

Creating a Split Level Entry, or Foyer, with a Landing

Reference Number: **KB-00587**

Last Modified: **July 30, 2021**

The information in this article applies to:



QUESTION

I would like to create a split level entry to a house. How can I do this?



ANSWER

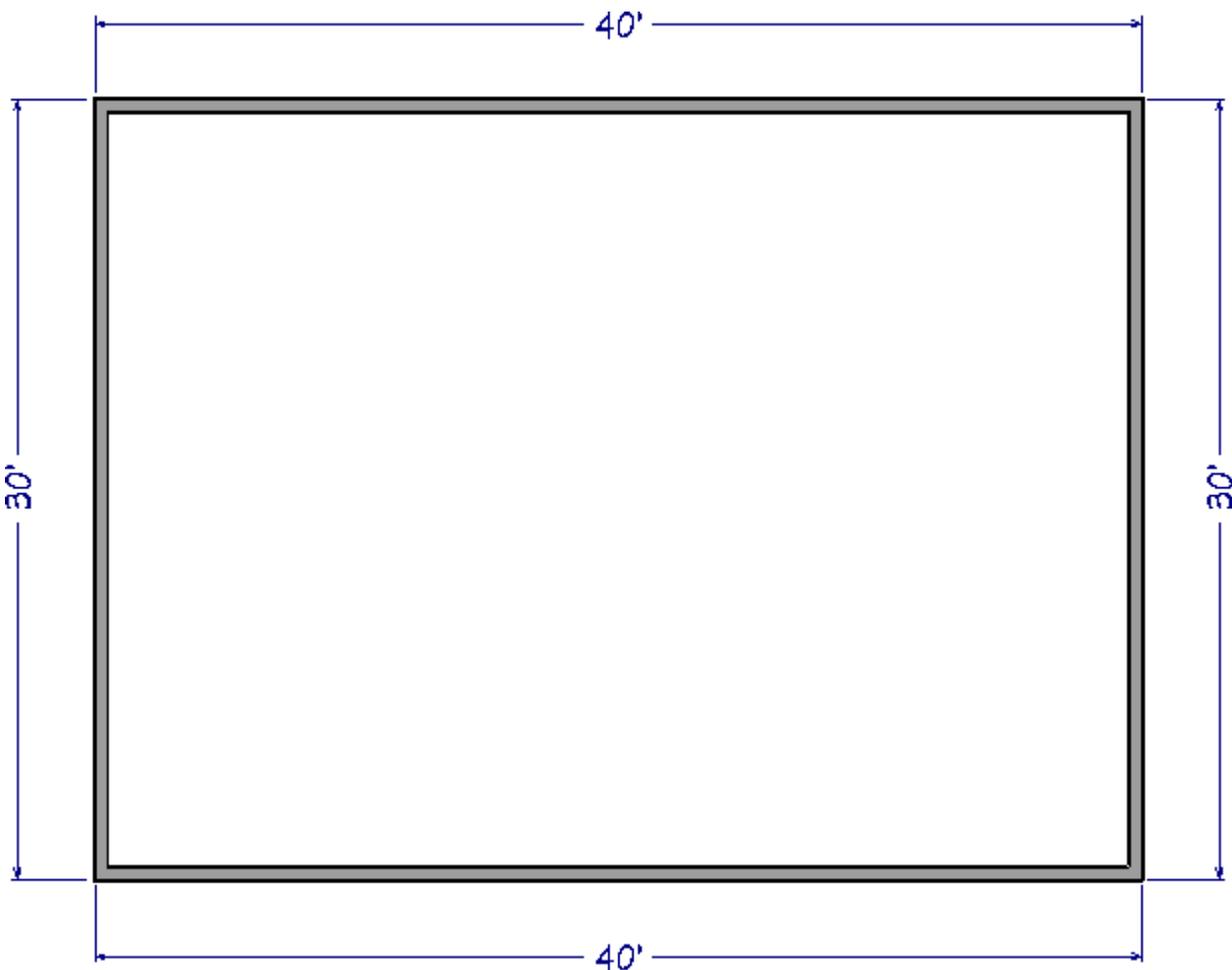
A split level entry consists of a landing with a floor height between the first floor and the basement. This kind of entry can be created using the Build Foundation and U-Shaped Stair tools.

