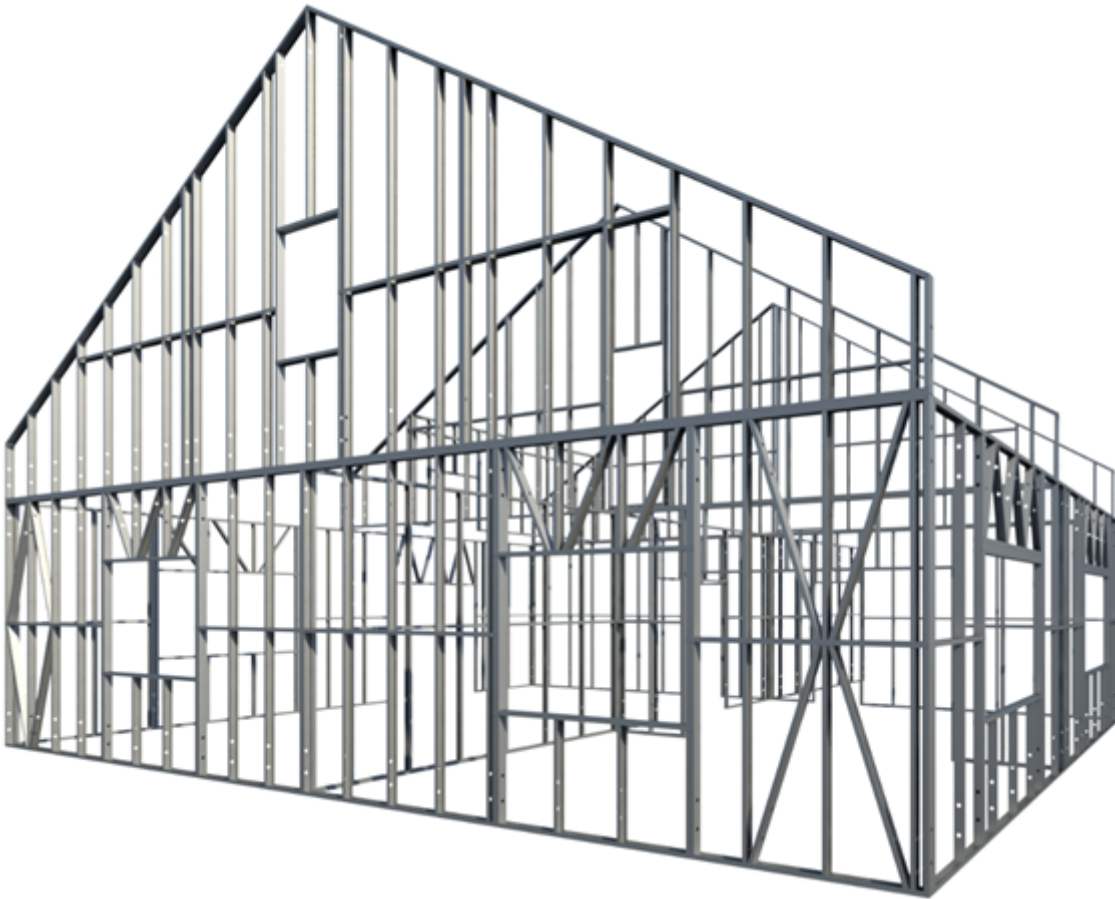


# INTRODUCTION

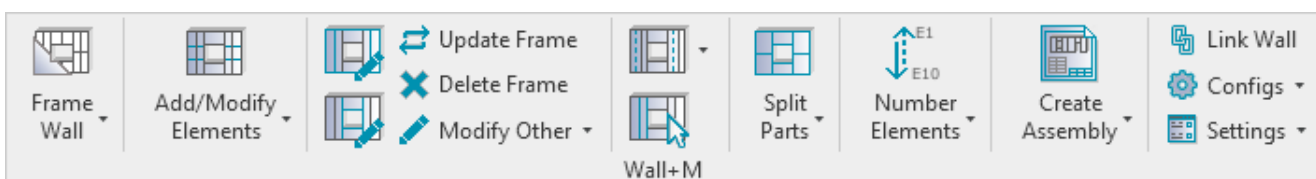
Modified on: Thu, 29 Aug, 2019 at 7:47 PM

