SketchList 3D Cabinet Wizard

The Cabinet Wizard add-on to SketchList 3D reduces both the learning curve and time required to make and customize designs. You can design highly customized cabinets and furniture in minutes.

This is accomplished by working from a list of predefined models with a form that allows you to customize every important aspect of the design. The way you craft cabinets and furniture is built into your design. With the Cabinet Wizard you accomplish a great deal of work in a very short period of time.

A cut list, shop drawings, and optimized layout diagrams (Pro version) are available after models are imported to SketchList 3D.

Getting Started

Create or open a project.

When you create a new project, you can specify either the metric or imperial [feet and inches] system of measurement to use. To open the Cabinet Wizard from SketchList 3D, click its icon near the top of the page.



The 3 sections of the Cabinet Wizard form, left to right, are as shown.



- 1. A visual list of models [blue box] that are available for import to SketchList 3D. Click on a model to load it.
- 2. The working section [red box] has two tabs:
- The size tab is where you change material and part sizes. The section is organized into categories containing parameters for the cabinets and its doors and drawers. For our use parameters means characteristics, factors, or aspects that define the design.
- The build tab is where you remove parts from the design. Click on a part in the design and its listing under the build tab is selected. Click the check mark to remove the parts. The part removed is now hidden. You can re-click to return the part to the design. Parts removed from the design are not moved to SketchList 3D.
- Notice that this section may display tabs that organize the parameters. For example, a model may have a Drawer tab where everything about the drawer is kept. A model without a drawer will not have a drawer tab.
- Drawer Box and door panel made of plywood. The image area [green box] displays a 3D rendering of the model. You can rotate the model to examine it from every angle.

You cannot delete default models from the list. The load more button allows you to import additional models as we develop them.

To change a parameter, highlight it with your cursor and enter the new value. Click the enter key on your keyboard. Check the image area to see the result.

The parameters you enter may be saved for future use. Click the down arrow at the right of the text box. Select 'save as' and type in a name for this profile. Click OK. When you select a model to work upon, you can pick an existing profile and its values will be applied.

Understanding Size Changes

Size changes are proportional, but some objects are not affected. As a rule of thumb, if you can change a parameter of a part in the Cabinet Wizard, that part is not affected by automatic resizing. Only the parts for which the Cabinet Wizard calculates the depth, width, or height will be affected by the resizing activity.

The parameters under the size tab fall into the following categories:

Cabinet sizes	Height Width	Depth
Drawers	Height Adjustment Drawer Box Drawer Height Space Behind Drawer Front Panel Thickness of Drawer	Thickness of Box Materials Clearance Sides of Drawer Box Tenons on Box Bottom Distance at Bottom of Box Bottom
Doors	Size of tab on Door Panel Space Between Doors Space Around Doors and Drawers Door Stile Width	Door Rail Height Rails for Door Rails Door Panel Thickness Thickness of Door
Material Sizes	Sheet Good Thickness Lumber Thickness	Thickness of Countertop Material
Rails and Stiles	Left Stile Width Middle Stile Width Right Stile Width	Left Rail Scribe Amount Right Stile Scribe Amount
Setbacks and Clearances.	Setback for Frame Setback for Overlay Door or Drawer Overlay Doors and Drawers	Distance of Lower Shelf From Bottom of Cabinet
Tenons	Shelf Tenon Tenon Bottom Board	Tenon Backboard
Toe Kick	Toe Kick Height Toe Kick Depth	

NOTES:

- **1.** The types parameters present in any model vary depending upon the type of assembly being designed.
- 2. Parameters are designed to react to changes to the model size. For example, you specify the depth of a drawer by the space between the drawer and cabinet backing. This allows the drawer to vary with changes to cabinet depth.

The width of the door and drawers are determined by the distance between rails and stiles. If you increase or decrease stile width, the door or drawer between them reflects that change.

Heights of drawers are set. Heights of doors are calculated by the Cabinet Wizard.

The width of the shelves, bottom, and top are calculated with the insides of the vertical sideboards. Changing the thickness of those sideboards changes the width of the boards between them.

Cabinets

Each model contains different numbers and types of boards. The Cabinet Wizard lists boards for any model under the Build tab.



In our sample cabinet, which is typical of most, the boards are as follows.

- 1. Side Left
- 4. Stile Right
- 7. Shelf Top
- 10. Backboard

- 2. Side Right
- 5. Shelf Bottom
- 8. Rail Top
- 11. Middle Rail

- 3. Stile Left
- 6. Rail Bottom
- 9. Shelf

You change parameters under the cabinet tab. Overall cabinet sizes are the most frequently adjust.