For the purposes of this example, we will walk through creating this scenario in a basic plan, and you can then take that knowledge and apply it to your own designs.

To create each floor level

1. Click **File> New Plan** , select **Build> Wall> Straight Exterior Wall**  from the menu, then draw a basic rectangular structure.

In this example, a structure that measures 30' x 40' is created.



2. Next, select **Build> Floor> Build Foundation**  from the menu.

3. On the **FOUNDATION** panel of the **Build Foundation** dialog that opens:

The screenshot shows the 'Build Foundation' dialog box with the 'Foundation Options' panel selected. The dialog has a title bar with a close button (X) and a 'Number Style...' button at the bottom left. The main content area is divided into several sections:

- Automatically Rebuild Foundation:** An unchecked checkbox.
- Foundation Type:** Three radio buttons: 'Walls with Footings' (selected), 'Grade Beams on Piers', and 'Monolithic Slab'. Below these are two checkboxes: 'Hang 1st Floor Platform Inside Foundation Walls' (unchecked) and 'Show S Markers on Stepped Foundation Footings' (checked).
- Slab:** A section with a 'Default Slab Footing Wall Type' set to '16" Concrete Stem Wall' and an 'Edit Default Slab Footing...' button. Below is a 'Slab Thickness' input field set to '4"' and an unchecked checkbox for 'Slab at Top of Stem Wall'.
- Stem Walls:** A section with a 'Default Type' set to 'Siding-6' and an 'Edit Default Foundation Wall...' button. Below are 'Minimum Height' (101 1/8" Including 1 1/2" Sill Plate) and 'Basement Ceiling Height' (97 1/8") input fields.
- Piers:** A section with 'Width' (12"), 'Depth' (96"), and 'Maximum Separation' (96") input fields. The 'Shape' is set to 'Round' with radio buttons for 'Round' and 'Square'.
- Garage Options:** A section with 'Garage Floor to Stem Wall Top' (12"), 'Lower Garage Floor' (3 1/2"), and 'Minimum Garage Height' (24") input fields.

At the bottom right, there are 'OK', 'Cancel', and 'Help' buttons.

- Select **Walls with Footings** under the Foundation Type.
- You may want to change the wall type that is used for the foundation. To do so, select the **Edit Default Foundation Wall** button to open the **Foundation Wall Defaults**, and on the **WALL TYPES** panel, choose your desired Wall Type(s).

In this example, we specified a pony wall with a Siding-6 wall type for the upper portion, and 8" Concrete Stem Wall for the lower portion.

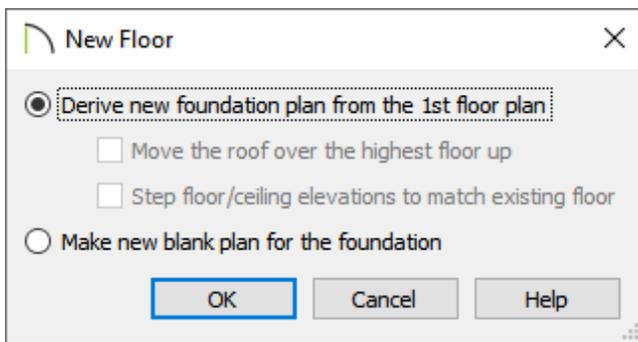
To learn more about pony walls, see the "Drawing a Pony Wall" resource in the [Related Articles](#) section below.

- Under the Stem Walls section, specify a **Minimum Height** sufficient for a full height basement.

