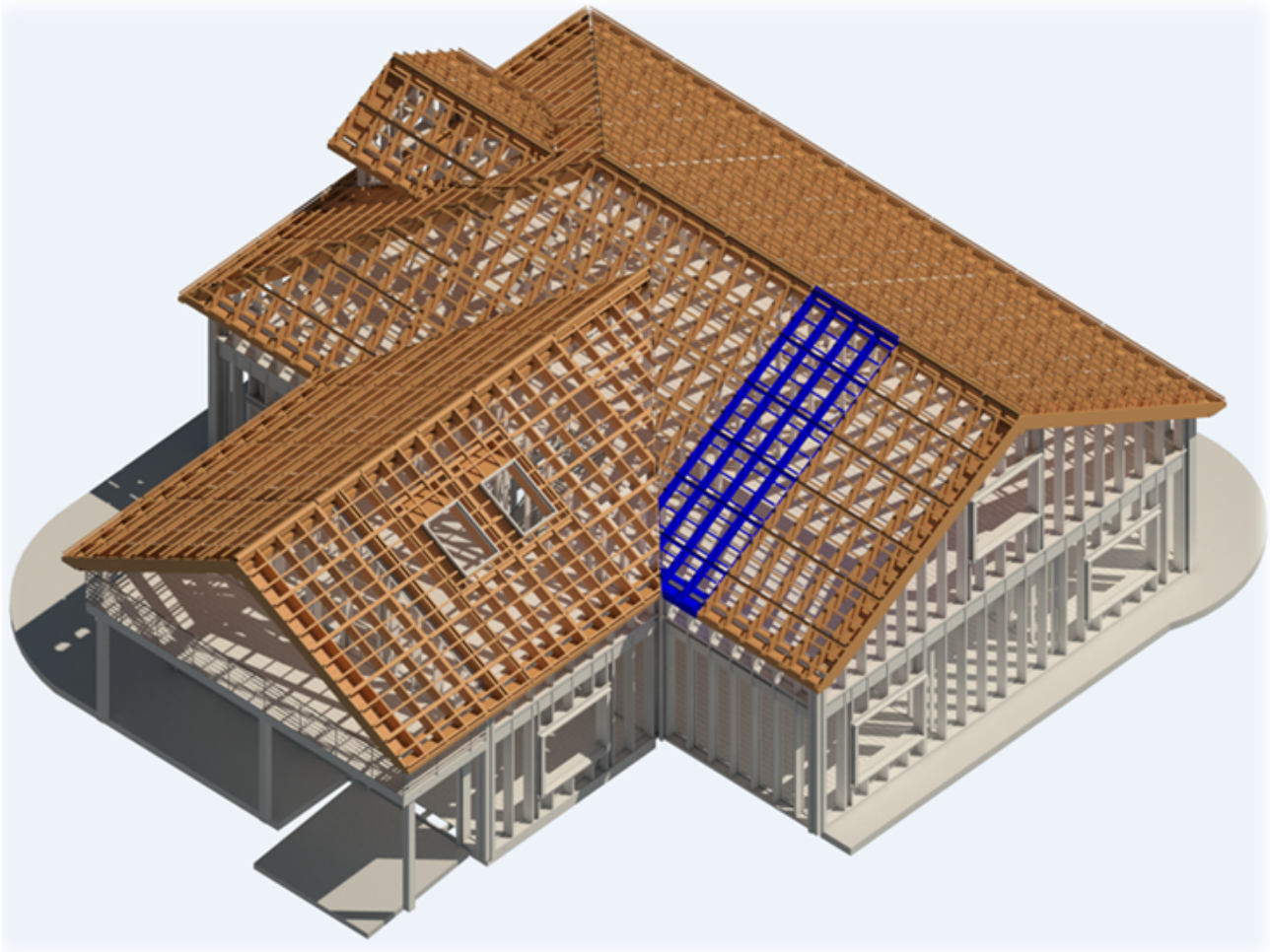
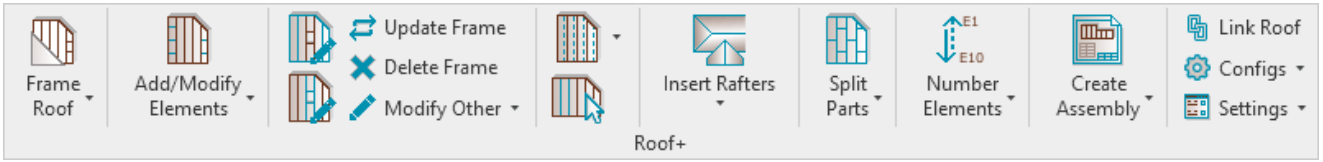
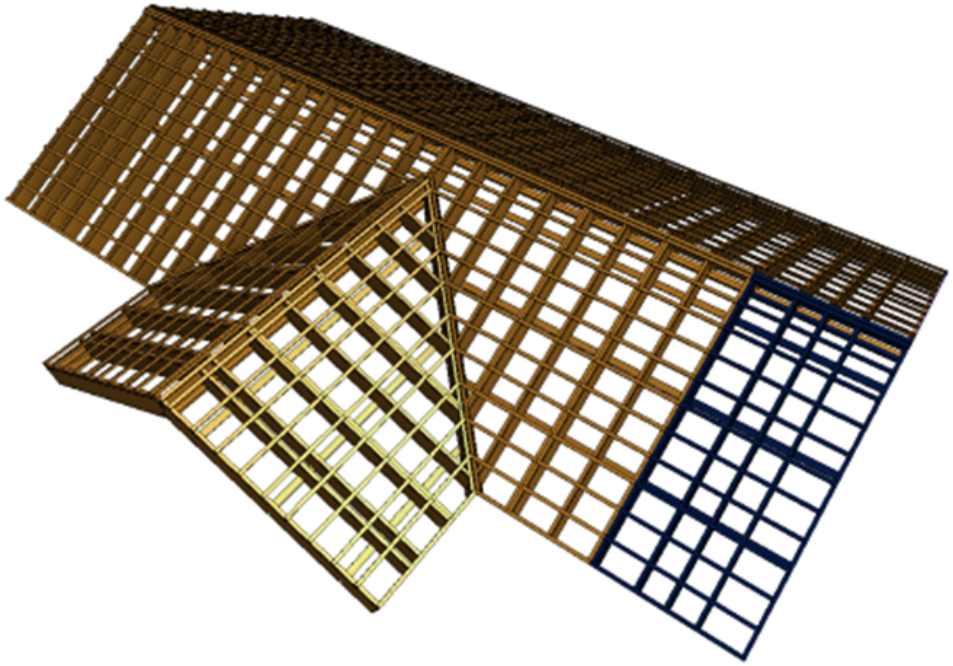
Wood Framing Roof+ application for Autodesk® Revit®

