

Specifying the Depth of Floor Joists

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The information in this article applies to:



QUESTION

How do I set the joist depth for one particular room?




ANSWER

Floor platform structure is specified on a floor-by-floor basis in the Framing Defaults/Build Framing dialog. You can also specify floor structure information on a room-by-room basis in the Room Specification dialog.

In addition, you can also specify the depth of an individual floor or ceiling joist in its specification dialog; however, resizing a joist in this manner will not affect the space allotted for it in the floor or ceiling platform that it is located in.

It is recommended that you specify all structural information, including floor and ceiling heights and platform thicknesses, before you build a roof or generate framing.

To specify joist depth for an entire floor

1. Select **Edit> Default Settings**  from the menu, click on **Framing** in the list to highlight it, then click the **Edit** button.
2. In the **Framing Defaults** dialog for the current floor:

Framing Defaults

Foundation

- ☐ Automatically Build Floor and Ceiling Framing
- ☐ Use Framing Reference

Ceiling Above Foundation

Ceiling Structure: 5 1/2" ☒ Default

Spacing: 16" On Center

Joist Width: 1 1/2"

Bear on Beams: ☒ Lap
☐ Butt over Support

Blocking: ☒ In Line
☐ Stagger
☐ Cross/Bridging

Subfloor for Floor 1

Floor Structure: 12 5/8" ☒ Default

Spacing: 16" On Center

Joist Width: 2 1/2"

☒ Rim Joist

Rim Joist Width: 1 1/8"

☐ Max Rim Joist Length: 144"

Rim Joist Type: LVL

Bear on Beams: ☒ Lap
☐ Butt over Support



Blocking: ☒ In Line
☐ Stagger
☐ Cross/Bridging

- The floor framing information for each floor is specified on the panel for the floor below.

For instance, to specify the floor framing defaults for Floor 2, select the FOUNDATION panel.

- When you are satisfied with your settings, click **OK** to close this dialog, then click the **Done** button to close the Default Settings dialog, as well.
3. When you build floor framing for the current floor, all floor joists will have the depth that you specified above.

To specify joist depth for an individual room

1. Click the **Select Objects**  button, then click in an empty space in a room to select it.
2. Click the **Open Object**  edit button, and on the **STRUCTURE** panel of the **Room Specification** dialog:
 - Click **Edit** next to **Floor Structure**.

Room Specification

General
Structure
 Deck
 Deck Support
 Moldings
 Wall Covering
 Fill Style
 Materials
 Components
 Schedule

Absolute Elevations

Floor Above: 121 3/4"

Ceiling: 109 1/8"

Floor: 0"

Floor Below: -46 1/8"

Relative Heights

Rough Ceiling: 109 1/8"

Finished Ceiling: 107 5/8"

SWT To Ceiling: 109 1/8"

Ceiling Below: 33 1/2"

Stem Wall: 37 1/2"

