Manually Modifying Deck Framing

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The information in this article applies to:



QUESTION

I need to manually modify deck framing that Chief Architect created in my plan. What are my options?



ANSWER

When a room is defined as a Deck in Chief Architect, framing is generated automatically. This is a fast way to generate posts, beams, joists and planking, but sometimes manual modifications may still need to be made.

In this article, we will cover the following topics:

- <u>Creating the initial structure</u>
- <u>Adjusting deck planks</u>
- Adjusting deck joists
- Adjusting deck beams
- Adjusting deck posts and footings
- Adding end profiles

Note: Chief Architect is not an engineering program and will not calculate loads or other important structural considerations. Always have your designs approved by a licensed engineer before building.

To create the initial structure

- 1. Select **File> New Plan** 🗋 to open a new, blank plan.
- 2. Select **Build> Wall> Straight Exterior Wall** a , then draw exterior walls forming a perimeter, making sure to create a fully enclosed space.
- 3. Select **Terrain> Create Terrain Perimeter a** to create a flat terrain pad.
- 4. Next, navigate to **Terrain > Terrain Specification F** from the menu.
- 5. On the **G**ENERAL panel of the **Terrain Specification** dialog that displays, remove the check from the **Automatic** box beside Subfloor Height Above Terrain, change the

Subfloor Height Above Terrain value, then click OK.

- 6. Select **Build> Floor > Build Foundation** III to open the **Build Foundation** dialog.
- 7. On the FOUNDATION panel, select **Walls with Footings** as the Foundation Type, specify the **Minimum Height** under the Stem Wall section, then click **OK**.

For information on creating a walkout basement in sloping terrain, please see the <u>Related Articles</u> section below.

Go Up One Floor to Floor 1, select Build> Railing and Deck> Straight Deck
 Railing and draw railings to enclose one or more Deck rooms attached to the structure.

Note: If a Deck is drawn on Floor 1 and a foundation is present, the deck framing will be drawn on Floor 0. If no Floor 0 is present, the deck framing will be created on Floor 1.

9. Using the **Select Objects** tool, click in an empty space in the Deck room to select it, then click the **Open Object** edit button.



10. On the DECK panel of the **Room Specification** dialog that opens, uncheck **Automatically regenerate deck framing**, then click **OK**.



Note: Grayed out options on this panel indicate that the Room Type is set to something other than a Deck. For framing to generate, define the room as a Deck, click OK, then open the room back up to specification to disable the setting mentioned in this step.

To adjust deck planks

1. With the **CAD> Lines> Draw Line** / tool, create a line at the corner where the miter should be.

In X12 and prior versions, framing ends will be square even if trimmed on an angle.

- 2. Select the CAD line and click the **Trim Object(s)** 🚧 edit button.
- 3. Click and drag a temporary line, or fence, that runs through the deck planks on one

side of the miter CAD line.

In X14 and newer versions, the deck planks will highlight for the portion that will be kept after trimming.



4. When you release the mouse button, the ends of the planks will be trimmed back to the inside edge of the CAD line.



- 5. Repeat these steps for any other areas where the planks need to be mitered, and use the edit handles to extend the length of the planks as necessary.
- When you are finished, you can select **3D> Create Perspective View> Full Camera** to see the results.

To adjust deck joists

1. Select one or multiple joists with **Select Objects** \mathbf{k} .

Hold down the Shift key on your keyboard and click on another framing member to add it to the selection set. For more information on group selecting objects, please see the <u>Related Articles</u> section below.

2. Click **Edit> Delete** X or the **Delete** key on your keyboard to remove the joists that aren't necessary.

- 3. With the joists still selected, use the edit handles to change their location.
- Click on Open Object To adjust the Bottom Height, Depth, Width, Role*, and Type.

*Only available in X14 and newer program versions.

Framing Specification	on (Deck Joist)				×
General	Depth and Height				
End Profile	Raise/Lower:	0"	Apply		
Fill Style	Ock Top Height:	-1 1/8"			
Materials Label	O Lock Bottom Height:	-8 3/8"			
Components	O Lock Depth:	7 1/4"			
Schedule	Options				
	Width:	1 1/2"			
	Role:	Use Automatic (Dec	:k Joist) \vee		
	Туре:	Lumber 🗸 🗸			
		✓ Treated			
	Length and Angle				
	Length:	97 1/4"			
	Angle:	-90.0°			
	Lock:	○ Start	O End		
Number Style				OK Can	cel Help

- 5. Select the beam and click the **Trim Object(s)** address edit button. These steps also work with a CAD line.
- 6. Click and drag a temporary line, or fence, that runs through the joists where they

extend into the beam.

In X14 and newer versions, the deck joists will highlight for the portion that will be kept after trimming.



7. When you release the mouse button, the ends of the joists will be trimmed back to the inside edge of the beam.



When you are finished, you can select **3D> Create Perspective View> Full Camera** to see the results.

To adjust deck beams

- 1. Using the **Select Objects** \geqslant tool, click on a beam that runs under the Deck room.
- 2. Click the **Delete** is edit button or press the **Delete** key on your keyboard to remove this beam.