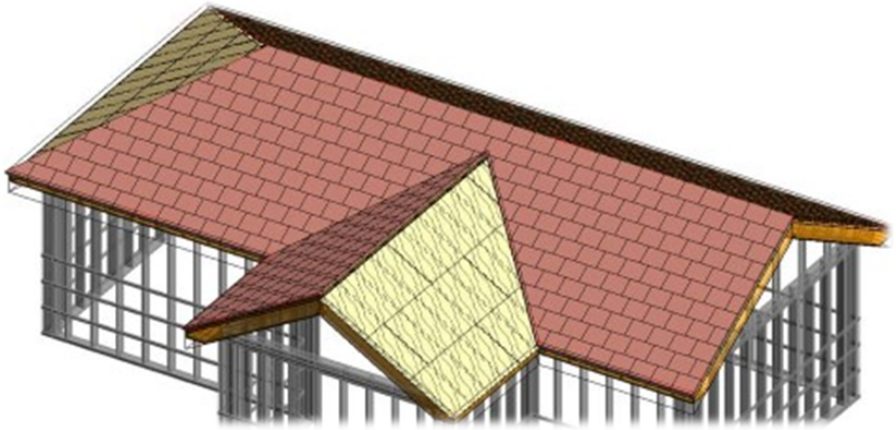
1....allows you to quickly pre-define your roof framing configuration and frame roofs in just a few easy steps;
2....is an all-in-one solution with different types of framing, from prefabricated panels to common rafters;
3....lets you edit framing manually or automatically;
4....lets you design framing with thousands of possible configurations;
5....prepares shop drawings in just a few clicks;
6....**saves vast amounts of time**.



Wood Framing Roof+ enables quick and easy creation of prefabricated wood framing for roofs in Revit® models. Powerful features simplify creation of roof joists, battens, valley joists, roof boards, and more. The software automates shop drawings, including the sorting, tagging, dimensioning, and scheduling of all frames.







