Creating a Storage Loft in a Larger Room

Reference Number: **KB-03012** Last Modified: **October 11, 2021**

The information in this article applies to:



QUESTION

I have a large area that needs to have smaller office spaces within that have ceilings shorter than the main area. How do I create these shorter areas, while being able to create storage space above?

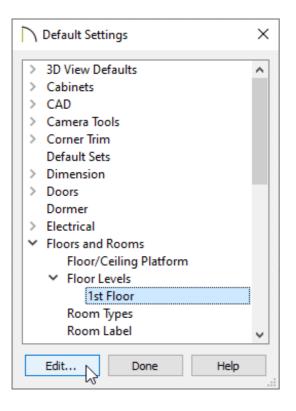


ANSWER

Smaller, shorter rooms with storage above can be created within a larger room by using a second floor. For example, if the larger room is going to have 18' ceilings and the smaller rooms will have 9' ceilings, you would create the first floor with a 9' ceiling height and the second floor could be 9' minus the thickness of the ceiling structure of the smaller rooms.

To create the first floor

- 1. Select **Edit> Default Settings** (4) from the menu.
- 2. Select Floors and Rooms> Floor Levels> 1st Floor, then click the Edit button.



3. In the **1st Floor Defaults** dialog, specify the desired **Ceiling** height on the **STRUCTURE** panel.

For this example, 109 1/8" is used.

1st Floor Defaults				
Structure	Absolu	ite Elevations		
Moldings		Floor Above:		
Fill Style Materials		Ceiling:	109 1/8"	
		Floor:	0" 55	
		Floor Below:		
	Relativ	ve Heights		
		Rough Ceiling:	109 1/8"	
		Finished Ceiling:	107 5/8"	
		SWT To Ceiling:	109 1/8"	
		Ceiling Below:		
		Stem Wall:	37 1/2"	
		SWT = Stem Wall	Тор	
	* Ceiling]		
			Roof Over This Room	
			Flat Ceiling Over This Room Shelf Ceiling	
			Use Soffit Surface for Ceiling	
		Ceiling Structure:		
		Ceiling Finish:	5/8" Edit 🔽 Default	
	Flags			
	Floor		Floor Under This Room	
			Eloor Supplied by the Foundation Room Below	
			Monolithic Slab Foundation	
		Floor Finish:	7/8" Edit 🗹 Default	
		Floor Structure:	12 5/8" Edit 🗹 Default	

- 4. Click **OK** and **Done** to close the dialogs.
- 5. Select **Build> Wall> Straight Exterior Wall** , then click and drag to draw out the exterior walls.

For this example, a 45' x 45' structure is drawn.

6. Select **Build> Wall> Straight Interior Wall** and then click and drag to draw the interior walls of the space.

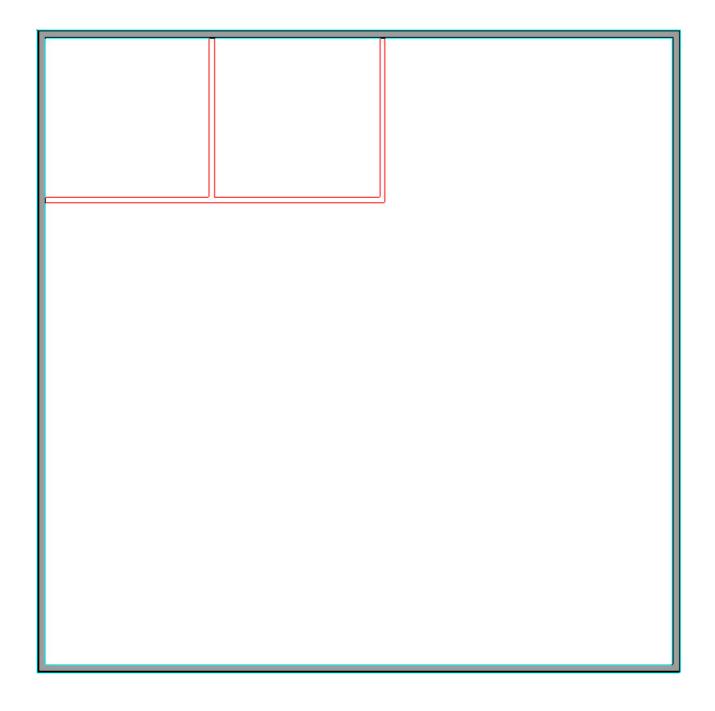
For this example, two 12 'x 12' rooms are drawn.

