

# Creating a Staircase

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Reference Number: **KB-00420**

Last Modified: **October 6, 2023**

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The information in this article applies to:



## QUESTION




How do I create a staircase with an opening to the floor above?



## ANSWER

Home Designer makes placing stair cases fast and easy. To make it easier to see our stairs, lets tile our plan view with a 3D view.

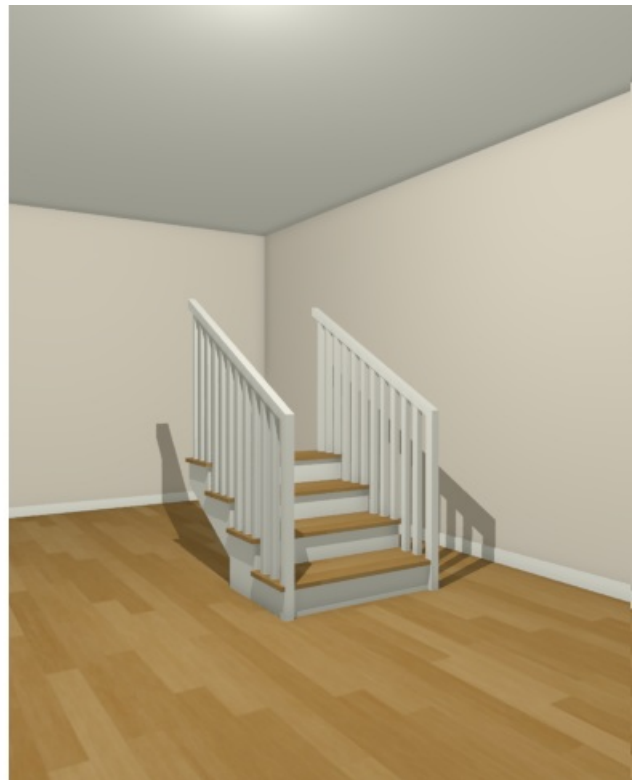
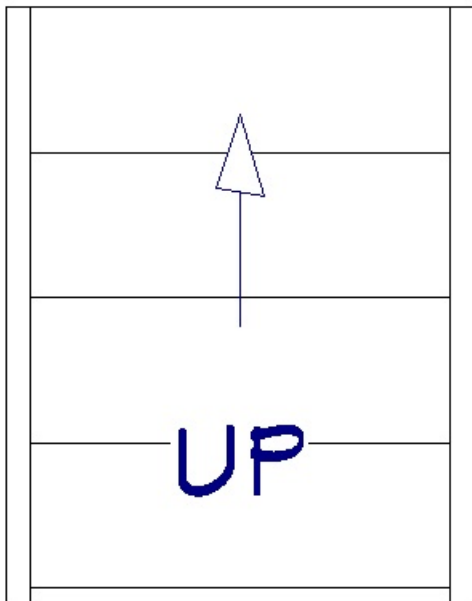
## To tile the plan view and a 3D view

1. Select **3D> Create Camera View> Full Camera**  and click and drag with your mouse to create a 3D view looking at the room where the staircase will be built.
2. Select **Window> Tile Vertically**  or **Tile Horizontally**  so that you can see the 3D view side-by-side with the plan view.

## To create a staircase

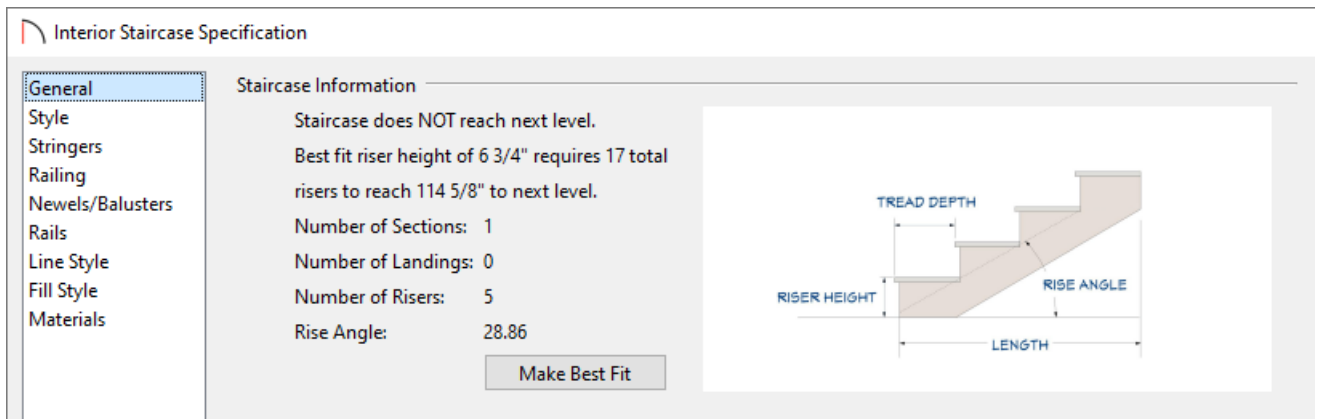
1. With the floor plan view active, select **Build> Stairs> Draw Stairs**  and click, drag, and release the mouse button to create the stairs.