Recommended workflow

1. Build a model using Revit **Roof** functionality
2. Create roof types with layers → assign materials
3. Split roofs into prefabricated segments using **Roof Panel Layout** (http://www.aga-cad.com/products/bim-solutions/roof-panel-layout)
4. **Roof+** → **Settings** → **Load Families**
5. **Roof+** → **Configs** → define **Framing Configuration**
6. **Roof+** → map roof types with framing configuration using **Link Roof**
7. **Roof+** → frame roof panels
8. **Roof+** → **Number Elements** → number roofs using **Number Roofs**
9. **Roof+** → number framing elements using **Number Elements**
10. **Roof+** → **Configs** → define **Drawing Configuration**
11. **Roof+** → make shop drawings for one roof using **Create Assembly**
12. Add shop drawing views into the sheet for one roof and save it as a template for future roof segments
13. **Roof+** → make shop drawings for other roof segments

Best practices for making roofs in Revit

Roof structure should be layered out the way the parts of the framing will be modeled, e.g.

1. Roofing
2. Battens
3. Secondary Frame
4. Sheathing
5. Main Frame
6. Sheathing

Layers

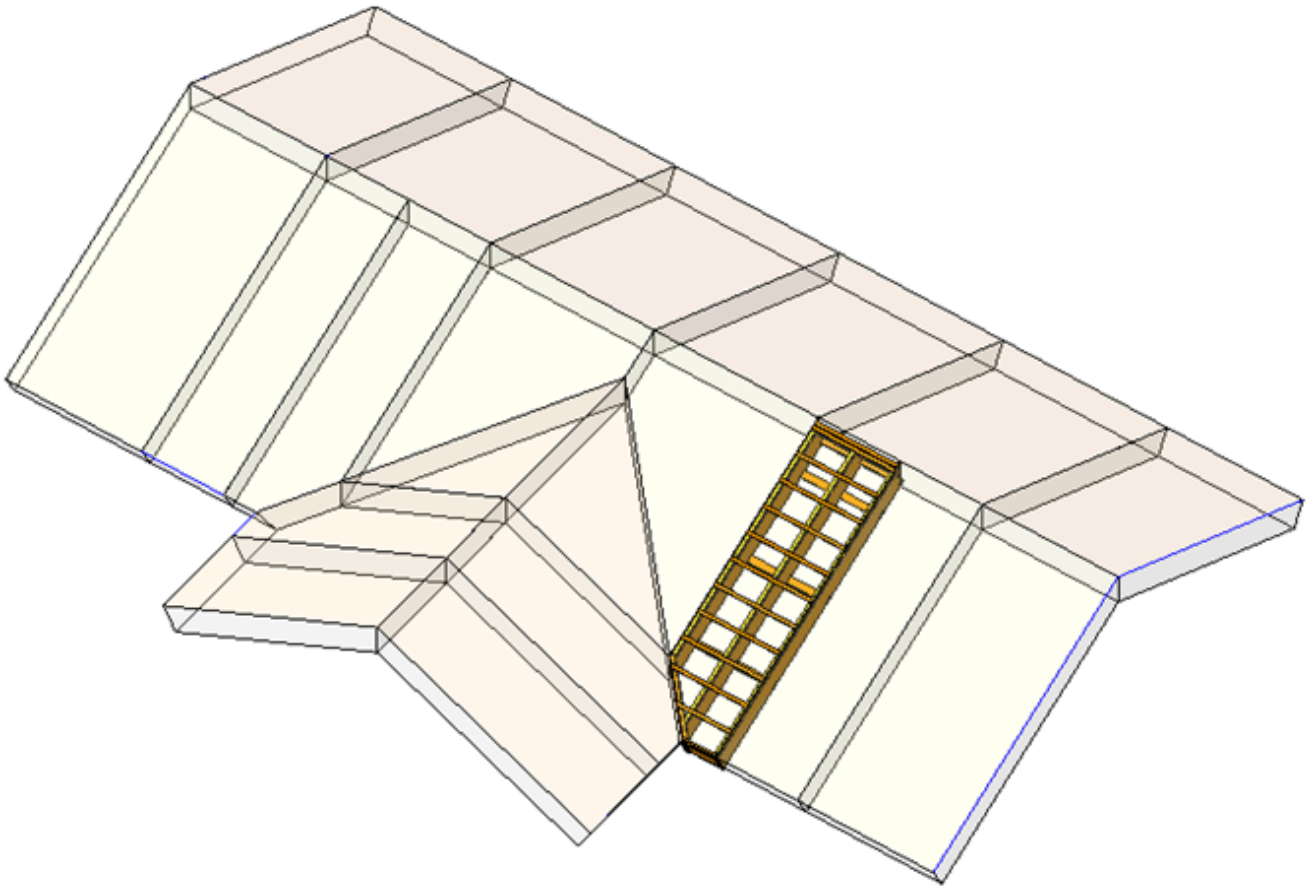
	Function	Material	Thickness	Wraps	Variable
1	Finish 2 [5]	Roofing	1.00	☐	☐
2	Finish 2 [5]	Wood - Cherry	1.50	☐	☐
3	Finish 1 [4]	Wood - C24	1.50	☐	☐
4	Substrate [2]	Wood - Sheathing - particleboard/ OSB	0.50	☐	☐
5	**Core Boundary**	**Layers Above Wrap**	**0.00**		
6	Structure [1]	Structure - Wood Joist/Rafter Layer	11.25	☐	☐
7	**Core Boundary**	**Layers Below Wrap**	**0.00**		
8	Finish 1 [4]	Wood - Sheathing - plywood	0.50	☐	☐

