

# Creating Barrier-free Cabinets

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## QUESTION

I am designing a kitchen for a client with a disability and would like to know how I can create kitchen cabinets that meet his needs. How can I do this?






## ANSWER

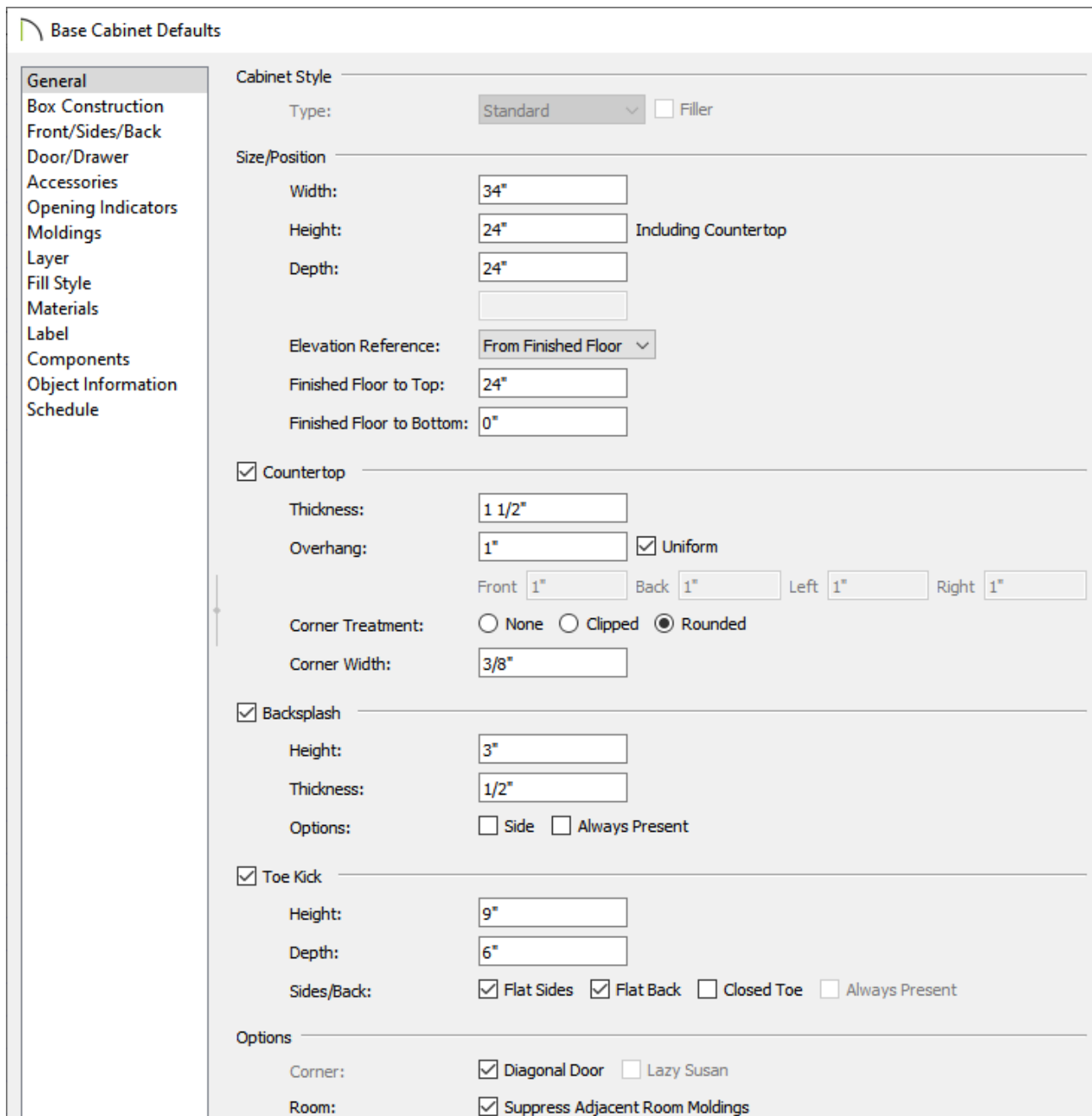
There are a number of ways to customize cabinets so that they meet the needs of individual clients.

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The steps in this article will teach you how to design your own accessibility cabinets; however, you can also download and install the Accessible Design (<https://www.chiefarchitect.com/3d-library/index.php?r=site/detail/790>) bonus catalog from the Chief Architect 3D Library (<https://www.chiefarchitect.com/3d-library/index.php?r=site/library&reset=true>). This catalog is available for free for all users.

