

Customizing Deck Planking and Framing Automatically

Reference Number: **KB-00794**

Last Modified: **October 15, 2021**

The information in this article applies to:



QUESTION

I would like to create a deck with angled deck planking and border planks. How can I customize deck planking and framing?



ANSWER

When a Deck room is created, the floor platform is modeled using joists, beams, posts, and planking as specified in the Deck Room Type Defaults dialog.

- If a floor is present below the one that the Deck room is created on, the framing will be created there. If needed, posts for the deck may be generated beneath any beams that are generated.
- If a floor is not present below the Deck, framing will be generated on the same floor as the room. Beams may be created but posts will not.
- Deck framing, planking, beams, posts, and footings are placed on their own respective layers, which are turned off by default in floor plan view
- In Chief Architect X13, the ability to add end profiles to framing members and the ability to use the **Trim**  and **Extend**  tools to clip framing ends at an angle was introduced. To learn more about these features, please see the [Related Articles](#) section below.

Editing deck attributes and building deck framing

1. **Open**  the Chief Architect plan in which you would like to customize deck planking or select **File> New Plan**  to open a new, blank plan.
 - In this example, a simple 10' x 10' deck is used.



2. Using the **Select Objects**  tool, click in the deck room, then click the **Open Object**  edit button.
 - In the **Room Specification** dialog, select the **DECK** panel.
 - Editing the information on this panel will control how the deck planking and joists are created.

Room Specification

General
Structure
Deck
Deck Support
Moldings
Wall Covering
Fill Style
Materials

Automatically regenerate deck framing.
 Keep deck framing after the deck room is deleted.

Deck Planking

Set plank depth in first layer of floor structure.

Plank Overhang:

Plank Width:

Plank Gap Width:

Plank Direction: Automatic

Number of Border Planks:

No Border Against Walls
 Herringbone Border Pattern
 Treated

Deck Joists

Set joist depth and type in second layer of floor structure.

Joist Width:

Joist Spacing:

Joist Direction: Automatic

Treated

- The next part of this article will describe how changing each one of these settings affects the deck.

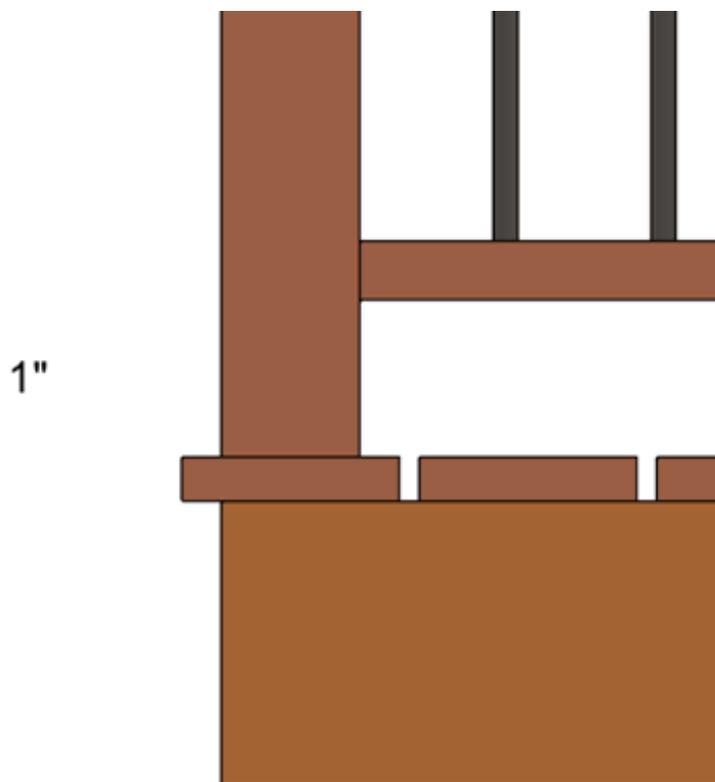
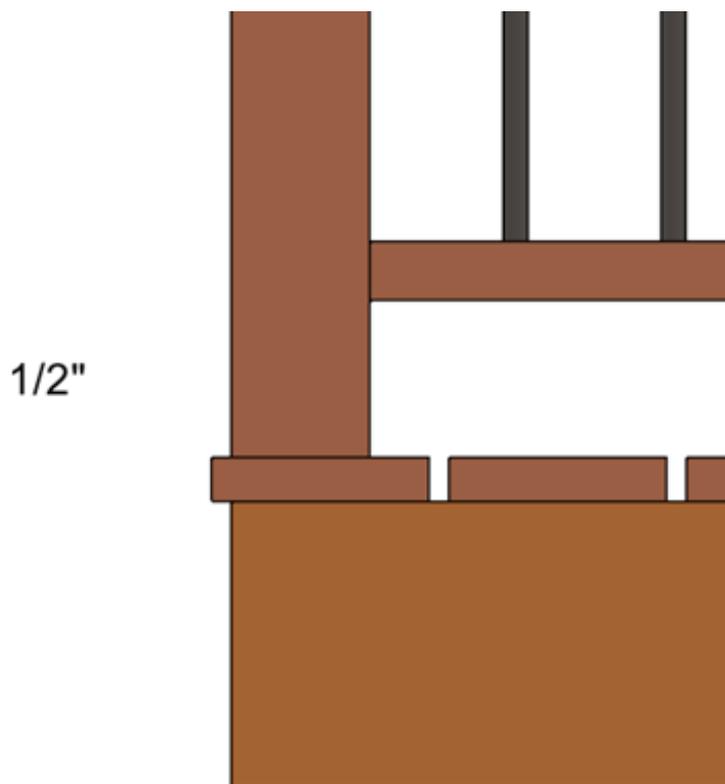
3. Once you have made the necessary changes in the dialog, click **OK**.
4. If changes are later made to the settings on the **DECK** panel of the **Room Specification** dialog, the deck framing and planking will automatically be rebuilt. To prevent this from happening, you can uncheck **Automatically regenerate deck framing**.