Drawers

Each model drawer may contain different number of and types of boards. The Cabinet Wizard lists boards for any model under the Build tab. In our example drawer, which is typical of many, the drawer boards are as in the image.



Boards for drawers are as follows:

1. Panel Front2. Box Left3. Box Right4. Box Front5. Box Back6. Box

Material sizes for drawers are as follows:

1. Drawer box thickness - the thickness of the material used to make the drawer box.

Clearances for drawers are as follows:

- **1.** Drawer side clearance. The distance to accommodate drawer slides.
- **2.** Drawer bottom board set. The amount of material to be added to the drawer bottom to fit into slots in the front back and sides of the box.

- **3.** Drawer backspace. The distance from the back of the drawer to the back of the cabinet. This allows the drawer depth to change with changes in the cabinet depth.
- **4.** Drawer overlay. The thickness of the front panel of the drawer. This parameter affects the depth of the cabinet in order to make room for an overlay door.

Doors



The Cabinet Wizard lists boards for any model under the Build tab.

The boards for doors are as follows:

1. Stile Left

- 2. Stile Right
- 3. Bottom Rail

- 4. Top Rail
- 5. Panel

Material sizes for doors are as follows:

- 1. Door Style Width.
- Door Panel Tab
 The amount to be
 added to the panel on
 all four sides to fit into
 the frame
- **2.** Door Rail Height
- 5. Door Panel Thickness If different than the thickness of the framing material.
- **3.** Door Thickness.

Clearances for doors are as follows:

- **1.** Door Inset Clearance for inset doors the amount of space between the outside all four sides of the door and the frame.
- 2. Overlay for an overlay door the amount that the door overlays its opening.
- **3.** Door and Drawer Setback essentially the thickness of the door which adjust the cabinet depth to accommodate that thickness.

Add to library.

When an assembly is moved into SketchList 3D you can save it, or any part in it, to the library for use in many different designs. Objects in the library differ from the Cabinet Wizard in two ways.

- Library objects are those you use the SketchList 3D tools to further modify. Generally, you might import a cabinet with the Cabinet Wizard and use SketchList 3D to refine it.
- Library objects are not as dynamic as Cabinet Wizard assemblies. The tools in SketchList 3D modify library objects, but probably not as quickly as you can with the Cabinet Wizard.

Overview of Cabinet Wizard models



3	BASE F CARCASS A basic cabinet with no doors or drawers. Used as a basic starting point.	
4	BASE F 1 DOOR. A 1 door floor unit. It contains a vertical divider and two shelves.	
5	BASE F 1 DOOR. A base unit with 2 doors. The door height is a function of the cabinet height. The doors meet in the center and there is a parameter to set the gap between them.	
6	BASE F 1 DRAWER 2 DOORS. A single drawer over two doors. The draw height is re-sizable and determines the height of the door. The doors meet in the center and there is a parameter to set the gap between	

7 BASE F 1 DRAWER 1 DOOR.

them.

Base unit with one drawer and one door. The draw height is re-sizable and determines the height of the door.



8 BASE F 2 DRAWERS 2 DOORS

Floor cabinet containing 2 doors and 2 doors. The draw heights can be resized (independently of each other) and determine the height of the doors. The drawers and doors meet in the center and there is a parameter to set the gap between them.





9 BASE F 3 DRAWERS Base unit with three drawers. The top and bottom drawers are re-sizable. 10 COUNTERTOP This assembly may be used for countertop or floor in a design.

Further Modifications

Once you move the design into SketchList 3D you can further customize it.

Modifications include:

- Cloning, cloning and spacing, cloning and mirroring allow you to make multiple copies of any object and locate it in relationship to the entire project.
- Adding contours to the edges of boards as desired.
- Shaping (cutting) boards to create 45° angles, L-shaped, or otherwise angled or curved surfaces.
- Merging one or more assemblies to create a more complex design.

Cautions

The Cabinet Wizard places no constraints on the models generated. SketchList 3D requires all objects fit into their container limits (e.g. assembly, project). If you move a model from the Cabinet Wizard to SketchList 3D and nothing happens most probably an object is bigger than its container. Edit the project size or remove the board that is outside of the assembly space and move the model again.

Conclusions:

Cabinets are created to your standards and specifications in minutes using the Cabinet Wizard. With the Cabinet Wizard add-on to SketchList 3D, you achieve speed of design and flexibility. By editing the parameters that define the size and shape of the cabinet you have a great degree of control over the process.

We are looking to feedback, suggestions, and sample assemblies you create in the Cabinet Wizard. Also please let us know what Cabinet Wizard models you would like to see in the future.