## To create base cabinets that accommodate wheelchairs



1. **Open**  the plan file in which you would like to design barrier-free cabinetry.
2. Select **Edit> Default Settings**  from the menu. In the **Default Settings** dialog, click the arrow  beside **Cabinets**, select **Base Cabinet** and click the **Edit** button.
3. On the **GENERAL** panel of the **Base Cabinet Defaults** dialog:

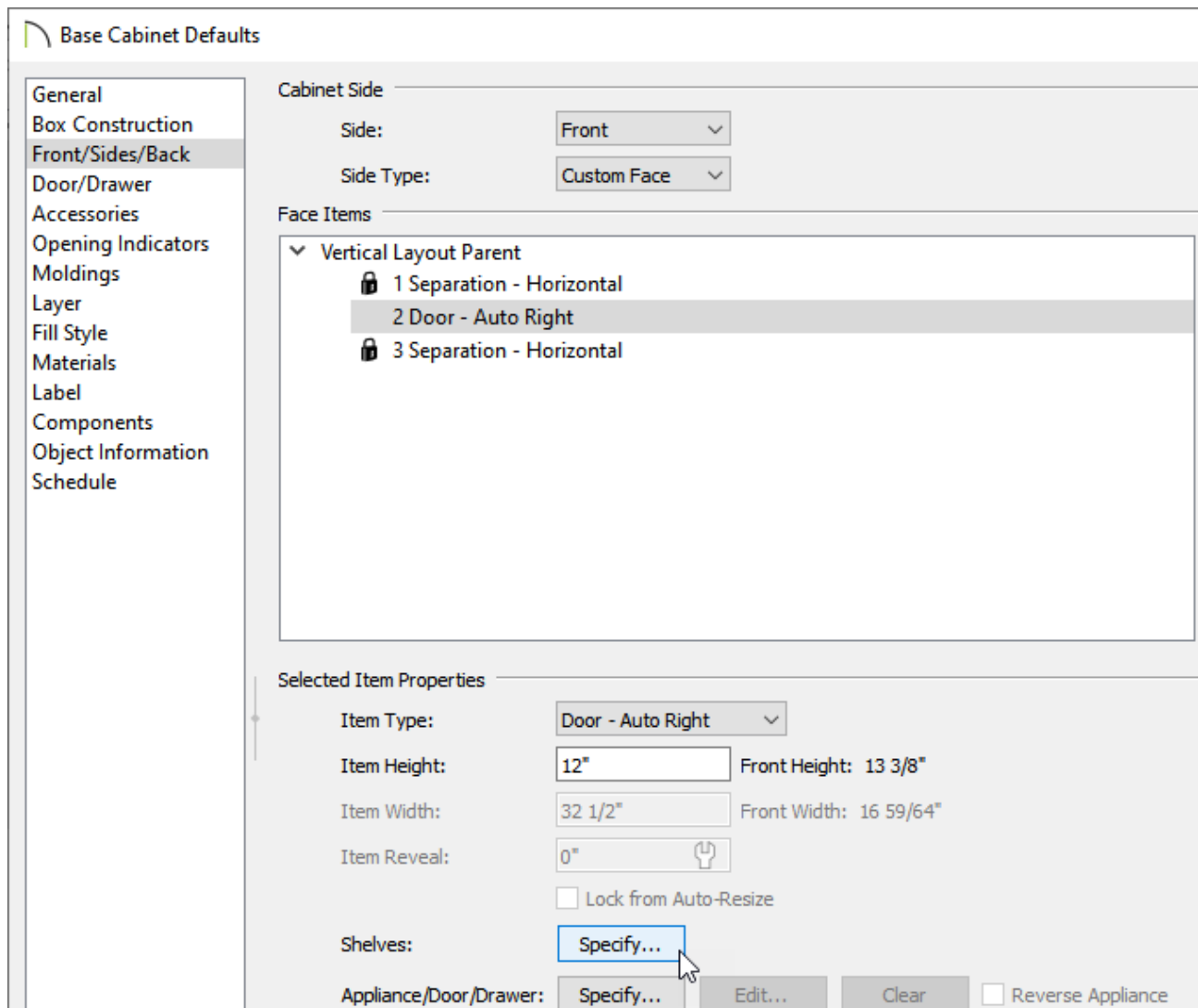
The image shows a software dialog box titled "Base Cabinet Defaults". On the left is a vertical sidebar with a list of categories: General, Box Construction, Front/Sides/Back, Door/Drawer, Accessories, Opening Indicators, Moldings, Layer, Fill Style, Materials, Label, Components, Object Information, and Schedule. The "General" category is selected and highlighted. The main area of the dialog is divided into several sections. The "Cabinet Style" section has a "Type:" dropdown set to "Standard" and an unchecked "Filler" checkbox. The "Size/Position" section contains input fields for "Width:" (34"), "Height:" (24"), and "Depth:" (24"), with the text "Including Countertop" next to the height field. Below these are "Elevation Reference:" (From Finished Floor), "Finished Floor to Top:" (24"), and "Finished Floor to Bottom:" (0"). The "Countertop" section is checked and includes "Thickness:" (1 1/2"), "Overhang:" (1"), and a "Uniform" checkbox. It also has input fields for "Front", "Back", "Left", and "Right" overhangs, all set to 1". "Corner Treatment:" has radio buttons for "None", "Clipped", and "Rounded" (which is selected), and a "Corner Width:" field set to 3/8". The "Backsplash" section is checked and includes "Height:" (3"), "Thickness:" (1/2"), and "Options:" with checkboxes for "Side" and "Always Present". The "Toe Kick" section is checked and includes "Height:" (9"), "Depth:" (6"), and "Sides/Back:" with checkboxes for "Flat Sides", "Flat Back", "Closed Toe", and "Always Present". The "Options" section at the bottom has "Corner:" with checkboxes for "Diagonal Door" and "Lazy Susan", and "Room:" with a checked "Suppress Adjacent Room Moldings" checkbox.