SWT = Stem Wall Top

Ceiling

☒ Roof Over This Room

☒ Flat Ceiling Over This Room

☐ Shelf Ceiling

☐ Use Soffit Surface for Ceiling

Ceiling Structure: 5 1/2" ☒ Default

Ceiling Finish: 5/8" ☒ Default

Floor

☒ Floor Under This Room

☐ Floor Supplied by the Foundation Room Below

☐ Monolithic Slab Foundation

☒ Build Foundation Below

☐ Raised Floor For Bump Out

☐ Retain Floor/Ceiling Framing

Slab Pour Number / Framing Group: 1

Floor Finish: 7/8" ☒ Default

On Structure Resize: ☒ Lock Floor Top ☐ Lock Floor Bottom



Floor Structure: 12 5/8" ☒ Default

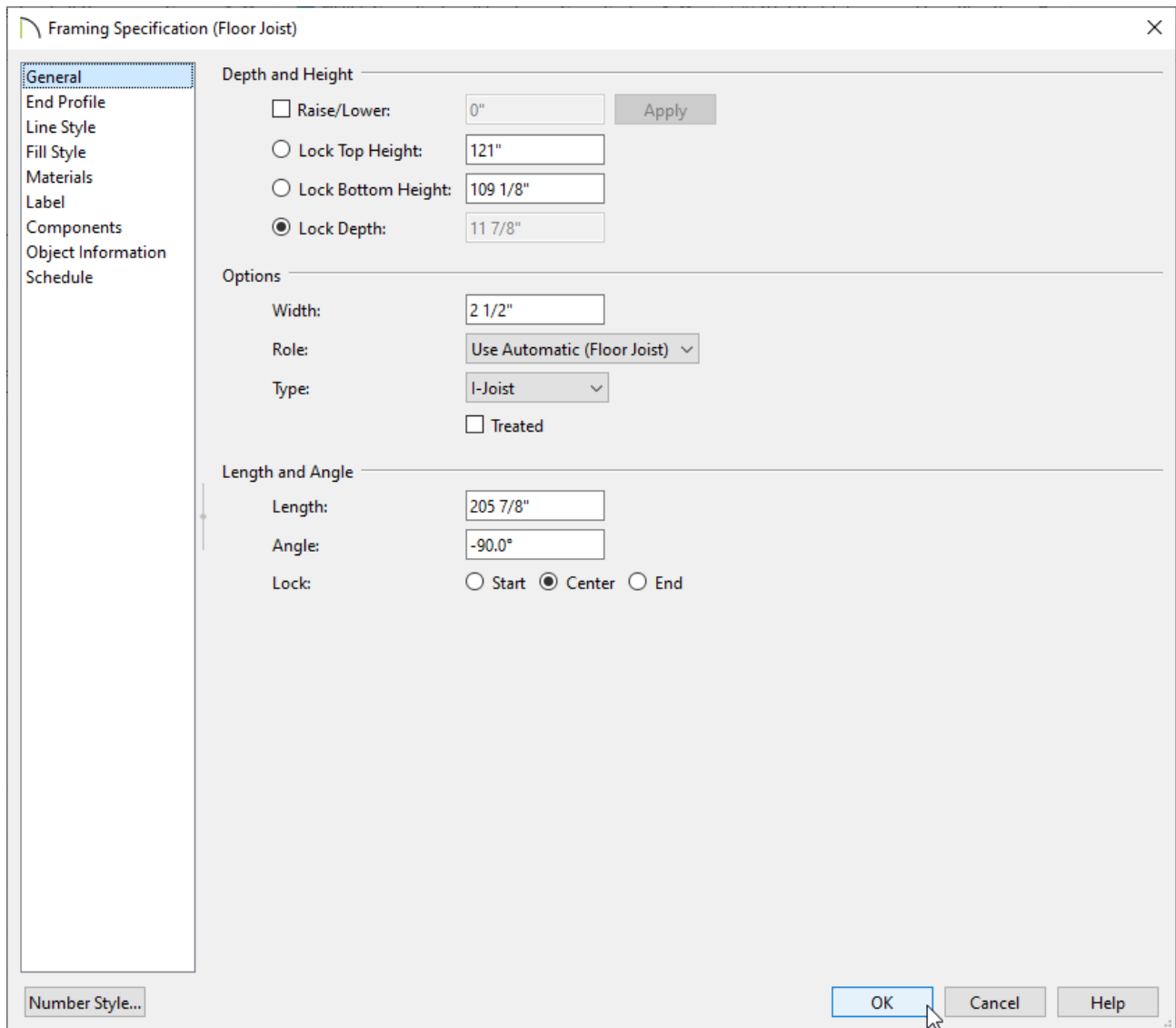
- In the **Floor Structure Definition** dialog, change value for Layer 2: (the Fir Framing layer) Thickness.
- Click **OK** to close the dialog and apply your change.

3. When you build floor framing for the current floor, the floor joists in this room will have the depth that you specified rather than the default depth.

To specify the depth of an individual joist

When a joist is generated automatically or drawn manually, it's initial depth will be based on the default joist depth for the current floor or the depth specified for an individual room on that floor. Once a joist is created, you can edit its depth in the **Framing Specification (Floor Joist)** dialog. Bear in mind, though, that it may not fit within the platform that it was placed in.

1. Click the **Select Objects**  button, then click on a joist to select it, then click the **Open Object**  edit button.
2. On the **GENERAL** panel of the **Framing Specification (Floor Joist)** dialog:



Framing Specification (Floor Joist)

General

Depth and Height

- ☐ Raise/Lower: 0"
- ☐ Lock Top Height: 121"
- ☐ Lock Bottom Height: 109 1/8"
- ☒ Lock Depth: 11 7/8"

Options

- Width: 2 1/2"
- Role: Use Automatic (Floor Joist) ▾
- Type: I-Joist ▾
- ☐ Treated

Length and Angle

- Length: 205 7/8"
- Angle: -90.0°
- Lock: ☐ Start ☒ Center ☐ End

Number Style...

OK Cancel Help

- Uncheck **Raise/Lower**.

- Move the radio button next to Lock to the Depth field.
- Specify the desired Top Height and Bottom Height Values to create the desired Floor Joist depth
- Click **OK** to apply the changes.

Related Articles

- 📄 [Changing Joist Directions \(/support/article/KB-02932/changing-joist-directions.html\)](/support/article/KB-02932/changing-joist-directions.html)
- 📄 [Creating and Using a Plan Template \(/support/article/KB-00463/creating-and-using-a-plan-template.html\)](/support/article/KB-00463/creating-and-using-a-plan-template.html)



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