Deck panel settings

Deck Planking:

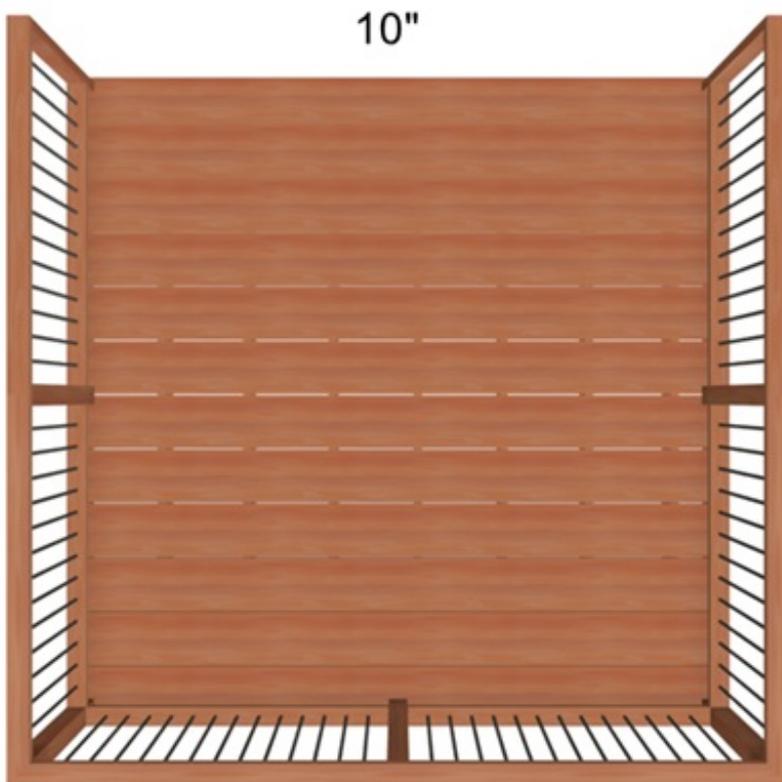
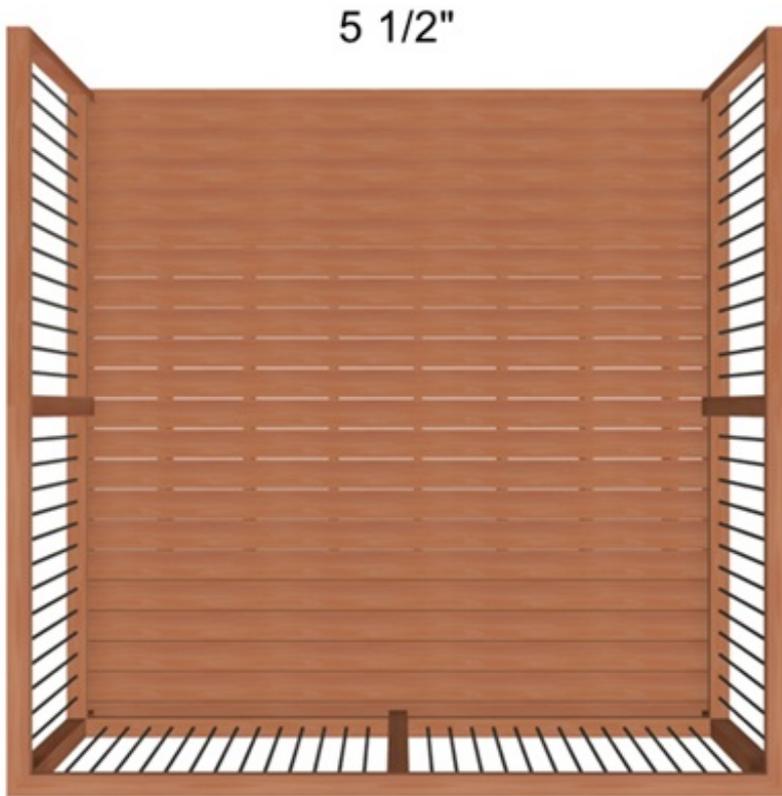
- Plank Overhang.

- Use this to specify how far deck planking overhangs the joists. In the example below, the value is changed from 1/2" to 1".