- Specify the desired **Height** including the countertop. In this example, **34"** is used.
- Specify the **Toe Kick Height** and **Depth**. In this example, **9"** and **6"**, respectively, are used.
- Click **OK** to close the dialog and apply your changes; then, click **Done** to close the **Default Settings** dialog.

4. Select **Build> Cabinet> Base Cabinet**  from the menu, then click in your plan to place a base cabinet with your modifications at that location.

## To create base cabinets with accessible storage

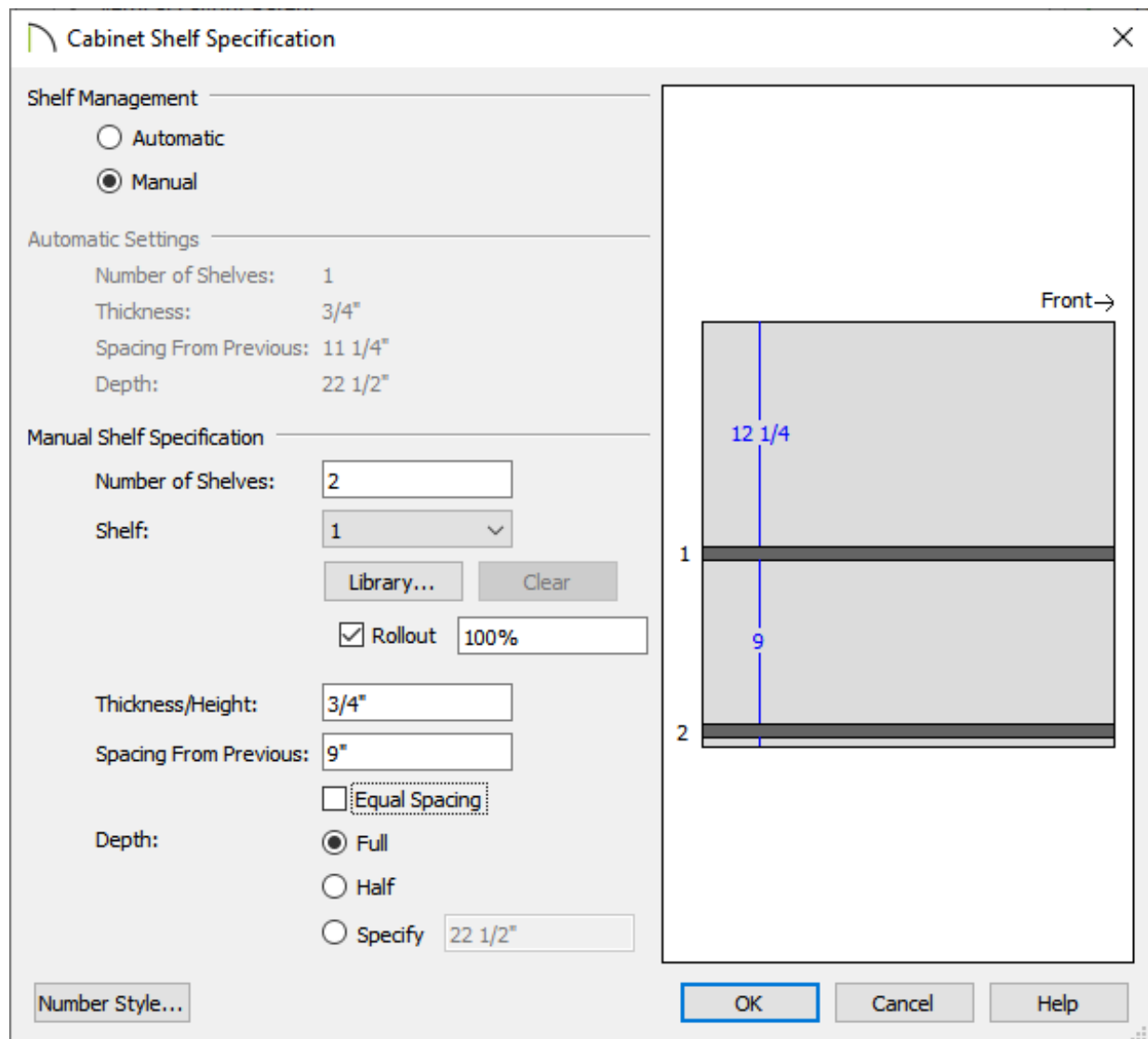
1. Select **Edit> Default Settings**  from the menu. In the **Default Settings** dialog, click the arrow  beside **Cabinets**, select **Base Cabinet** and click the **Edit** button.
2. On the **FRONT/SIDES/BACK** panel of the **Base Cabinet Defaults** dialog, click on the drawer in the preview image, then click the **Delete** button.
3. Next, click on the door in the preview image to select it or select the **Item Number** drop down list and pick the number that correlates with the **Auto Right Door**.
4. Click the **Specify Shelves** button.



