How the Height of Floors Relate to the Height of the Terrain

Reference Number: **KB-00861**

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The information in this article applies to:

PRO   ARCH   SUITE

QUESTION

How does the height of the terrain relate to the height of my floors?

ANSWER

In the real world, floor platforms are nearly always built so that you step up into a building. There are a number of reasons for this, but perhaps the most important is to prevent the structure's framing from coming into contact with the terrain. Over time, exposure to moisture in the soil can damage or even ruin untreated lumber in a framed floor platform or wall. For this reason, building codes in most areas require that floors be raised off the terrain.

Home Designer programs raise the building pad off the terrain for you automatically. The amount that the building pad is raised depends on the type of foundation you have built in your plan:

- **No foundation** - The distance between the Default Floor Height of 0" and the terrain is equal to the depth of the default floor structure thickness for Floor 1.
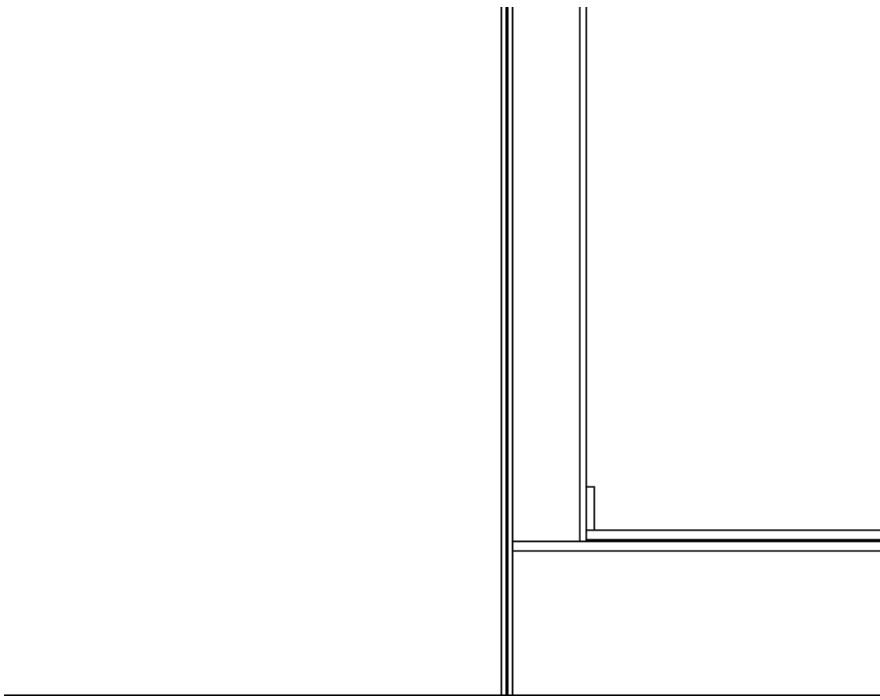
- **Walls with Footings** - The distance between the Default Floor Height of 0" and the terrain is equal to the depth of the default floor structure thickness for Floor 1, plus the default Sill Plate Height of the foundation, plus 6" (187 mm).