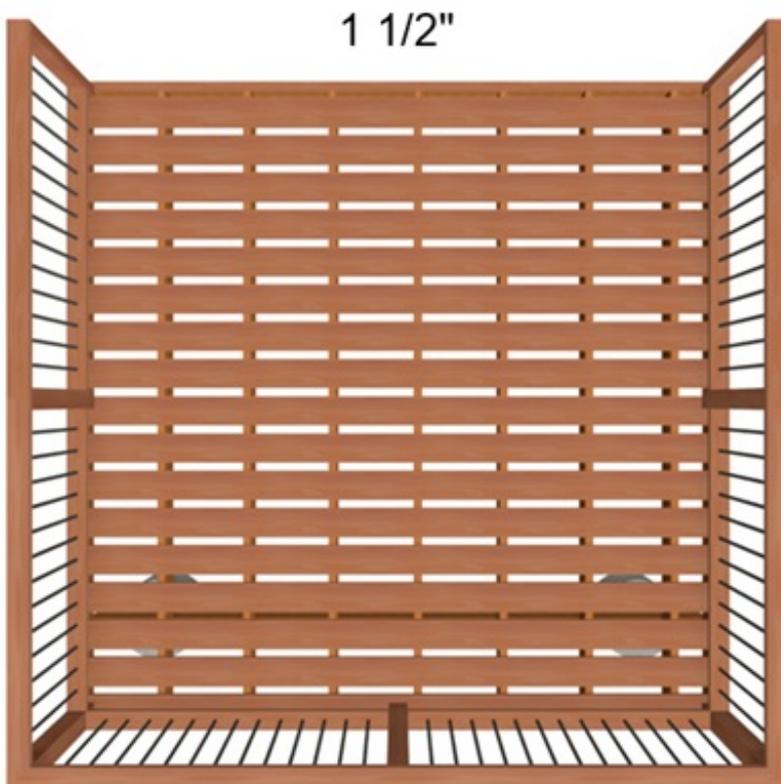
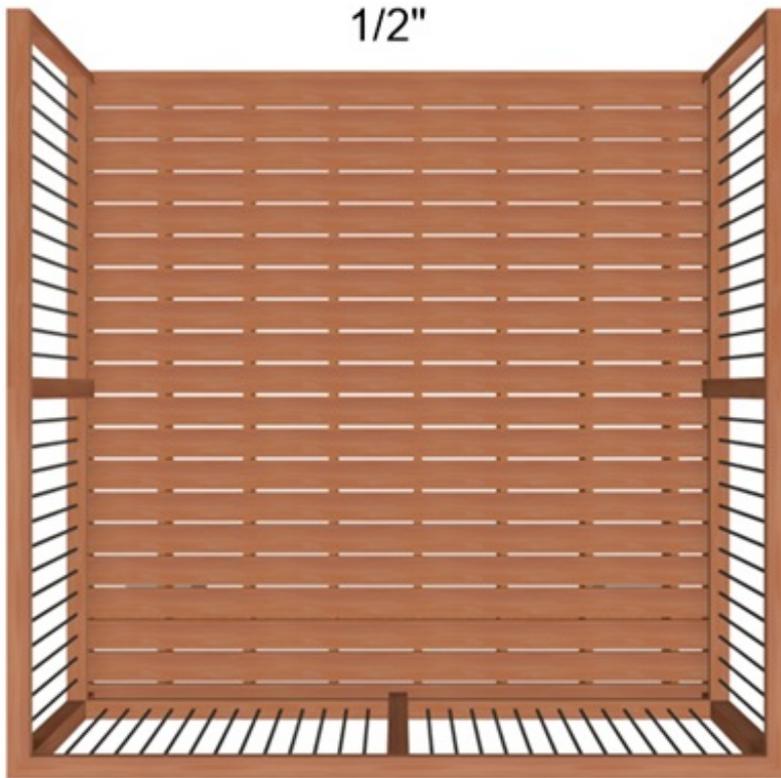
- Plank Width.

- Use this to specify the width of the deck planking. In the example below, the width is changed from 5 1/2" to 10".



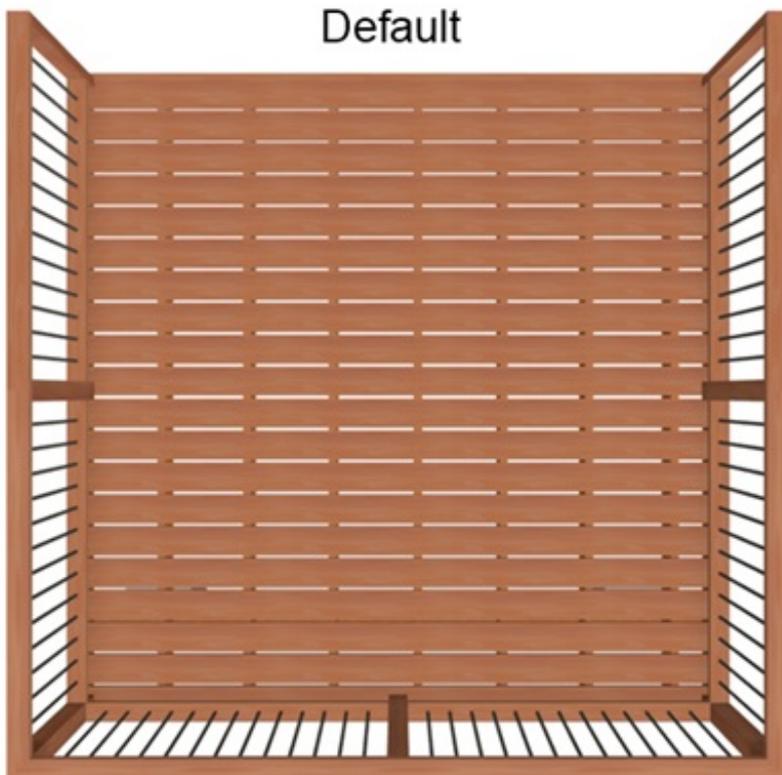
- Plank Gap Width.