In this example, the staircase is intentionally drawn too short, which allows you to modify the staircase so that it reaches the second floor.



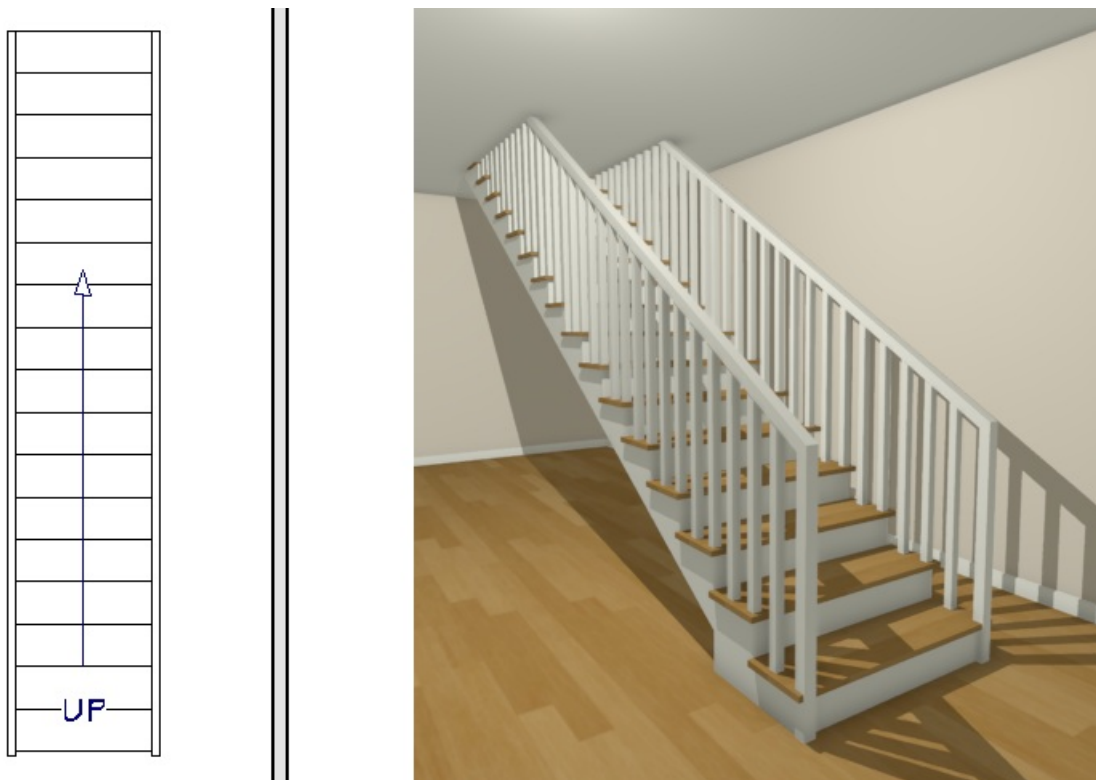
2. In the floor plan view, activate the **Select Objects**  tool, select the staircase, and click on the **Open Object**  edit tool to display the **Staircase Specification** dialog.

Notice that Home Designer has detected the short staircase, and gives us a message to let us know.





3. Home Designer gives us a way to automatically extend the staircase to reach the second floor. Let's click the **Make Best Fit** button, then click **OK**.