## Metal Framing Wall+ application for Autodesk® Revit®

- 1....allows you to quickly pre-define your wall framing configuration and frame walls in just a few easy steps;
- 2....configuration procedure supports both C+C and C+U framing types;
- 3....lets you edit framing manually or automatically;
- 4....lets you design framing with thousands of possible configurations;
- 5....makes sheathing layouts;
- 6....prepares shop drawings in just a few clicks;
- 7....suitable for residential and multi-stored houses;
- 8....**saves vast amounts of time.**

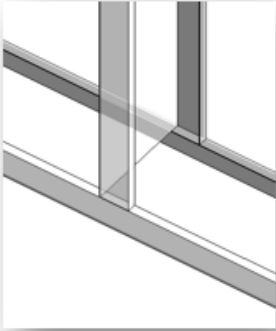


**Metal Framing Wall+** gives Revit® users a one-stop full-power platform for the whole metal stud walls – from the auto-design of light gauge steel framing, with clash detection and real-time take-offs, to shop drawings and cut lists. Solution supports both **C+C** (incl. **C+C Chamfered**), **C+U** (incl. **C+U Special**) and **U+U** framing systems.

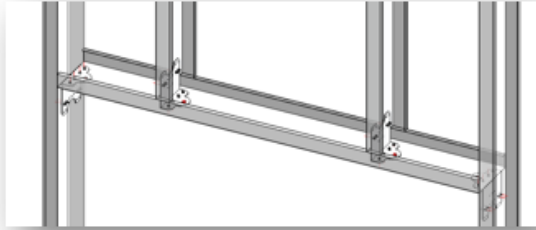


### C+C system samples

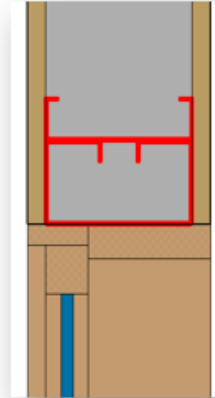
C+C stud and bottom plate (3D view):



C+C simple header (3D view):

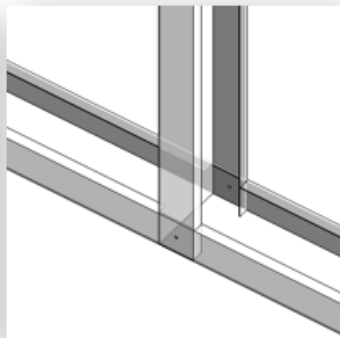
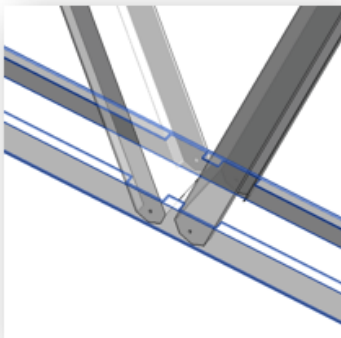


C+C complex header (Section view):

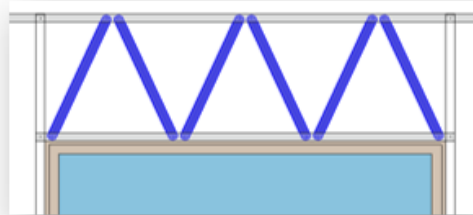


### C+C Chamfered system samples

C+C with cuts and chamfered ends if needed (3D view):

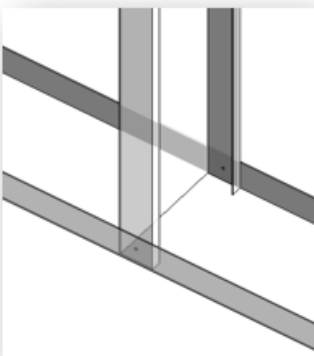


C+C Chamfered warren diagonal cripples above the window (Front side view):