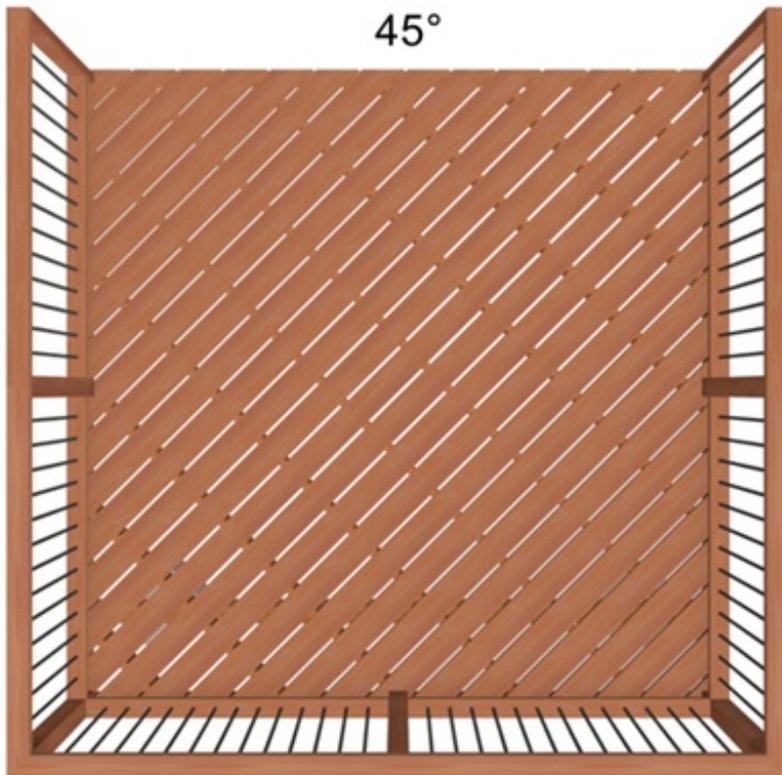
- Use this to specify the width of the gap between each deck plank. In the example below, the width is changed from 1/2" to 1 1/2".



- Plank Direction

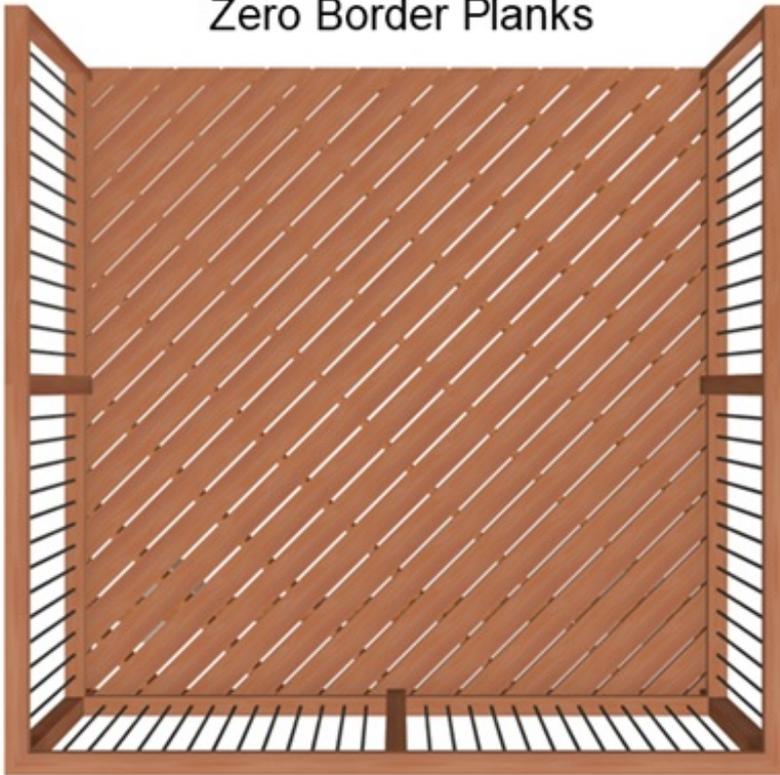
- This is used to specify the direction of the deck planks.
- When **Automatic** is checked, the program will place the deck planking parallel to the longest edge.
- In the example below, Automatic is unchecked and the plan direction angle is changed to 45°.



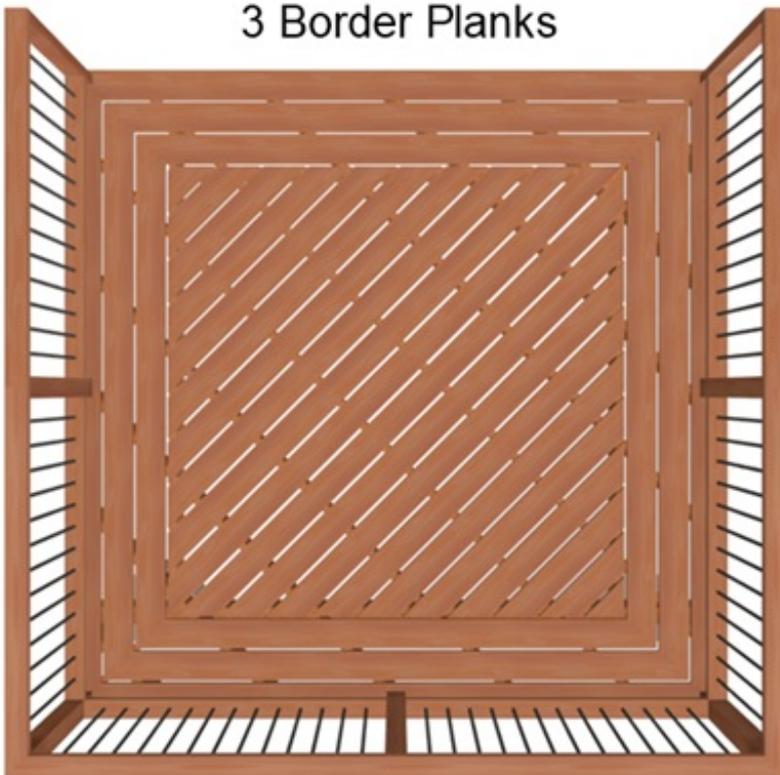


- Number of Border Planks.
 - Use this to specify the number of border planks that will go around the edge of the deck.
 - In the example below, this value is changed from 0 to 3.