6"
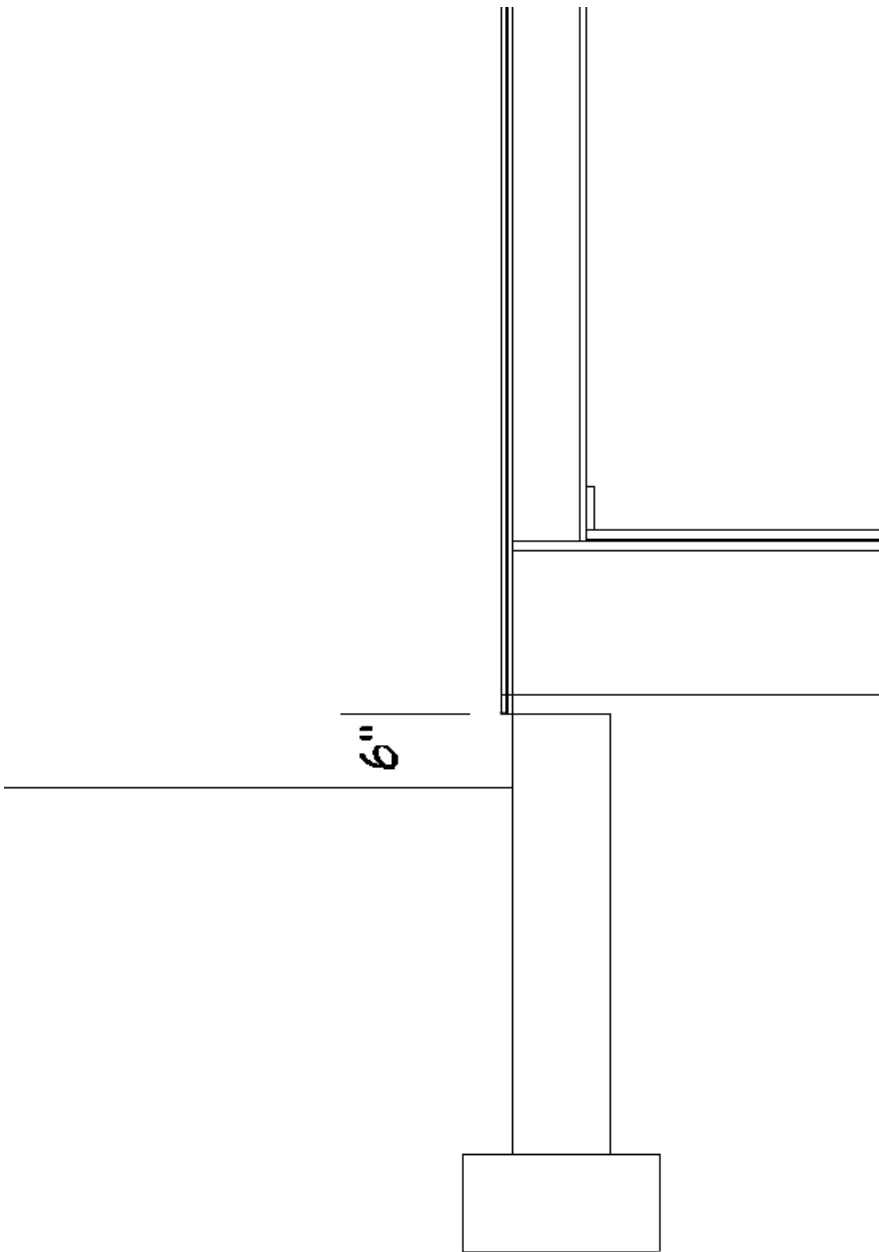
- **Grade Beams on Piers*** - Similar to the Walls with Footings option listed above. The distance between the Default Floor Height of 0" and the terrain is equal to the depth of the default floor structure thickness for Floor 1, plus the default Sill Plate Height of the foundation, plus 6" (187 mm).
  *Home Designer Pro Only