In this example, a value of 101 1/8" is used, giving us a Basement Ceiling Height of 97 1/8", as shown in the image above.

- Click **OK**.

4. In the **New Floor** dialog that displays next, select **Derive new foundation plan from 1st floor plan**, then click **OK**.

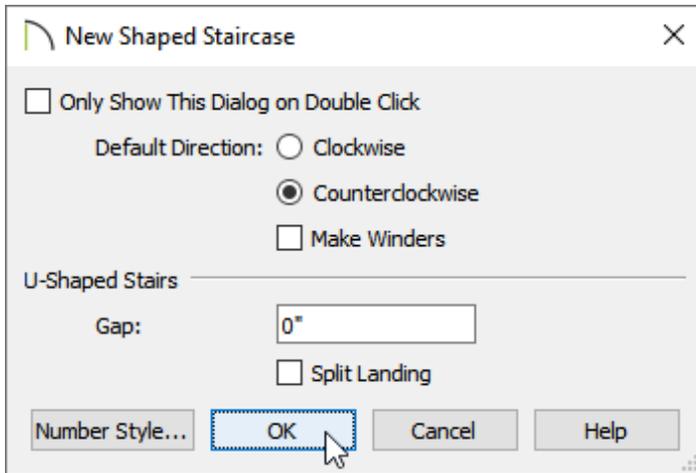


5. Your foundation may now look similar to the following image if you have specified pony walls:

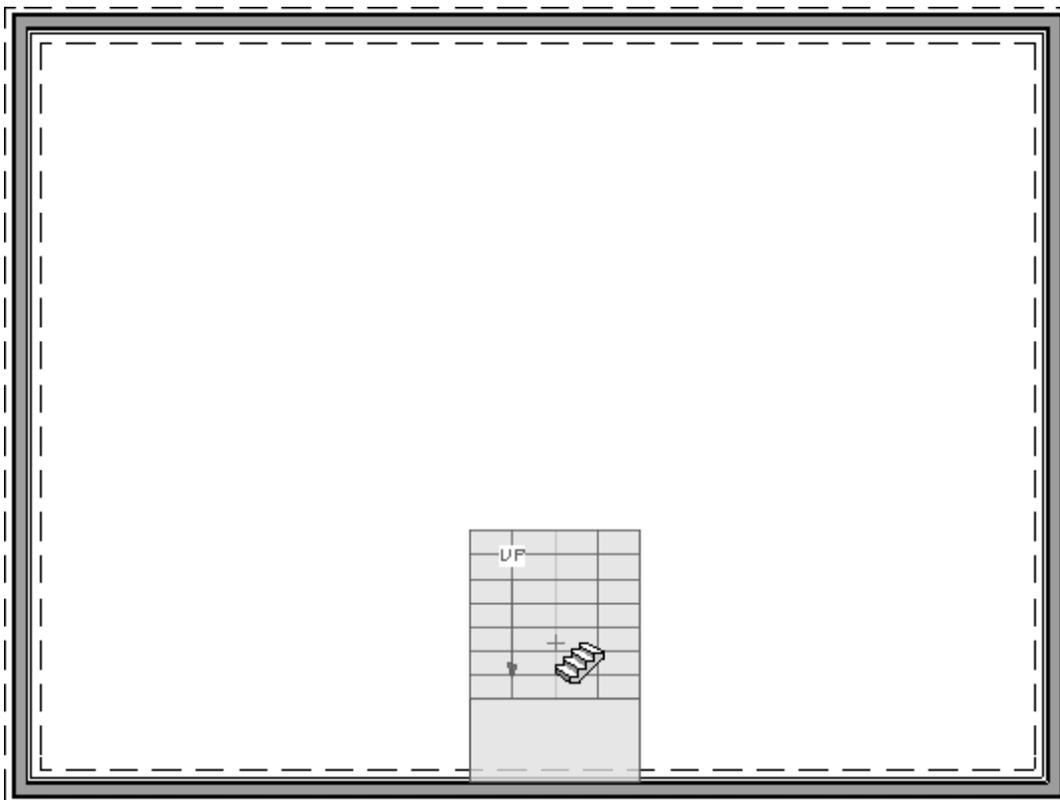


To create the staircase

1. While Floor 0 (foundation) is the active floor, select **Build> Stairs> U-Shaped Stair** , and in the **New Shaped Staircase** dialog that displays, choose the Default Direction, specify a **Gap** value if one is desired, then click **OK**.