Zero Border Planks



3 Border Planks

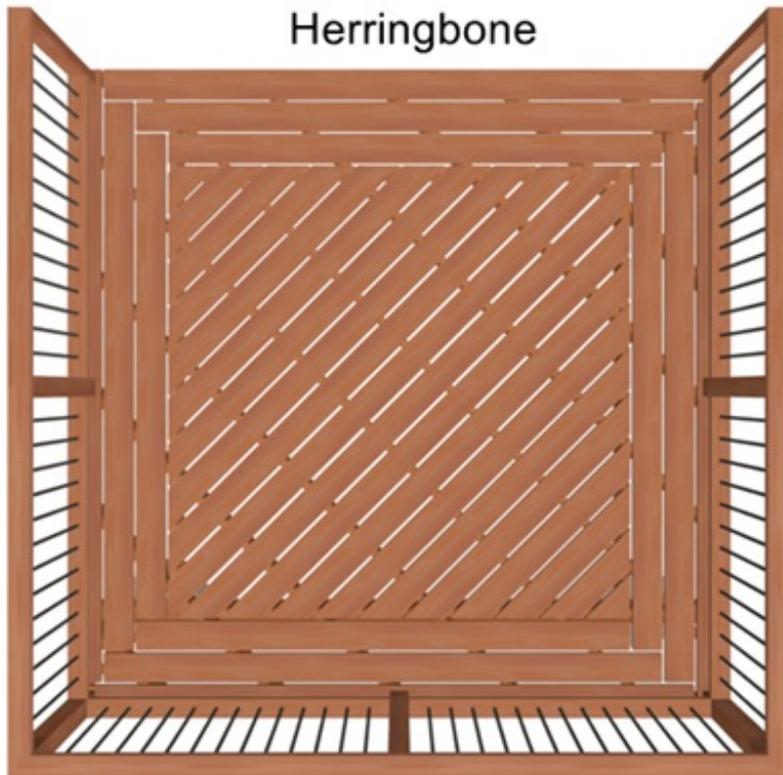


- No Border Against Walls and Herringbone.
 - Both of these check boxes are only applicable when border planks are present.
 - **No Borders Against Walls** prevents border planking from being generated along

any walls defining the deck.

- **Herringbone** produces a herringbone pattern where the border planks meet, instead of miters at the corners.
- Examples of each are shown below.



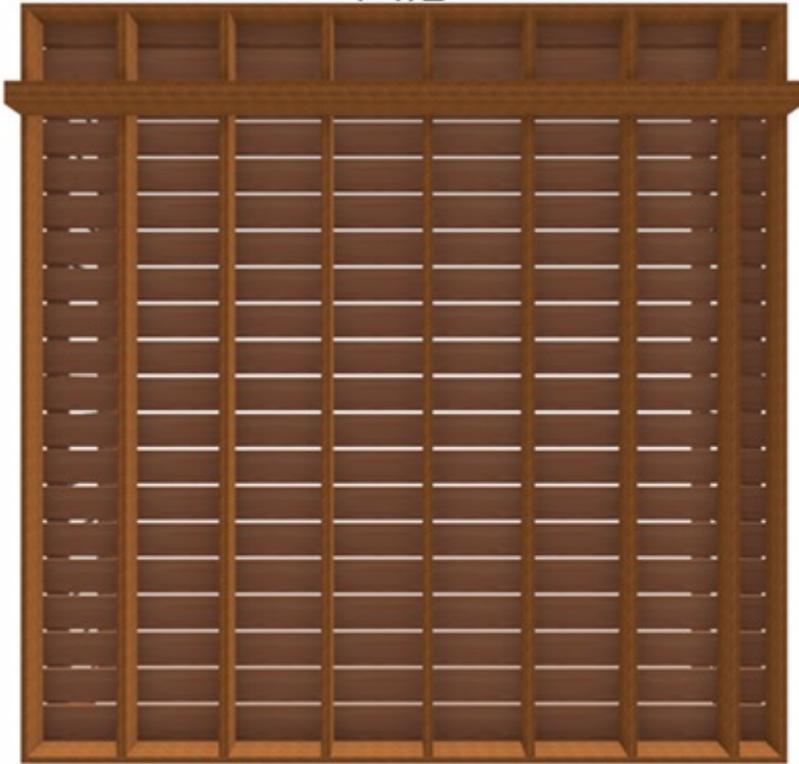


- Checking Treated will set each deck plank as Treated in the deck plank's specification dialog.