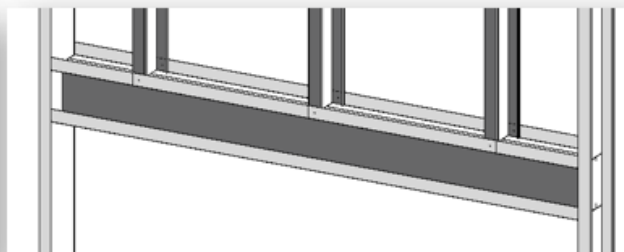


### C+U system samples

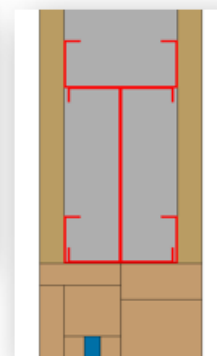
C+U stud and bottom track (3D view):



C+U window header (3D view):



C+U window header (Section view):

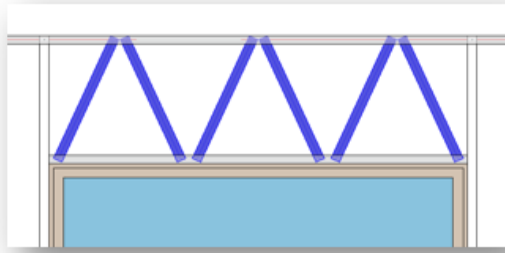


### C+U Special system samples

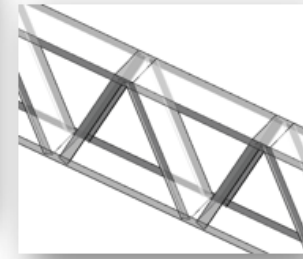
C+U Special window header (3D view):



C+U Special warren diagonal cripples above the window (Front side view):



C+U Special warren diagonal cripples above the window (3D view):



### Best practices for making walls in Revit

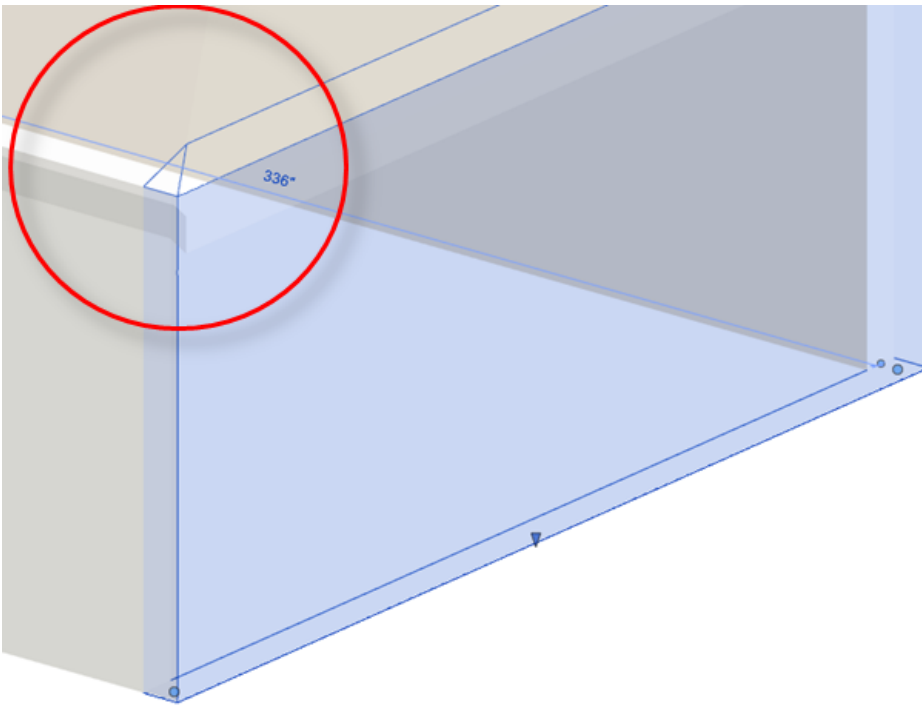
Wall structure should be layered out in the way the parts of the framing will be modeled, e.g.