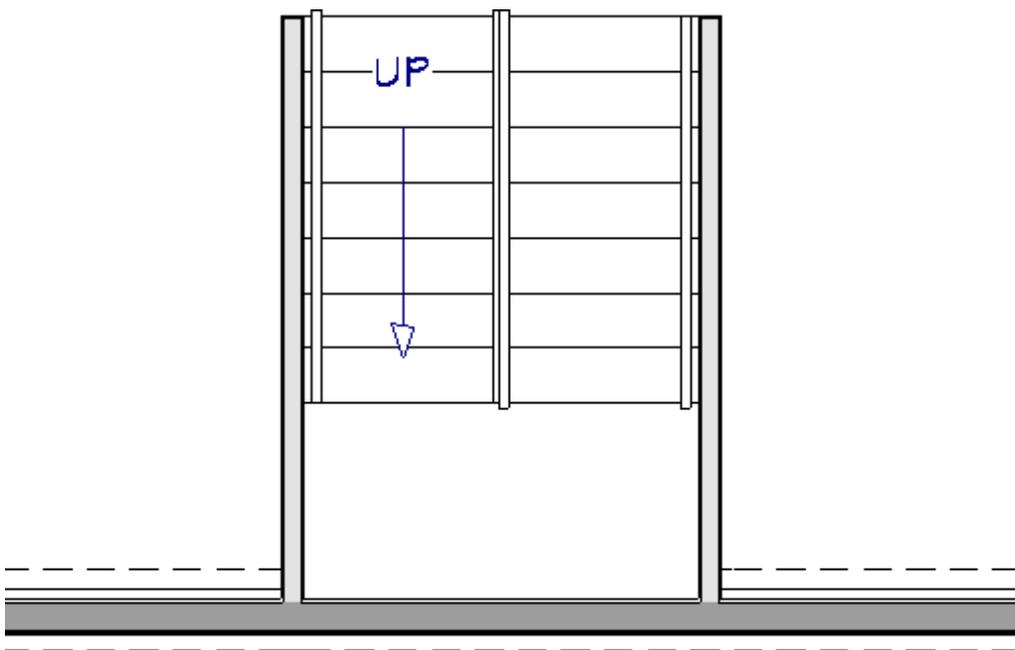


2. You will notice that a U-shaped staircase is now following your cursor. Hover the cursor along the wall that will be used for the entry, move the cursor towards the center of the structure until the landing is oriented correctly, then click to place the staircase.