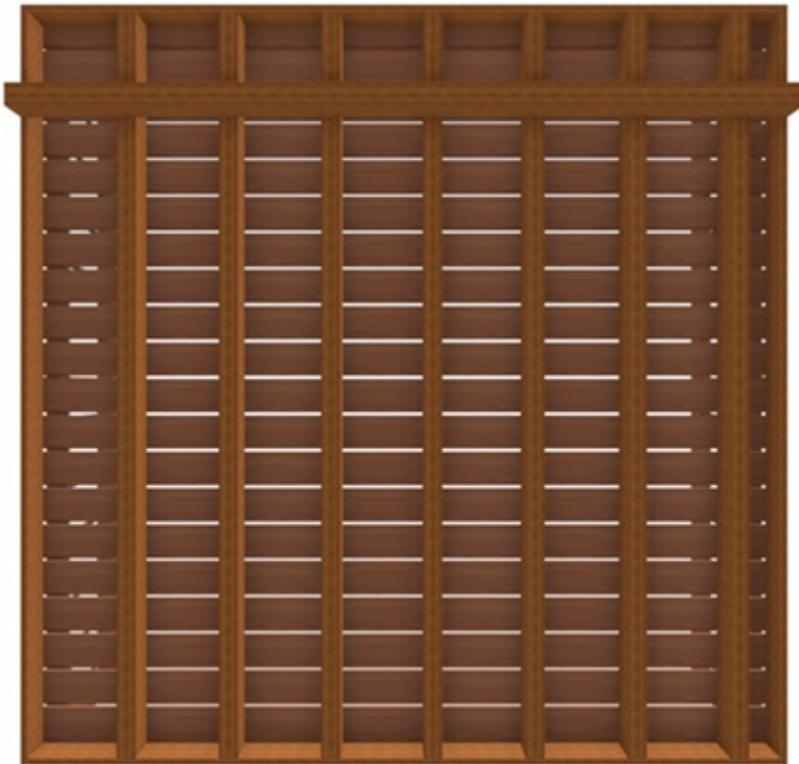
Deck Joists:

- Joist Width
 - Use this to specify the width of the joists that support the deck planking. In the example below, the width is changed from 1 1/2" to 3".

1 1/2"



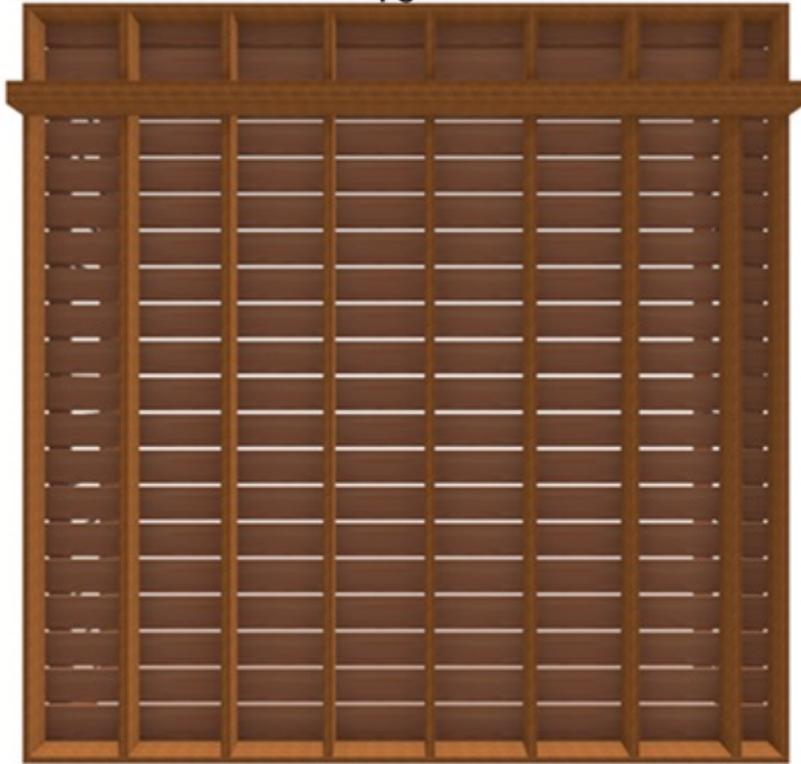
3"



- Joist Spacing

- Use this to specify the distance between the joists that support the deck planking. In the example below, the spacing is changed from 16" to 24".

16"



24"



- Joist Direction
 - Use this to specify the direction of your joists.
 - When **Automatic** is checked, the program looks at the direction of the deck

planks and the size of your deck to determine which way the joists will run.

- When **Automatic** is unchecked, and a direction specified, your plank direction will change to accommodate the specified joist direction.
- In the example below, **Automatic** is not checked and the direction is changed to 45°.





- Checking **Treated** will set each deck joist as Treated in the deck joist's specification dialog.

Deck Support panel settings

- Next, In the **Room Specification** dialog, select the **DECK SUPPORT** panel.
- Editing the information on this panel will control how the deck beams, posts, and footings are created.

Room Specification

General
Structure
Deck
Deck Support
Moldings
Wall Covering
Fill Style
Materials

Deck Beams

Edit Beam...

Beam Spacing: 168"

Deck Posts

Edit Post...