- **Monolithic Slab** - The Default Floor Height of 0" is raised 8" (200 mm) above the terrain.
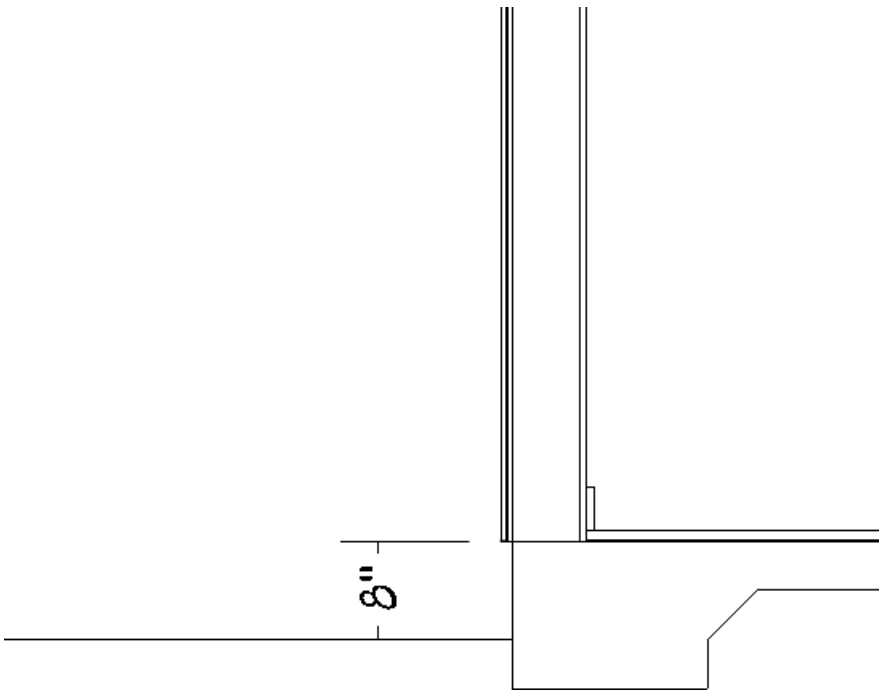
Note: The distances described above may vary somewhat in older program versions. Also, to make sure the automatic terrain height is up to date with the foundation type, select Terrain> Build Terrain.

To specify a different distance between the floor and terrain

1. Using the **Select Objects** ⟍ tool, select the Terrain Perimeter, then click the **Open Object** ▯ edit button.

   In Home Designer Pro, you can also navigate to **Terrain> Terrain Specification** ▨ from the menu.

2. On the GENERAL panel of the **Terrain Specification** dialog, remove the check from the **Automatic** box, then type in the needed value in the **Subfloor Height Above Terrain** field.
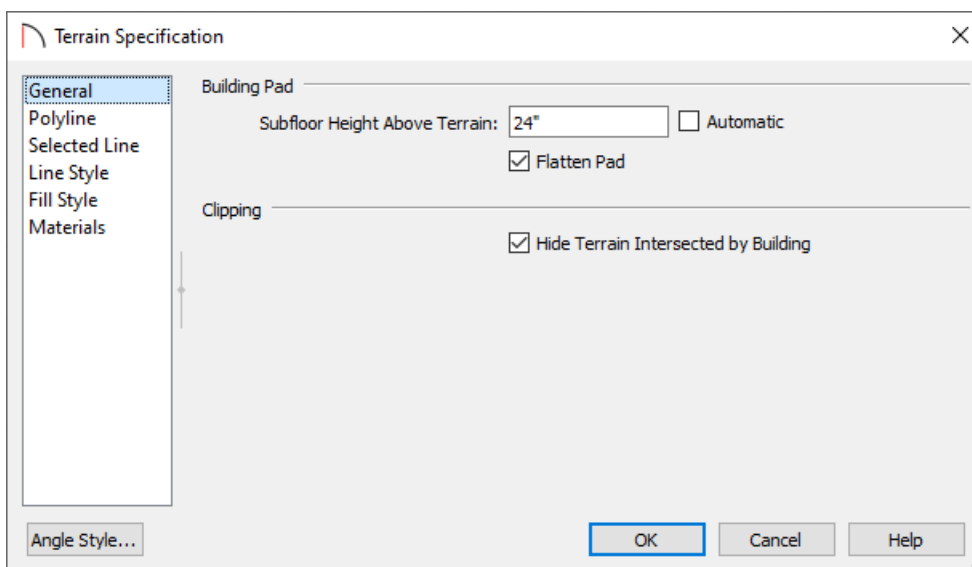
3. Click **OK** to apply the change.

Related Articles

Adding a Pond and Stream to Your Terrain (/support/article/KB-00447/adding-a-pond-and-stream-to-your-terrain.html)

Modeling a Sloping Terrain for a Walk-out Basement (/support/article/KB-00718/modeling-a-sloping-terrain-for-a-walk-out-basement.html)