4. You can now see that your staircase reaches the next floor.



Now that you've created the staircase, open it to specification once more so that you can configure the structure of the staircase.

## To adjust the staircase structure

1. In the floor plan view, activate the **Select Objects**  tool, select the staircase, then click on the **Open Object**  edit tool to display the **Staircase Specification** dialog.
2. For the purposes of this example, we want to have 14 treads, so move the radio button under the Advanced Options heading to **Lock Number of Treads**, then change the **Treads** value to **14**.

Notice that Home Designer has updated the Length and also gives us a message at the top saying that the "Steep staircase reaches next level".

Interior Staircase Specification

**General**

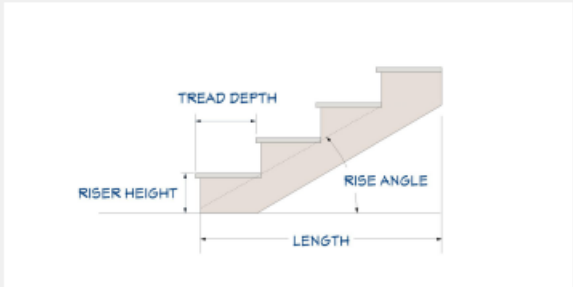
- Style
- Stringers
- Railing
- Newels/Balusters
- Rails
- Line Style
- Fill Style
- Materials

**Staircase Information**

Steep staircase reaches next level.  
 Best fit riser height of 6 3/4" requires 17 total risers to reach 114 5/8" to next level.

Number of Sections: 1  
 Number of Landings: 0  
 Number of Risers: 15  
 Rise Angle: 32.76

Make Best Fit



**Advanced Options**

- Automatic Treads
- Lock Tread Depth
- Lock Number of Treads

Section Number	Length	Width	Tread Depth	Treads	Riser Height
1	166 1/4"	39"	11 7/8"	14	7 5/8"

3. If you change the number of treads to **18**, you can see that Home Designer has detected this, and has let you know that the "Shallow staircase reaches next level".

**Note:** Home Designer also provides a recommended tread depth here, and can calculate all of the settings for your staircase automatically. In addition, when using the Lock features, you can customize your staircase to your exact specifications.

Interior Staircase Specification

**General**

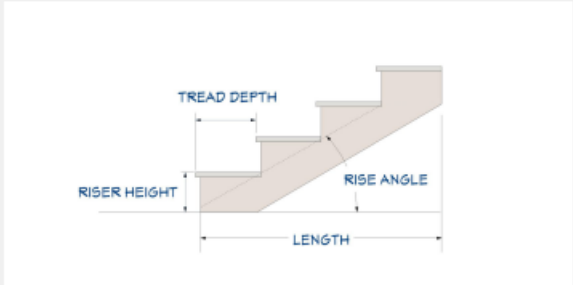
- Style
- Stringers
- Railing
- Newels/Balusters
- Rails
- Line Style
- Fill Style
- Materials

**Staircase Information**

Shallow staircase reaches next level.  
 Best fit riser height of 6 3/4" requires 17 total risers to reach 114 5/8" to next level.

Number of Sections: 1  
 Number of Landings: 0  
 Number of Risers: 19  
 Rise Angle: 26.93

Make Best Fit




**Advanced Options**

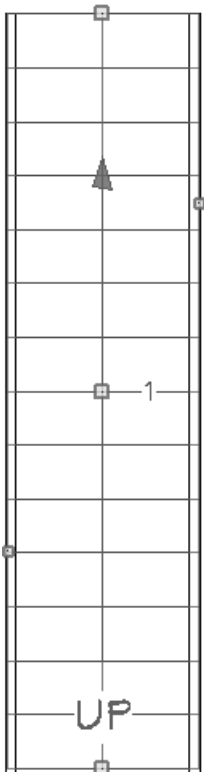
- Automatic Treads
- Lock Tread Depth
- Lock Number of Treads


Section Number	Length	Width	Tread Depth	Treads	Riser Height
1	213 3/4"	39"	11 7/8"	18	6 1/16"