5. In the **Cabinet Shelf Specification** dialog, which opens next, click the radio button

beside **Manual** to enable the options below it.

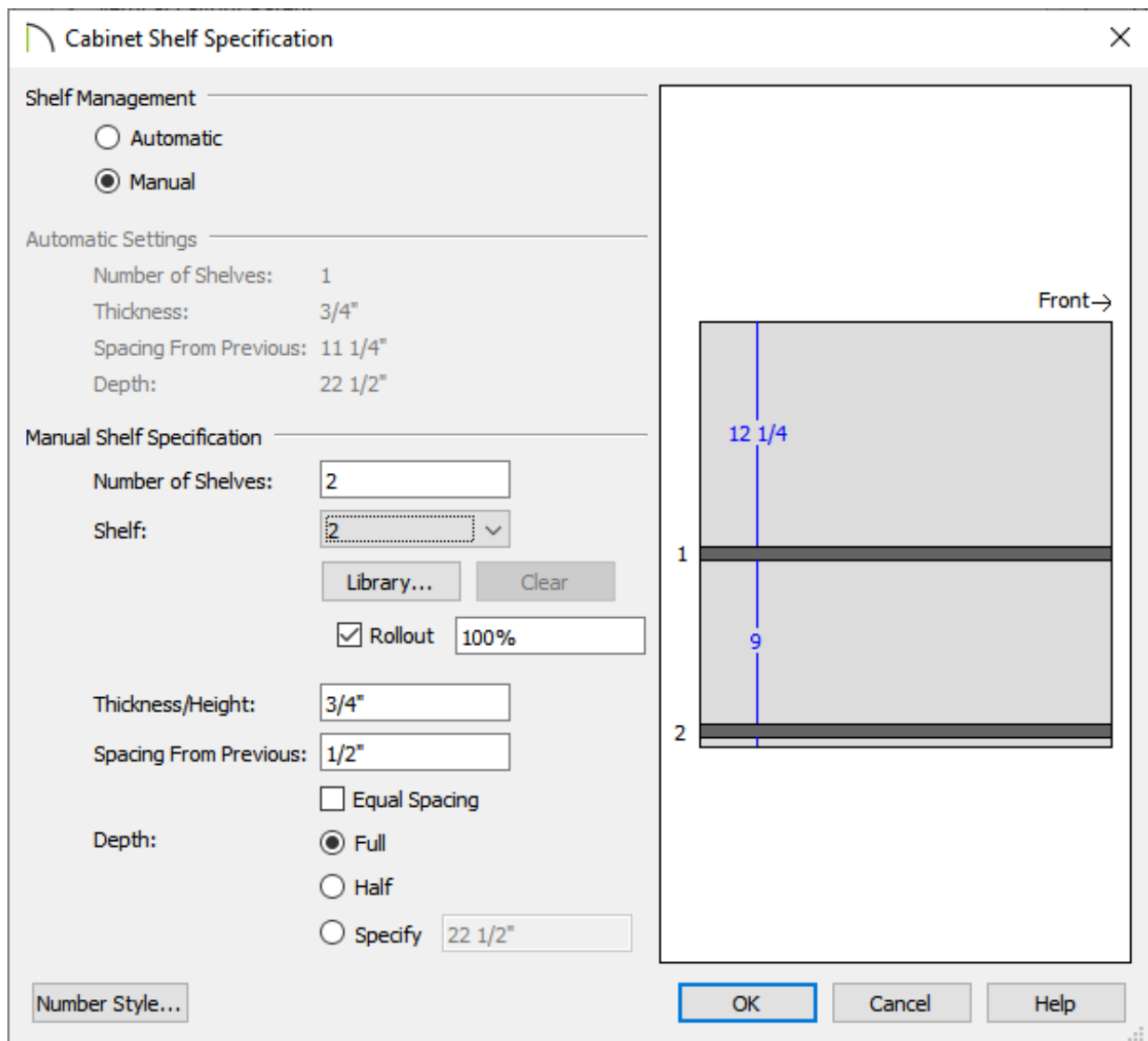
6. Uncheck **Equal Spacing**, then specify the desired **Number of Shelves**. In this example, **2** shelves are used.
7. Select **1** from the **Shelf** drop-down list, then:



The screenshot shows the 'Cabinet Shelf Specification' dialog box. The 'Shelf Management' section has 'Automatic' unselected and 'Manual' selected. The 'Automatic Settings' section shows 'Number of Shelves' as 1, 'Thickness' as 3/4\", 'Spacing From Previous' as 11 1/4\", and 'Depth' as 22 1/2\". The 'Manual Shelf Specification' section shows 'Number of Shelves' as 2, 'Shelf' as 1, 'Library...' and 'Clear' buttons, 'Rollout' checked at 100%, 'Thickness/Height' as 3/4\", 'Spacing From Previous' as 9\", 'Equal Spacing' unchecked, 'Depth' as Full, and 'Specify' as 22 1/2\". A 'Number Style...' button is at the bottom left. The preview on the right shows a cabinet front with two shelves. The top shelf is labeled '1' and the bottom shelf is labeled '2'. The distance from the bottom of the cabinet to the top of the first shelf is labeled '12 1/4\". The distance between the two shelves is labeled '9\". The 'Front' arrow points to the right.