Post Spacing: 96"
Offset From End: 12"

Deck Post Footings

Height Above Terrain: 6"
Thickness: 12"
Width: 16"

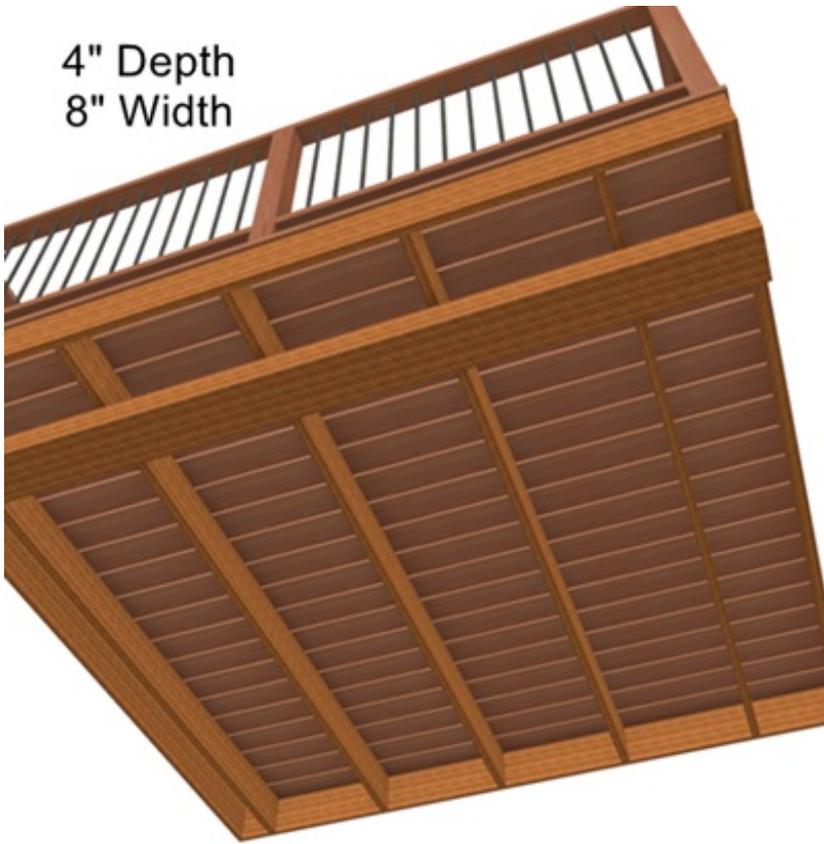
Square
 Round

Rebar Size (#): 5
Rebar Count: 2

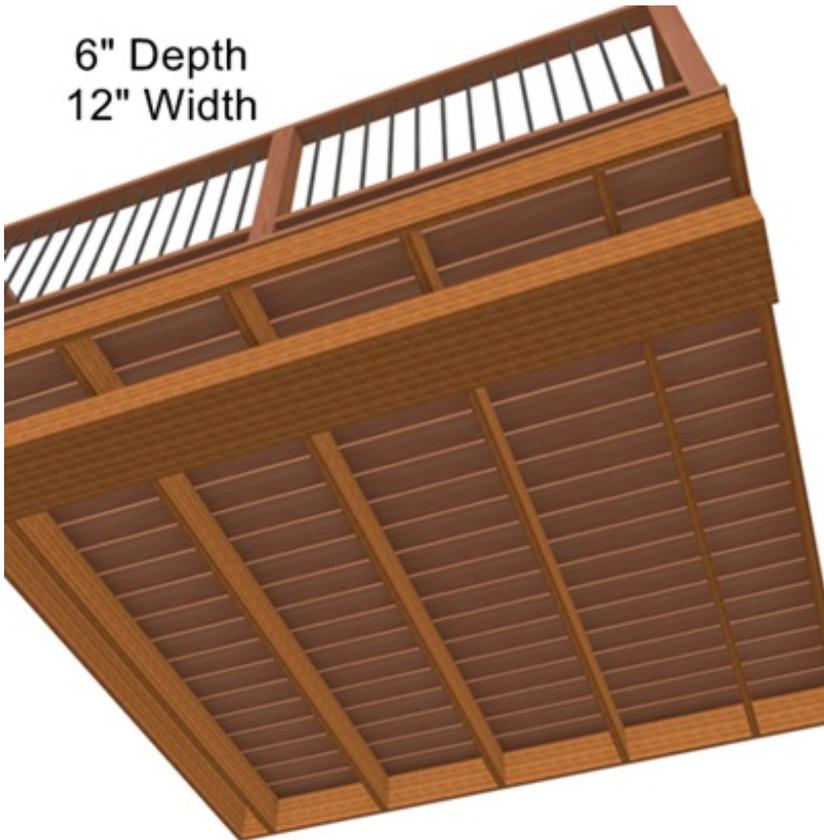
Deck Beams:

- Support Beam Depth and Width
 - Click **Edit Beam** to specify the depth and width of the beams that will support the deck joists. In the example below, the depth and width are changed from 4"x8" to 6"x12".