- 3. With the beam still selected, use the edit handles to change its location.
- 4. Click the **Open Object** edit button, and on the **GENERAL** panel of the **Framing Specification** dialog that displays:

Framing Specification	on (Deck Beam)	×
General	Depth and Height	
End Profile	Raise/Lower:	0" Apply
Fill Style	Ock Top Height:	-8 3/8"
Materials	O Lock Bottom Height:	-15 5/8"
Components	O Lock Depth:	7 1/4"
Object Information Schedule	Options	
	Width:	3 1/2"
	Role:	Use Automatic (Deck Beam) 🗸
	Туре:	Lumber V
		Bearing Beam
		☑ Treated
	 Length and Angle 	
	Length:	332 7/16"
	Angle:	-0.0°
	Lock:	○ Start
	Concrete Beam Options	
	Rebar Size (#):	5
	Rebar Count:	4
	Rebar Extensions:	20"
	Stirrup Size (#):	3
	Stirrup Count:	8
	Stirrup Overlap:	5"
Number Style	_	OK Cancel Help

• Change the **Top/Bottom Height** and **Depth**.

Use the different **Lock** radio buttons to keep that field from changing as the other ones are adjusted.

- Change the **Width** to your liking.
- Change the **Type** and **Role***.

*Only available in X14 and newer program versions.

• Click **OK** to close the dialog and apply your changes.

The new beam is resized concentrically from the centerline outward, so it may have to be moved to compensate any changes.

To edit posts and footings

- 1. Using the **Select Objects** \geqslant tool, click on one of the posts to select it.
- 2. With the post selected, click the **Delete** 🔀 button or the **Delete** key on your keyboard.
- 3. Repeat step 1 and 2 for any footings that need to be removed.
- 4. Select any posts that need to be edited and select the **Open Object [**] edit button.
- 5. On the **GENERAL** panel of the **Framing Specification** dialog:

☐ Framing Specification	on (Deck Post)		×
General	Post Height		
End Profile	Raise/Lower:	0" Apply	
Fill Style	Ecck Top Height:	-15 5/8"	
Label	O Lock Bottom Height:	-30"	
Components Object Information	○ Lock Total Height:	14 3/8"	
Schedule	Options		
	Role:	Use Automatic (Deck Post) $$	
	Туре:	Lumber ~	
		Show Cross	
		✓ Treated	
	Size/Orientation		
	Width 1:	3 1/2"	
	Width 2:	3 1/2"	
	Angle:	-0.0°	
	Concrete Post Options		
	Rebar Size (#):	5	
	Rebar Count:	4	
	Rebar Extensions:	20"	
	Stirrup Size (#):	3	
	Stirrup Count:	8	
	Stirrup Overlap:	5"	
Number Style		OK Cancel Help	

• Set the **Top Height**, **Bottom Height**, and/or **Total Height**.

Use the different **Lock** radio buttons to keep that field from changing as the other ones are adjusted.

• Set the **Role*** and the **Type**.

*Only available in X14 and newer program versions.

- Specify both of the post **Width** values to fit your needs.
- Click **OK** to close the dialog and apply your changes.

Note: You may have to center the resized posts on to their footings again.

- In order to make sure everything is positions correctly, click on 3D> Create
 Orthographic View> Cross Section/Elevation _____.
- 7. Click where the camera view should start and drag through the deck.

8. In the view, select any framing members that are not in the correct positions and use edit handles and/or dimensions to move these members into the correct location.



To add end profiles*

*Only available in X13 and newer program versions

- 1. With **Select Objects** \geqslant , select the framing member(s) that you'd like to add end profiles to.
- 2. Click on **Open Object** and on the END **PROFILE** panel of the **Framing Specification** dialog:

Framing Specificat	ion (Deck Joist)			×
General	Molding Profiles			
End Profile	Name	Width Height		Add New
Fill Style	RT02	5 1/2" 5 1/2"		Replace
Materials				Delete
Label				Delete
Object Information				Add to Library
Schedule	Retain Aspect	t Ratio		
	Selected Profile (Options		
		Profile Rotation: 0.0°		
		Reflect Horizontal Refle	ect Vertical	/
		Stretch To Fit Framing		/
		Count Components in N	/laterials List	
	+			
				RT02
	E			
	Profile En	d: Start End	Bath	
	FIGHE		y boun	
Number Style			OK	Cancel Help
Number Style			OK	Cancel Heip

- Click the **Add New** button to select a molding profile to use at the end profile.
- Set the **Width** and **Height** of the molding profile.
- Adjust the **Profile Rotation** and/or **Reflect Vertical/Horizontal** as necessary.
- Set whether the end profile needs to be on the **Start**, **End**, or **Both**.
- Click **OK** to save your changes and close the dialog.

- Creating a Walk-out Basement (/support/article/KB-00376/creating-a-walk-outbasement.html)
- Customizing Deck Planking and Framing Automatically (/support/article/KB-00794/customizing-deck-planking-and-framing-automatically.html)
- Displaying Framing in a Cross Section/Elevation View (/support/article/KB-00017/displaying-framing-in-a-cross-section-elevation-view.html)
- Group Selecting Objects (/support/article/KB-00623/group-selecting-objects.html)
- <u>And-terrain-heights.html</u>



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