- Select **Rollout** from the **Type** drop-down list.
- Specify the **Spacing From Previous** as **9"**. In the case of Shelf 1, which is the top shelf, this value is the distance from the bottom of the shelf to the top surface of the second shelf.
- Press the **Tab** key on your keyboard to update the preview image on the right.

8. Select **2** from the **Shelf** drop-down list, then:



The image shows the 'Cabinet Shelf Specification' dialog box. It has a title bar with a close button (X). The dialog is divided into three main sections: 'Shelf Management', 'Automatic Settings', and 'Manual Shelf Specification'. In 'Shelf Management', 'Automatic' is unselected and 'Manual' is selected. 'Automatic Settings' shows 'Number of Shelves: 1', 'Thickness: 3/4"', 'Spacing From Previous: 11 1/4"', and 'Depth: 22 1/2"'. 'Manual Shelf Specification' has 'Number of Shelves' set to 2, 'Shelf' set to 2 (from a dropdown), 'Library...' and 'Clear' buttons, 'Rollout' checked at 100%, 'Thickness/Height' set to 3/4", 'Spacing From Previous' set to 1/2", 'Equal Spacing' unchecked, and 'Depth' set to Full. A 'Number Style...' button is at the bottom left. On the right, a diagram shows a cabinet front with two shelves. The top shelf is labeled '1' and the bottom shelf is labeled '2'. A vertical dimension line on the left indicates a height of 12 1/4" for the top section and 9" for the bottom section. A 'Front→' label is at the top right of the diagram. At the bottom right are 'OK', 'Cancel', and 'Help' buttons.

**Cabinet Shelf Specification**

**Shelf Management**

☐ Automatic

☒ Manual

**Automatic Settings**

Number of Shelves: 1

Thickness: 3/4"

Spacing From Previous: 11 1/4"

Depth: 22 1/2"

**Manual Shelf Specification**

Number of Shelves: 2

Shelf: 2

Library... Clear

☒ Rollout 100%

Thickness/Height: 3/4"

Spacing From Previous: 1/2"

☐ Equal Spacing

Depth: ☒ Full ☐ Half ☐ Specify 22 1/2"

Number Style...

OK Cancel Help


Front→

12 1/4"


9"