4" Depth
8" Width

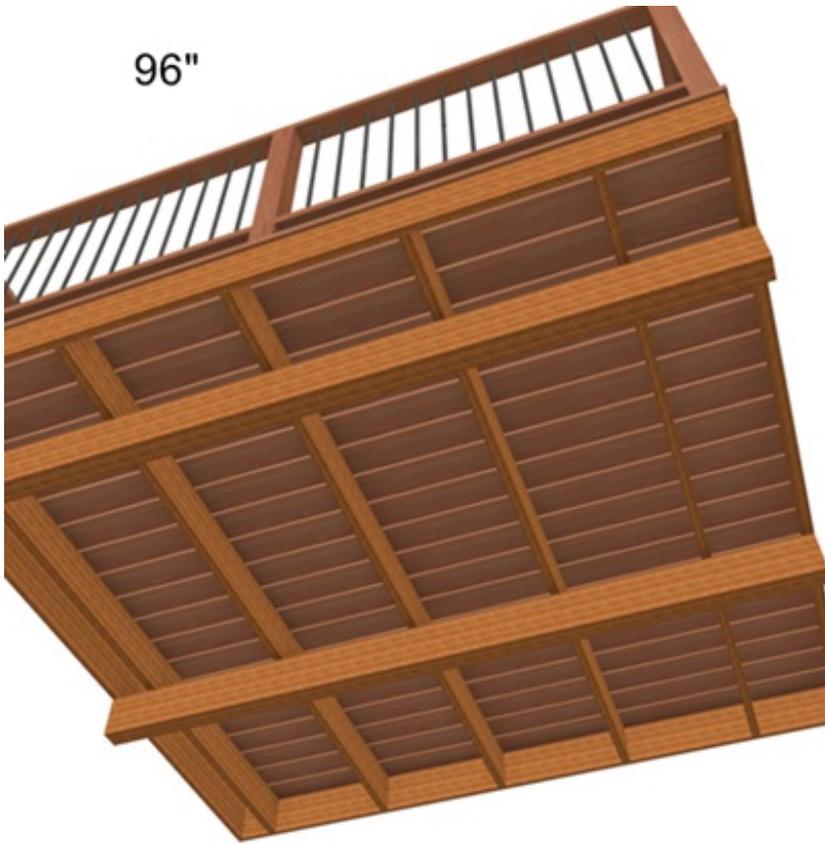


6" Depth
12" Width

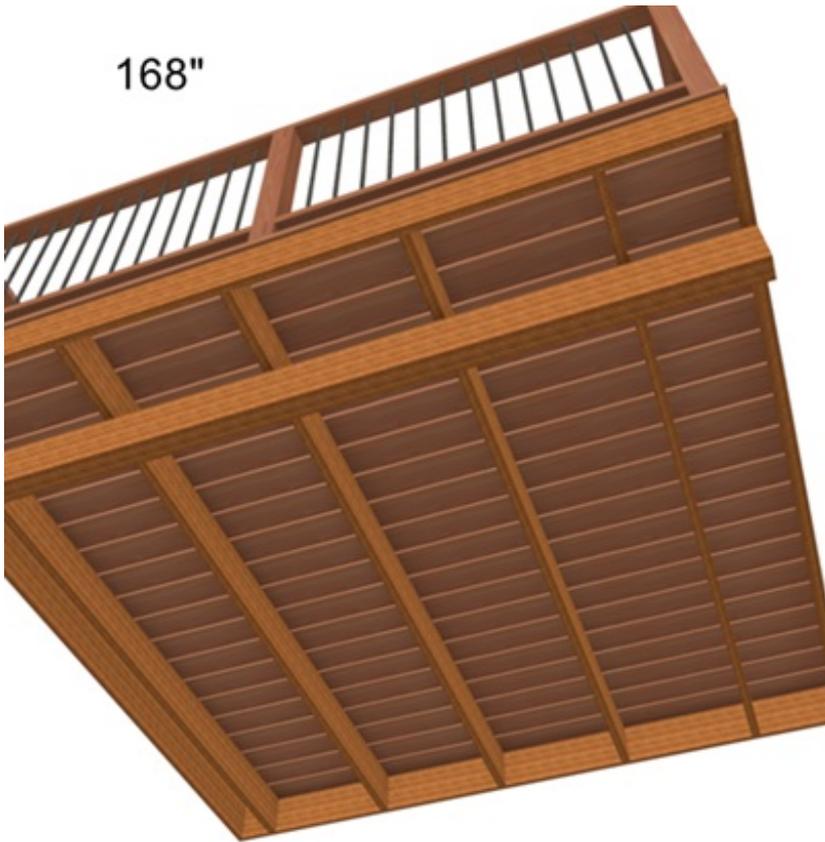


- Beam Spacing
 - Use this to specify the spacing between the beams that support the deck joists. In the example below, the spacing is changed from 168" to 96".

96"



168"



Note: To modify the Joist Depth, go to the Structure panel of the Room Specification dialog, and click the Edit button next to Planks, Joists.

Deck Posts:

- Deck Post Width 1 and Width 2
 - You can change the Deck posts width 1 and 2 by clicking **Edit Post** under Deck Posts. Use this to specify the widths of the deck posts. In the example below, width 1 and 2 were both changed from 3 1/2" to 5 1/2".





- Deck Post Spacing

- Use this to specify the spacing between the posts that support the deck. In the example below, the post spacing is changed from 96" to 48".





- Offset From End

- Use this to specify the distance the deck posts are offset from the end of the beam. In the example below, the offset is changed from 12" to 24".





Deck Post Footings:

- Footing Height Above Terrain
 - Use this to specify how high above terrain the top of the footings will be. In the example below, the height is changed from 6" to 24".



- Footing Thickness and Width

- Use the thickness to specify the thickness of the footings from top to bottom and width to specify the diameter of the footings. In the example below, the thickness and width are changed from 12" and 16" to 18" and 24" respectively.



- Footing Shape
 - Choose between using either square or round footings.



- Footing Rebar Size and Rebar Count
 - Use this to specify the rebar size and rebar count as displayed in the Materials List.

- [📄 Creating Mitered or Wrap Around Stairs \(/support/article/KB-00788/creating-mitered-or-wrap-around-stairs.html\)](/support/article/KB-00788/creating-mitered-or-wrap-around-stairs.html)
- [📄 Drawing Stairs Down From a Deck or Porch \(/support/article/KB-00755/drawing-stairs-down-from-a-deck-or-porch.html\)](/support/article/KB-00755/drawing-stairs-down-from-a-deck-or-porch.html)
- [📄 Manually Modifying Deck Framing \(/support/article/KB-01245/manually-modifying-deck-framing.html\)](/support/article/KB-01245/manually-modifying-deck-framing.html)



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