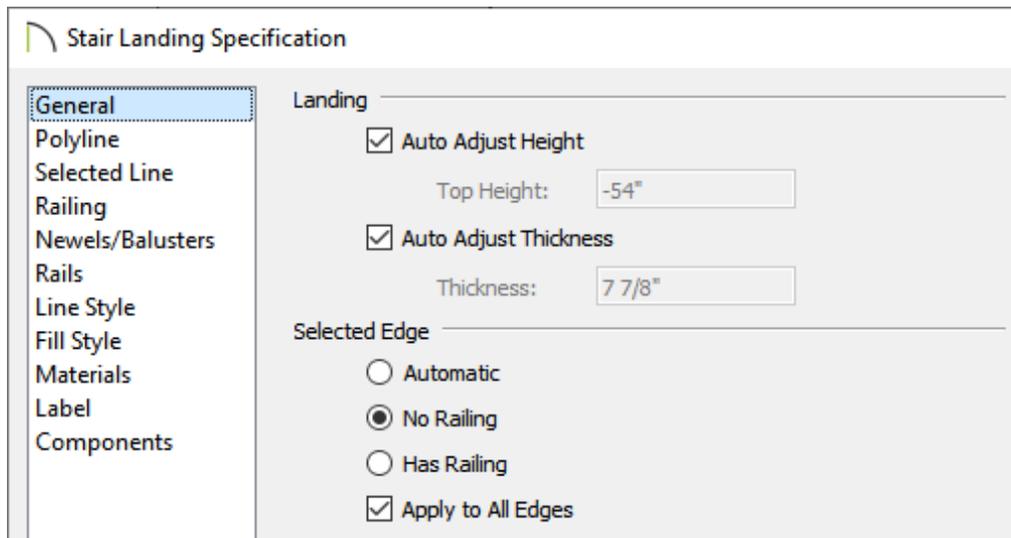
To precisely position the staircase after it has been placed, consider utilizing the Point to Point Move and/or Center Object edit tools. Please see [KB-00734: Using the Point to Point Move Tool](https://www.chiefarchitect.com/support/article/KB-00734/using-the-point-to-point-move-tool.html) (<https://www.chiefarchitect.com/support/article/KB-00734/using-the-point-to-point-move-tool.html>) and [Video 252: Centering Objects](https://www.chiefarchitect.com/videos/watch/252/centering-objects.html) (<https://www.chiefarchitect.com/videos/watch/252/centering-objects.html>) to learn more.

3. With the staircase now in place, select one of the stair sections and click the **Auto Stairwell**  edit tool to generate a stairwell on the 1st floor.
4. We will now enclose the entryway. On Floor 0 (foundation), navigate to **Build> Wall> Interior Wall** , then draw interior walls on either side of the landing, as well as any walls underneath the staircase.



Note: To ensure that the interior walls are aligned with the railings that were created automatically when the stairwell was generated in Step 3, select each interior wall after it is placed, then click the Align With Wall Above edit tool.

5. If any railings are still present on the landing, click on an edge of the landing, click on the **Open Object**  edit button to open the **Stair Landing Specification**, and on the GENERAL panel, select **No Railing**, check **Apply to All Edges**, then click **OK**.



Railings that are part of a staircase can also be controlled by accessing the Railings panel located in the Staircase Specification dialog.

Additionally, railings can be added to staircases manually using the Straight and Curved Railing tools. For more information, please see the "Manually Adding Railings to a Staircase" resource in the [Related Articles](#) section.

6. Select **Build> Door> Hinged Door**  and place an entry door. Once placed, **Open**  it to specification, and adjust the **Floor to Bottom** value so it lines up with the landing.
7. Take a **Camera**  view to see the results.



Related Articles

- [📄 Creating a Stair Rake Wall \(/support/article/KB-03107/creating-a-stair-rake-wall.html\)](/support/article/KB-03107/creating-a-stair-rake-wall.html)
- [📄 Drawing a Pony Wall \(/support/article/KB-00064/drawing-a-pony-wall.html\)](/support/article/KB-00064/drawing-a-pony-wall.html)
- [📄 Manually Adding Railings to a Staircase \(/support/article/KB-00082/manually-adding-railings-to-a-staircase.html\)](/support/article/KB-00082/manually-adding-railings-to-a-staircase.html)
- [📄 Specifying Glass, Cable, or Decorative Railing Panels \(/support/article/KB-01029/specifying-glass-cable-or-decorative-railing-panels.html\)](/support/article/KB-01029/specifying-glass-cable-or-decorative-railing-panels.html)
- [📄 Using the Auto Stairwell Tool \(/support/article/KB-00966/using-the-auto-stairwell-tool.html\)](/support/article/KB-00966/using-the-auto-stairwell-tool.html)



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