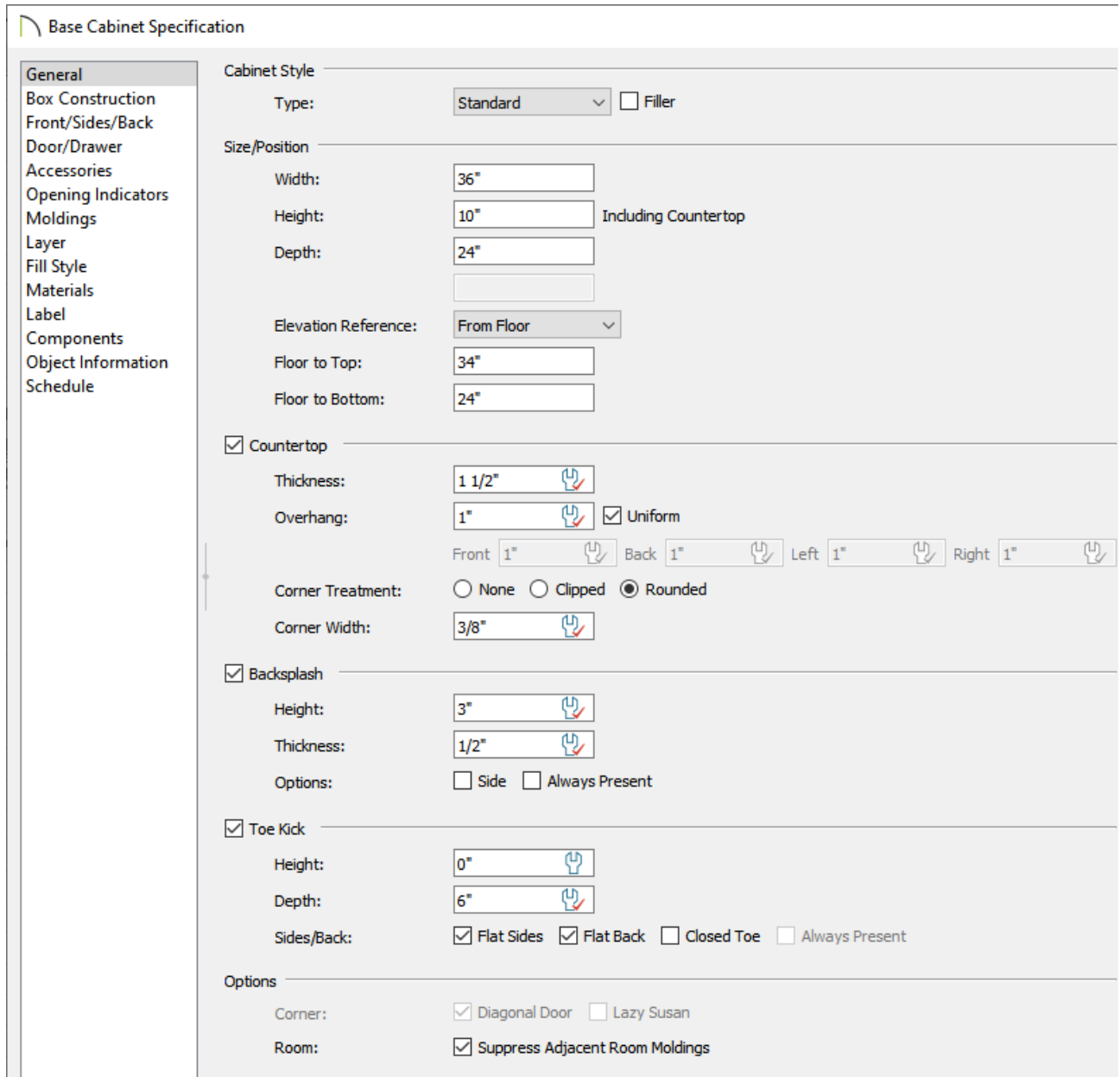
1

2

9. When you are satisfied with your shelves, click **OK** to close the **Cabinet Shelf Specification** dialog, then click **OK** once more to close the **Base Cabinet Defaults** dialog. Finally, click **Done** to close the **Default Settings** dialog.
10. Select **Build> Cabinet> Base Cabinet**  from the menu, then click in your plan to place a base cabinet with these additional modifications in your plan.

To create a barrier-free sink or cooktop base

1. Select a base cabinet that you would like to use as a sink base and click the **Open Object**  edit button.
2. On the **GENERAL** panel of the **Base Cabinet Specification** dialog:



The image shows the 'Base Cabinet Specification' dialog box with the 'General' panel selected. The dialog is divided into several sections for configuring cabinet properties.

**General**

**Cabinet Style**

Type:  ☐ Filler

**Size/Position**

Width:

Height:  Including Countertop


Depth:


Elevation Reference:





Floor to Top:

Floor to Bottom:


☒ **Countertop**

Thickness:  


Overhang:   ☒ Uniform


Front:   Back:   Left:   Right:  

Corner Treatment: ☐ None ☐ Clipped ☒ Rounded

Corner Width:  


☒ **Backsplash**


Height:  

Thickness:  

Options: ☐ Side ☐ Always Present

☒ **Toe Kick**

Height:  

Depth:  