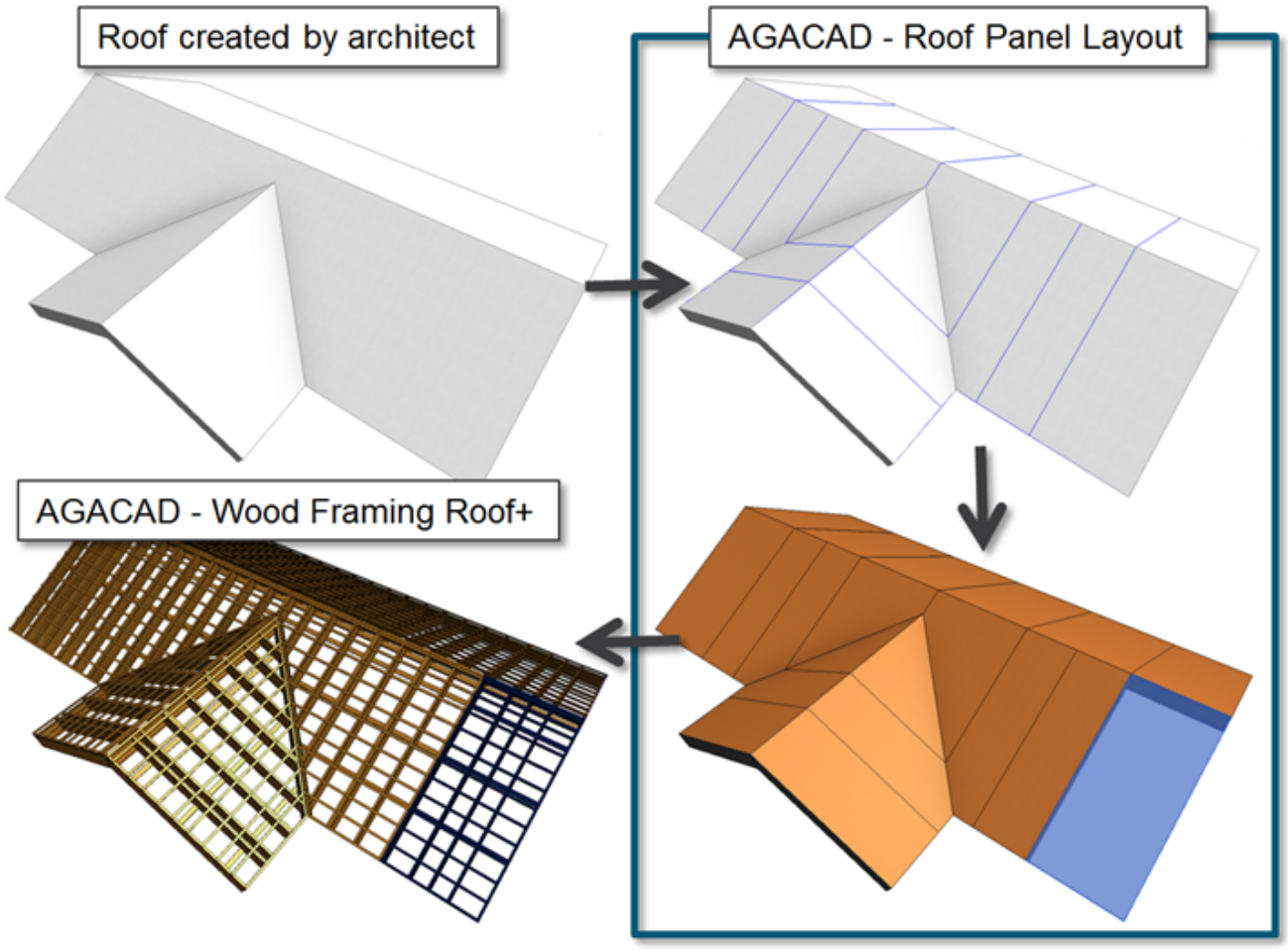
Materials for every layer are mandatory.

