

Manually Drawing Framing Members

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The information in this article applies to:



QUESTION

When I am manually drawing framing, I encounter one of the following messages:

- "#272003050 - Could not create a roof rafter at this location because no roof planes were found. Would you like to create a general framing member instead?"
- "#272003051 - Could not create a roof beam at this location because no roof planes were found."
- "#272003052 - Could not create roof blocking at this location because no roof planes were found."
- "#272003053 - Could not create a roof truss at this location because no roof planes were found."
- "#272003054 - Could not create a floor or ceiling joist at this location because no appropriate platform was found."
- "#272003055 - Could not create a floor or ceiling beam at this location because no appropriate platform was found."
- "#272003056 - Could not create a floor or ceiling truss at this location because no appropriate roof and ceiling planes were found."
- "#272003057 - Could not create floor or ceiling blocking at this location because no appropriate platform was found."
- "#272003058 - Could not create a roof purlin at this location. No roof plane found with a purlin layer or purlin cannot be created at this orientation."

Why is this happening and what should I do?

ANSWER

These messages may display if you try to draw a framing member at a location other than inside of a structural component that it is meant to frame - for example, if you try to draw a joist outside of a floor or ceiling platform.

Manually drawing framing members

The Floor/Ceiling Framing Tools can only be used to draw objects that are located within floor or ceiling platforms defined by rooms. These tools are:

- **Joist** 

Joists are always drawn as the ceiling framing for the current floor. The presence of a floor platform above will determine if a floor or ceiling joist is drawn.

- If there is no floor platform above, a ceiling joist is drawn.
- If there is a floor platform above, a floor joist is drawn.

- **Joist Blocking** 

Each run of blocking will behave as a single object and is drawn in by dragging in a straight line within a floor or ceiling platform. The blocking is based on what is specified in the framing defaults.

- **Floor/Ceiling Truss** 

Floor and ceiling trusses can only be drawn manually in plan view. Like joists, the presence of a floor platform above will determine if a floor or ceiling truss is drawn.

- **Floor/Ceiling Beam** 

Beams can be drawn in two different ways:

- **Under Joists** places the beam underneath the joists so the joists can bear on it.
- **With Joists** places the top of the beam even with the tops of joists it supports. The joist then butts against it.

Similarly, the Roof Framing Tools can only be used to draw objects that are located within roof planes. These tools are:

- **Rafter** 

Rafters are drawn within roof planes in a straight line and can be edited like other framing members, except that you cannot set the height. If a rafter is moved, its height and slope are automatically reset to fit under the roof plane at its new position.

- **Roof Blocking** 

Roof blocking is automatically generated in the eaves if a soffit is not present; otherwise, blocking is drawn

manually. It is drawn perpendicular to the rafters at the same pitch based off your framing defaults.

Each run of blocking behaves as a single object but has gaps where it crosses rafters, trusses or other blocking. In 3D, roof blocking is tilted to follow the pitch of the roof plane in which it is drawn.


- **Roof Truss** 

Roof trusses can be automatically generated or drawn manually, and can only be created where a roof and ceiling are already present.

- **Girder Truss Line*** 

**Available in Chief Architect Premier X16 and newer versions.*


Girder truss lines allow you to divide a roof plan into separate areas for the purpose of controlling truss layout and also cause Girder Trusses to generate along their length when trusses are automatically generated.

In order to have an effect, a Girder Truss Line must be drawn so they span an entire roof area, from eave to eave. A Girder Truss Line can also be drawn between two other Girder Truss Lines or between a Girder Truss Line and an eave. If a Girder Truss Line not properly positioned, a non-suppressible Caution  symbol will display over it.

- **Roof Truss Direction*** 

**Available in Chief Architect Premier X16 and newer versions.*

Roof truss direction lines allow you to define the direction that roof trusses run in particular sections of a roof plan, as well as customize some of their attributes.

In order to have any effect, a Roof Truss Direction line must be drawn within the area of one or more roof planes. If a Roof Truss Direction Line is positioned outside of such an area, a non-suppressible Caution  symbol will display over it. To avoid unexpected results, only one Roof Truss Direction line should be present in a given roof area.

- **Roof Beam** 

Roof beams are normally drawn across rafters and placed directly underneath them.

- **Roof Purlin*** 

**Available in Chief Architect Premier X13 and newer versions.*

Roof purlins can be both drawn manually and generated automatically. In order to create purlins, they must be drawn:

- Within a roof plane that has a Purlins layer defined in its **Roof Surface** or **Roof Structure Definition**.
- Perpendicular to the pitch of the roof plane.

Additional General Framing tools are available, including:

- **General Framing** 

General framing objects are generic, framing members that can be drawn outside a floor or ceiling platform or roof plane. When using this tool in a plan view, a horizontal framing member is created. When using this tool in a Wall Detail, vertical members are created.

- **Blocking/Wall Bridging*** 

**Available in Chief Architect Premier only.*

Blocking, or wall bridging, can be created both automatically and manually, but can only be drawn manually in a Wall Detail. When a Wall Detail is open, select this tool, then click and drag in a straight line across the wall in the view.

Each run of bridging has gaps where it crosses studs, but behaves as a single object.


Automatic wall bridging can be created when wall framing is built or rebuilt.

Blocking can also be added to trusses in the Truss Detail. This is particularly useful for adding horizontal blocking to roof End Trusses.

- **Post** 

Posts can only be placed manually.

- **Post with Footing** 

Posts can also be created with footings beneath them. Post footings are **Slab**  objects and can be selected independent of their posts.

- **Framing Reference Marker** 

Framing reference markers are manually-placed reference points that specify how automatically-generated framing is laid out. Please see your program's Help documentation to learn more.


- **Bearing Line** 

Bearing lines direct the program to lap or butt joists and/or rafters where they cross the line instead of spanning from wall to wall, and can only be drawn in plan view.

- **Joist Direction** 

Joist direction lines define the direction in which joists run in a floor or ceiling platform and can only be drawn in plan view. You must click and drag within a defined floor or ceiling platform when using this tool.

Related Articles

 [General Framing Guidelines \(https://www.chiefarchitect.com/support/article/KB-00465/general-framing-guidelines.html\)](https://www.chiefarchitect.com/support/article/KB-00465/general-framing-guidelines.html)