Sides/Back: ☒ Flat Sides ☒ Flat Back ☐ Closed Toe ☐ Always Present

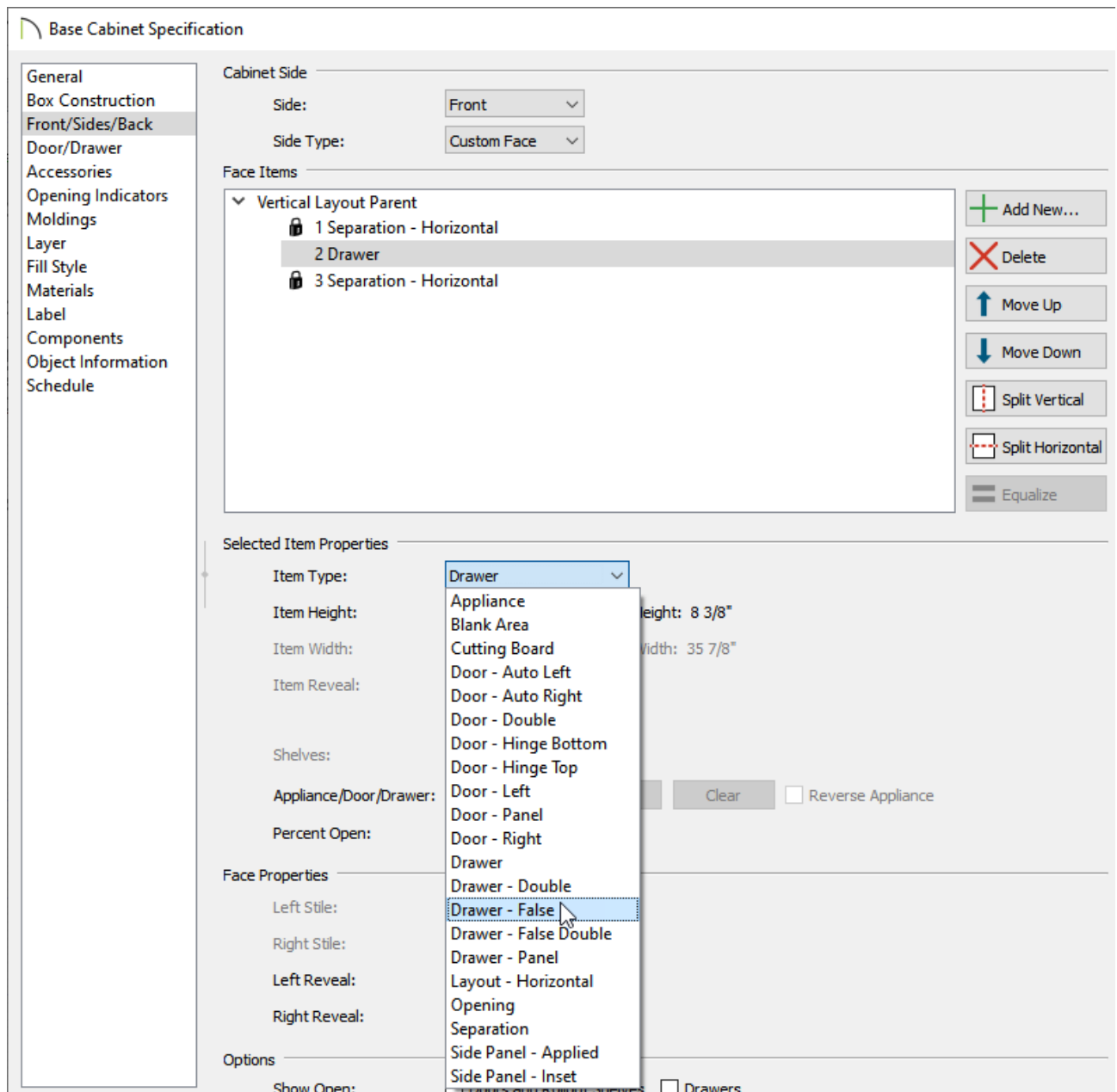
**Options**

Corner: ☒ Diagonal Door ☐ Lazy Susan

Room: ☒ Suppress Adjacent Room Moldings

- Specify a **Width** sufficient to hold the sink that you wish to use. In this example, **36"** is used.
- Specify the **Height** of the cabinet, measured from the bottom to the top. In this example, **10"** is used.
- Specify the desired **Floor to Bottom** distance, measured from the bottom of the cabinet down to the floor. This value should be enough to accommodate a wheelchair user's knees. In this example, **24"** is used.

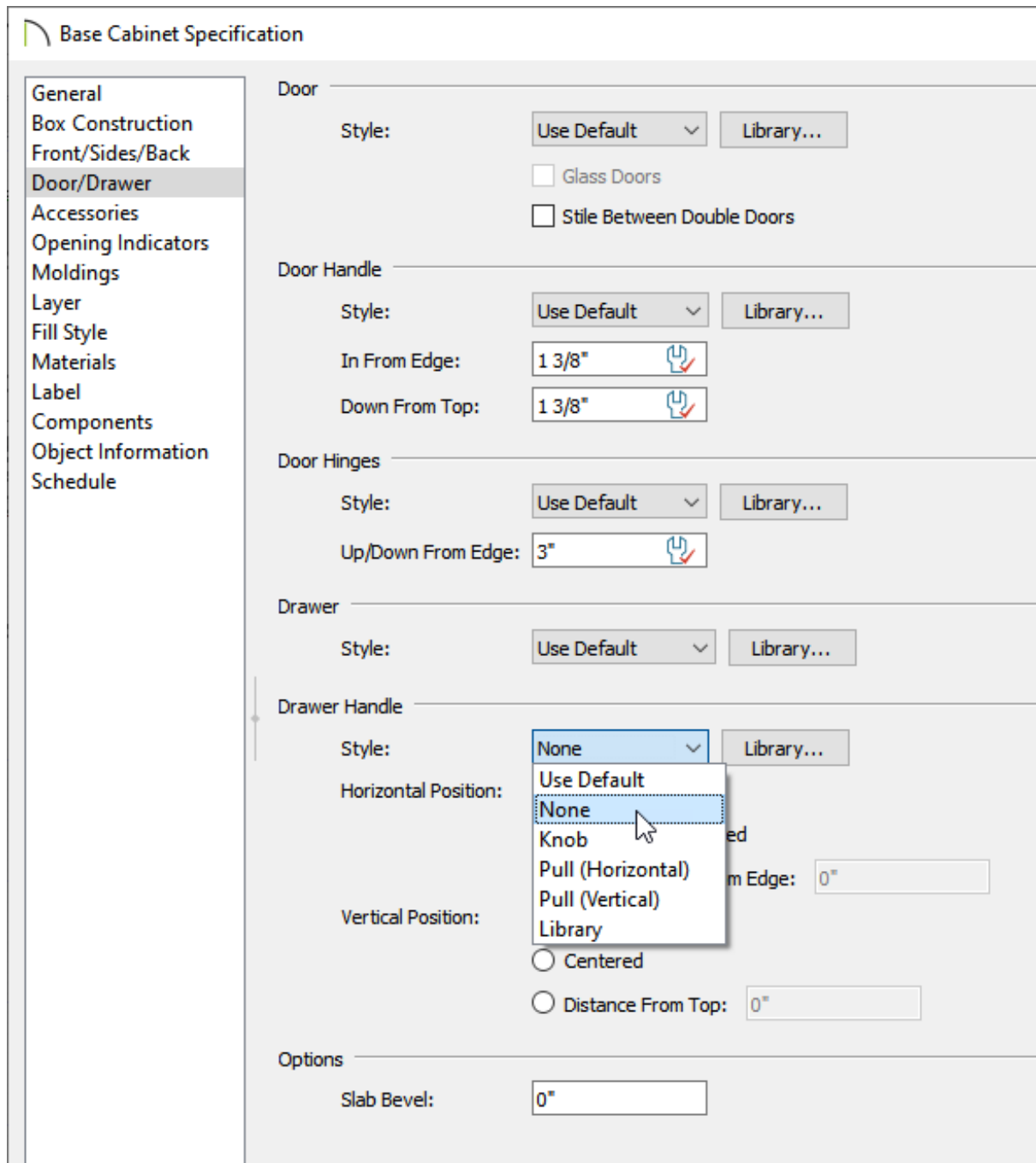
- On the **FRONT/SIDES/BACK** panel, click on the cabinet drawer in the preview image or select the **Item Number** drop down list and pick the number that correlates with the **Drawer**.
- Select **Drawer - False** from the **Item Type** drop-down list.