Roof splitting:
• **Roof+** is capable of making frames for both: on-site and modular roof framing. Splitting defines the modules of roof.

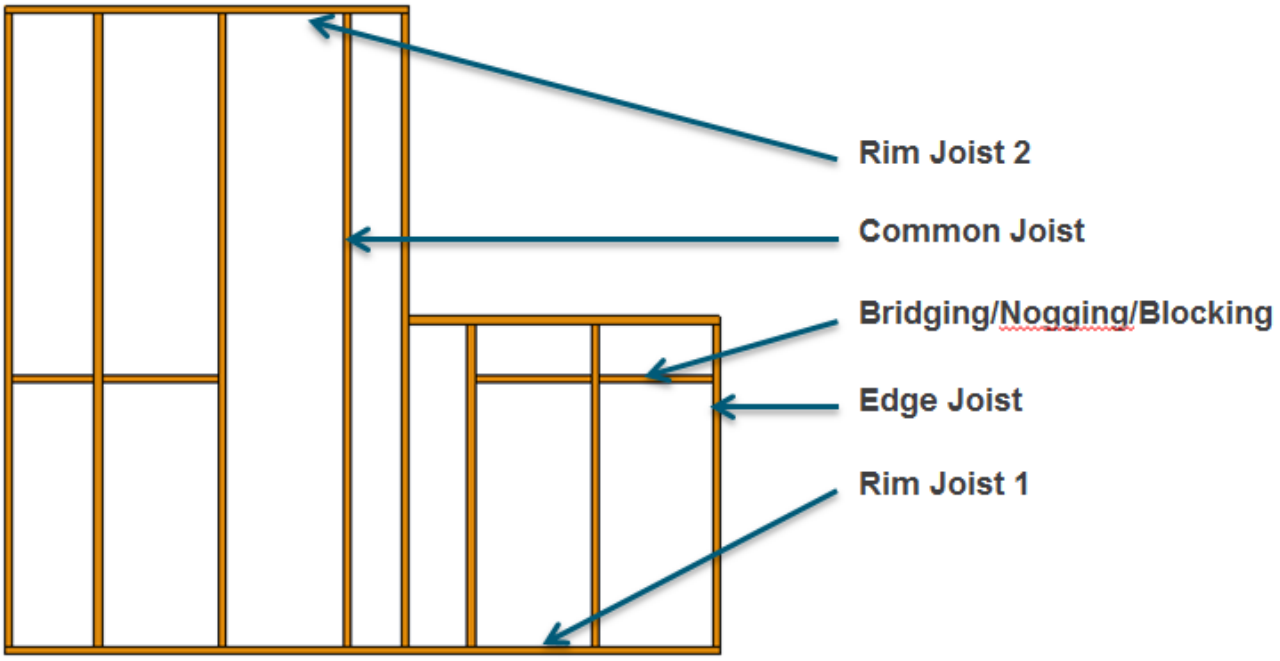
• To define panels of framing you should use **Roof** (http://www.aga-cad.com/products/bim-solutions/roof-panel-layout)**Panel Layout** (http://www.aga-cad.com/products/bim-solutions/roof-panel-layout).

Roof Panel Layout is a powerful solution for prefabricated roof panels in Revit®. It enables easy roof panel planning and splitting into segments for prefabrication, which can then be used in the roof framing process.





Main framing elements


Rim Joist 2
Common Joist
Bridging/Nogging/Blocking
Edge Joist
Rim Joist 1