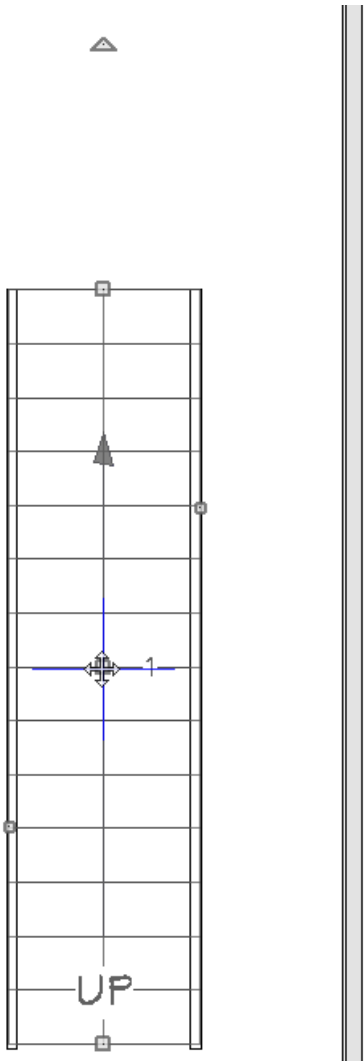
4. Change the **Treads** back to **14** and click **OK**.

## To move the staircase

1. Use the **Select Objects**  tool to select the staircase, and note the edit handles that display.



2. Select the middle **Move**  handle, and move the staircase up against the wall.




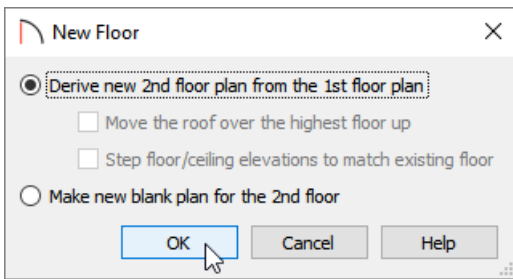
3. In the 3D view, notice that a railing has been created along the wall.



Now that the staircase is configured, it's time to create the stairwell.