To create the second floor

- 1. Select **Build> Floor> Build New Floor** from the menu.
- 2. In the **New Floor** dialog that appears, select the **Derive new 2nd floor plan from the 1st floor plan** option, then click **OK**.
- 3. In the **2nd Floor Defaults** dialog, specify the **Rough Ceiling** height as well as the **Floor Structure** for the storage space above the smaller rooms.

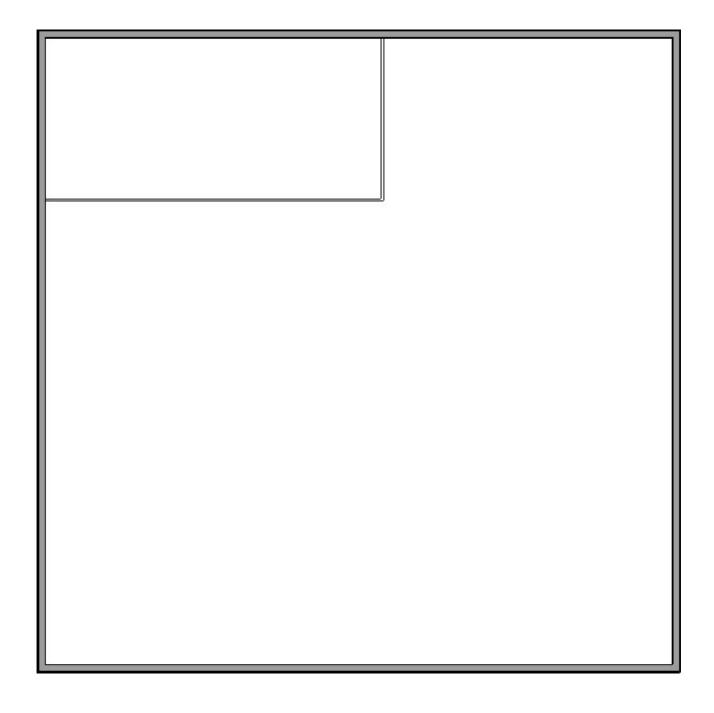
Structure	Absolu	ite Elevations			
Moldings		Floor Above:			
Fill Style Materials		Ceiling:	218 7/8"		
		Floor:	121 3/4"		
		Floor Below:	0"		
	Relativ	ve Heights			
		Rough Ceiling:	97 1/8"		
		Finished Ceiling:	95 5/8"		
		SWT To Ceiling:	97 1/8"		
		Ceiling Below:	109 1/8"		
		Stem Wall:	37 1/2"		
		SWT = Stem Wall	Тор		
	Ceiling]	Roof Over This Room		
			✓ Roof Over This Room ✓ Flat Ceiling Over This Room		
			Shelf Ceiling		
			Use Soffit Surface for Ceiling		
		Ceiling Structure:	5 1/2" Edit 🗹 Default		
		Ceiling Finish:	5/8" Edit 🗹 Default		
	Floor				
			Floor Under This Room		
			Floor Supplied by the Foundation Room Below		
			Monolithic Slab Foundation		
		Floor Finish:	7/8" Edit 🗹 Default		
		Floor Structure:	12 5/8" Edit 🗹 Default		

- 4. Click **OK** when done to apply the changes and close the dialog.
- With the second floor now active, select Tools> Floor/Reference Display> Reference Display to turn on the Reference Display feature so that you can see the placement of the walls on floor 1 while working on floor 2.



- 6. Select **Build> Railing and Deck> Straight Railing** and click and drag to draw a railing on top of the 1st floor interior walls along the storage area perimeter.
- 7. Select **Tools> Floor/Reference Display> Reference Display** to turn off the reference floor display.

There should now be two rooms on the second floor: the smaller storage area above the interior rooms and the big room over the larger area.



- 8. Using the **Select Objects** tool, select the larger room on floor 2, then click the **Open Object** edit button.
- 9. On the GENERAL panel of the **Room Specification** dialog, use the drop-down menu beside Room Type to select **Open Below**, then click **OK**.

NRoom Specification						
General Structure Deck Deck Support Moldings Wall Covering Fill Style Materials Components Schedule	General Room Type: Open Below Define Room Name: Open Below Show Room Label Living Area OInclude in Total Living Area Calculation Exclude from Total Living Area Calculation Use Default (Excluded)					
	Conditioned Room Conditioned Unconditioned Use Default (Conditioned)					

10. Take a **Camera** io view to see the results.



A staircase can now be added going up to the storage area, and doors and windows can be added to the interiors rooms located on the first floor.

Related Articles

Creating a Room with a Short Ceiling or Plant Shelf Closet Effect (/support/article/KB-03057/creating-a-room-with-a-short-ceiling-or-plant-shelf-closet-effect.html)