1. Sheathing (top)
2. Metal Secondary Framing
3. Metal Framing
4. Sheathing (bottom)

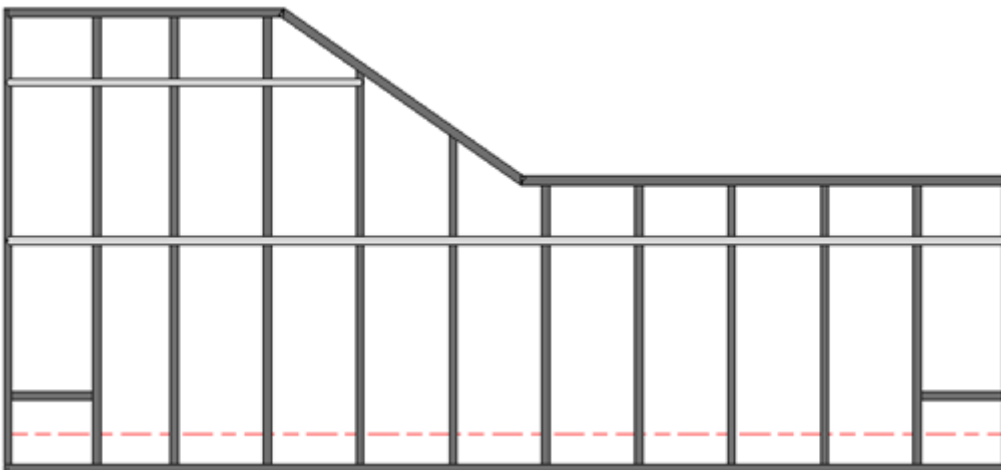
Layers					
EXTERIOR SIDE					
	Function	Material	Thickness	Wraps	Structural Material
1	Finish 1 [4]	Wood Sheathing, Chipboard	16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Substrate [2]	Metal Stud Layer for secondary frame	107.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	<b>Core Boundary</b>	<b>Layers Above Wrap</b>	<b>0.0</b>		
4	Structure [1]	Metal Stud Layer	107.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	<b>Core Boundary</b>	<b>Layers Below Wrap</b>	<b>0.0</b>		
6	Finish 1 [4]	Wood Sheathing, Chipboard	16.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INTERIOR SIDE					

Materials for every layer are mandatory!

Avoid abnormal wall forms which sometimes occur when a wall is attached to a roof:

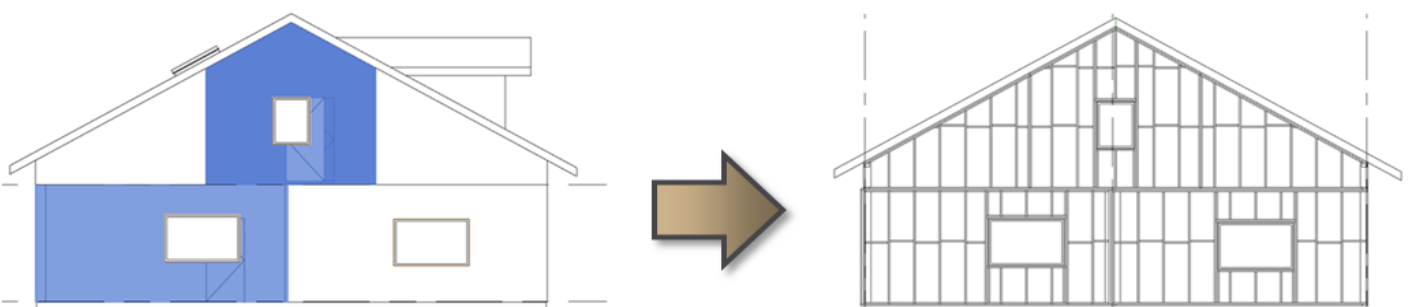


Walls have to be modeled according to your framing needs. **Wall+M** has the ability to frame sloped walls, but sides of a wall should always be vertical, as it is in real life:



#### Wall splitting:

- **Wall+M** is capable of making frames for both on-site and modular wall framing. Splitting defines the modules of the wall.
- To define framing panels, maximum height of studs, maximum length of sidings, etc., you should split the wall where you want your framing to end.
- Walls should be split straight vertically or horizontally.
- After splitting horizontally, the newly created wall has to be aligned with the levels which it represents.



### Knee Walls:

- If a wall is attached to the roof, then the framing adapts to the slope of the roof.
- Exterior walls have to remain horizontal for placing structural elements, e.g. girders

### *Note:*

*For knee walls to work as expected, wall function has to be set to Exterior.*

*If wall is left unattached to roof, the top plate of that wall will always be horizontal.*