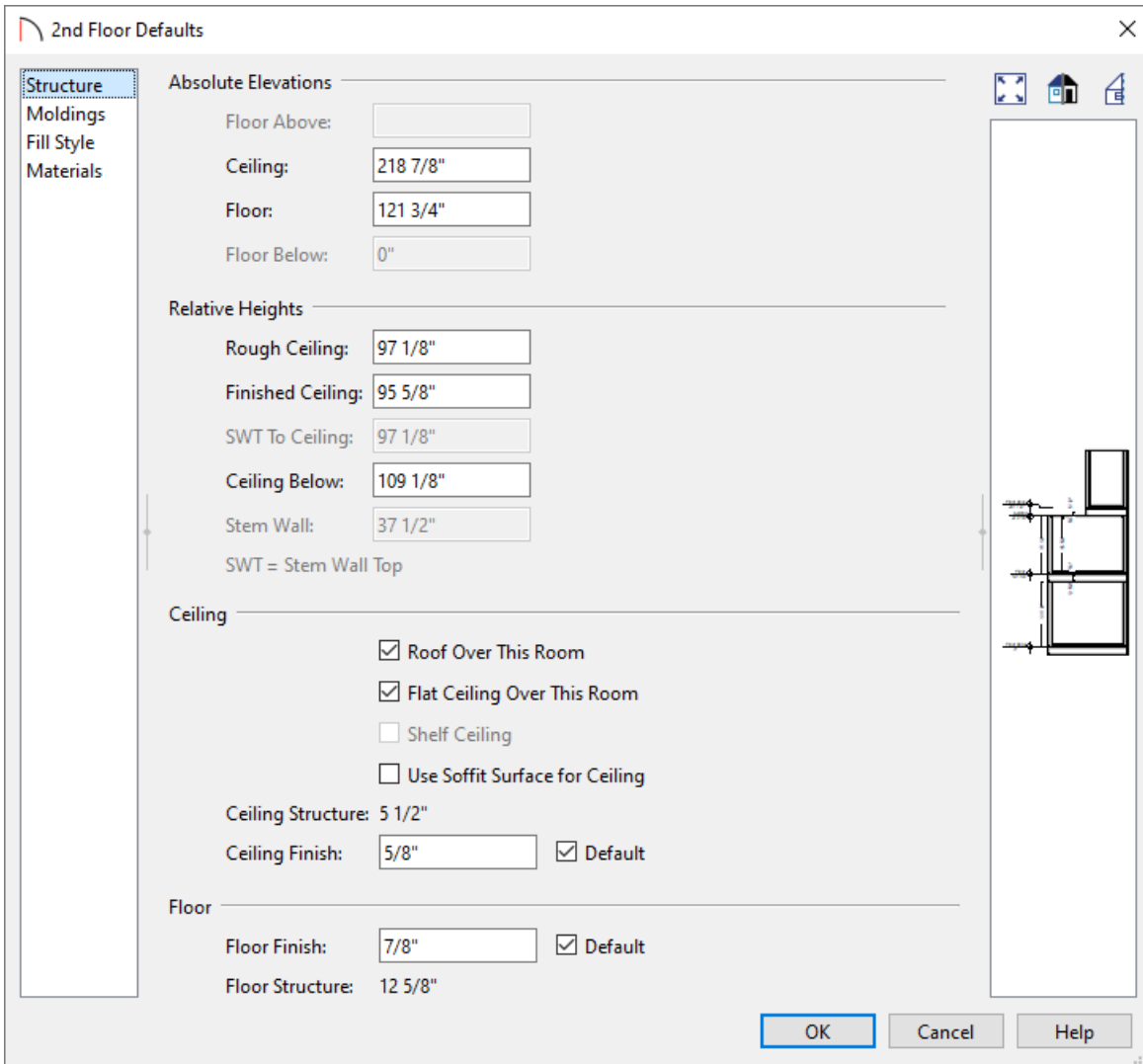
### To create a stairwell

1. In order to generate a stairwell, a second floor needs to be generated. Select **Build > Floor > Build New Floor**  from the menu.
2. Choose **Derive new 2nd floor plan from the 1st floor plan**, then click **OK**.





3. In the **2nd Floor Defaults** dialog that appears, specify your desired properties.

For this example, the preset defaults are used.



4. Select **Tools > Floor/Reference Display > Down One Floor**  to return to the first floor.

5. Using the **Select Objects**  tool, click on the staircase to select it, then click the **Auto Stairwell**  edit button.

**Note:** If you do not see the Auto Stairwell button on the Edit toolbar, a stairwell may already be present, an Open Below room may already be specified above the stairs on the second floor, or the stairs don't reach the platform above.



6. Now in the 3D view, see that a hole has been cut out of the ceiling.



7. Close the existing 3D view, go to the second floor, and create another 3D view.

Notice that the stairwell opening has a railing around it, and there is an opening at the top of the stairs. You can select each of these railings and edit them just like any other railing in Home Designer.

You may also notice that a new room has been established titled "Stairwell". Rooms defined as such will not generate floor platforms.



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#### Related Articles

- [🏠 Creating a Curved Staircase in Home Designer \(/support/article/KB-00302/creating-a-curved-staircase-in-home-designer.html\)](/support/article/KB-00302/creating-a-curved-staircase-in-home-designer.html)
- [🏠 Creating a Room Under a Staircase in Home Designer \(/support/article/KB-00265/creating-a-room-under-a-staircase-in-home-designer.html\)](/support/article/KB-00265/creating-a-room-under-a-staircase-in-home-designer.html)
- [🏠 Creating Stair Winders \(/support/article/KB-00486/creating-stair-winders.html\)](/support/article/KB-00486/creating-stair-winders.html)
- [🏠 Creating Staircases Connected by Landings \(/support/article/KB-00263/creating-staircases-connected-by-landings.html\)](/support/article/KB-00263/creating-staircases-connected-by-landings.html)
- [🏠 Creating, Moving, and Deleting Stairwells \(/support/article/KB-00125/creating-moving-and-deleting-stairwells.html\)](/support/article/KB-00125/creating-moving-and-deleting-stairwells.html)
- [🏠 Placing a Spiral Staircase and Stairwell \(/support/article/KB-00177/placing-a-spiral-staircase-and-stairwell.html\)](/support/article/KB-00177/placing-a-spiral-staircase-and-stairwell.html)
- [🏠 Using Open Below Rooms to Define an Opening to a Lower Floor \(/support/article/KB-00210/using-open-below-rooms-to-define-an-opening-to-a-lower-floor.html\)](/support/article/KB-00210/using-open-below-rooms-to-define-an-opening-to-a-lower-floor.html)