- If there's a face item defined as a toe kick, click on it in the preview pane or within the **Item Number** drop down to select it, and hit the **Delete** button.
- Adjust the **Item Height** of your **False Drawer** if necessary.



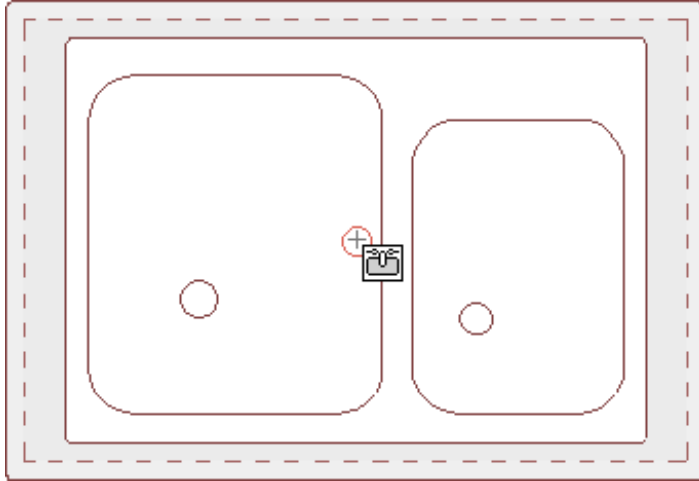
5. On the **DOOR/DRAWER** panel, select **None** from the **Drawer Handle** drop-down list, then click **OK**.



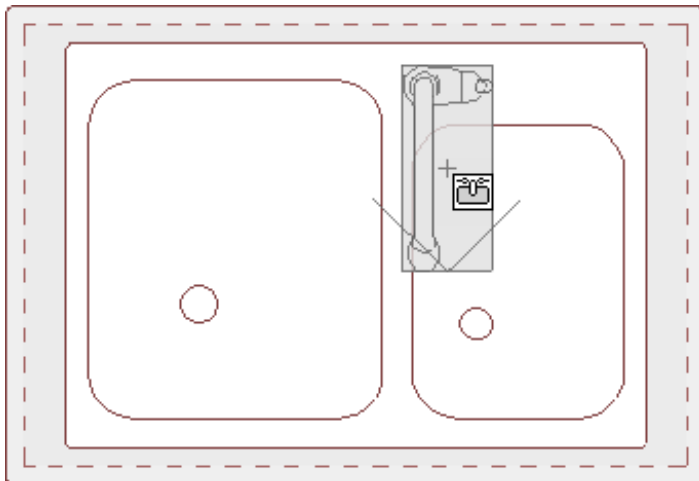
6. Select **View> Library Browser**  from the menu, then browse to **Architectural> Fixtures> Sinks> Kitchen Sinks> Without Fixtures** and click on a kitchen sink to select it.
- In this example, the **Flush Mount Offset 32"** sink is used.
  - Alternatively, you can browse to **Architectural> Appliances> Cooktops & Rangetops**.

- When you move your cursor into the drawing area, it displays a fixture icon .


7. Click on the sink base to place the selected sink or cooktop in this cabinet.



8. Next, browse to **Architectural> Fixtures> Faucets> Kitchen Fixtures> Single Control** and click on a faucet to select it. You can also find hot water taps in the **Accessories** subfolder.




Single control fixtures such as levers are recommended in barrier-free designs because they do not require strong grips to use them.


9. Move your cursor into the drawing area and click on the cabinet to place the faucet. Once placed, its position on the cabinet can be adjusted using its **Move**  edit handle.

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Related Articles


 [Building an Accessibility Ramp \(/support/article/KB-01114/building-an-accessibility-ramp.html\)](/support/article/KB-01114/building-an-accessibility-ramp.html)

 [Creating and Using Plan Templates \(/support/article/KB-00463/creating-and-using-plan-templates.html\)](/support/article/KB-00463/creating-and-using-plan-templates.html)

 [Locating and Importing 3D Symbols \(/support/article/KB-00117/locating-and-importing-3d-symbols.html\)](/support/article/KB-00117/locating-and-importing-3d-symbols.html)



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