

Easy Cabinet Maker

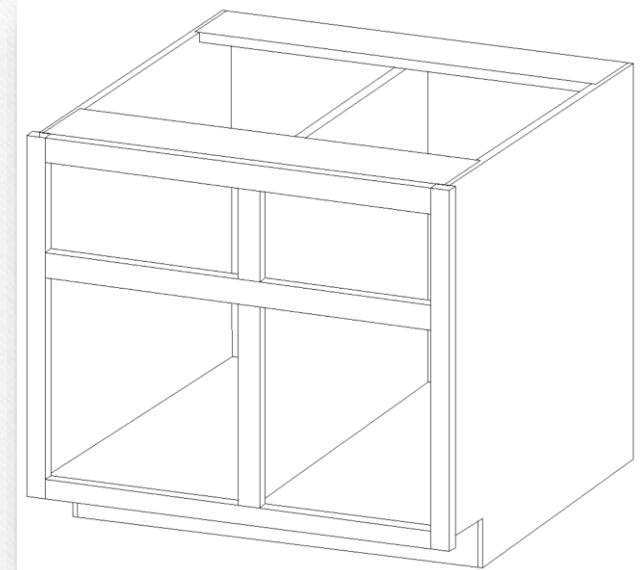
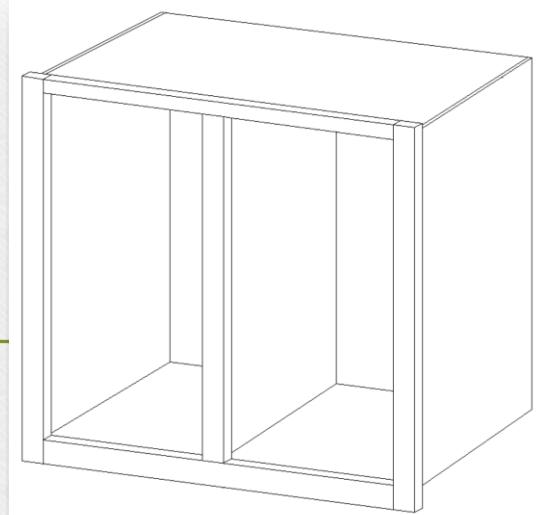
Version 13.5

Gadget Overview

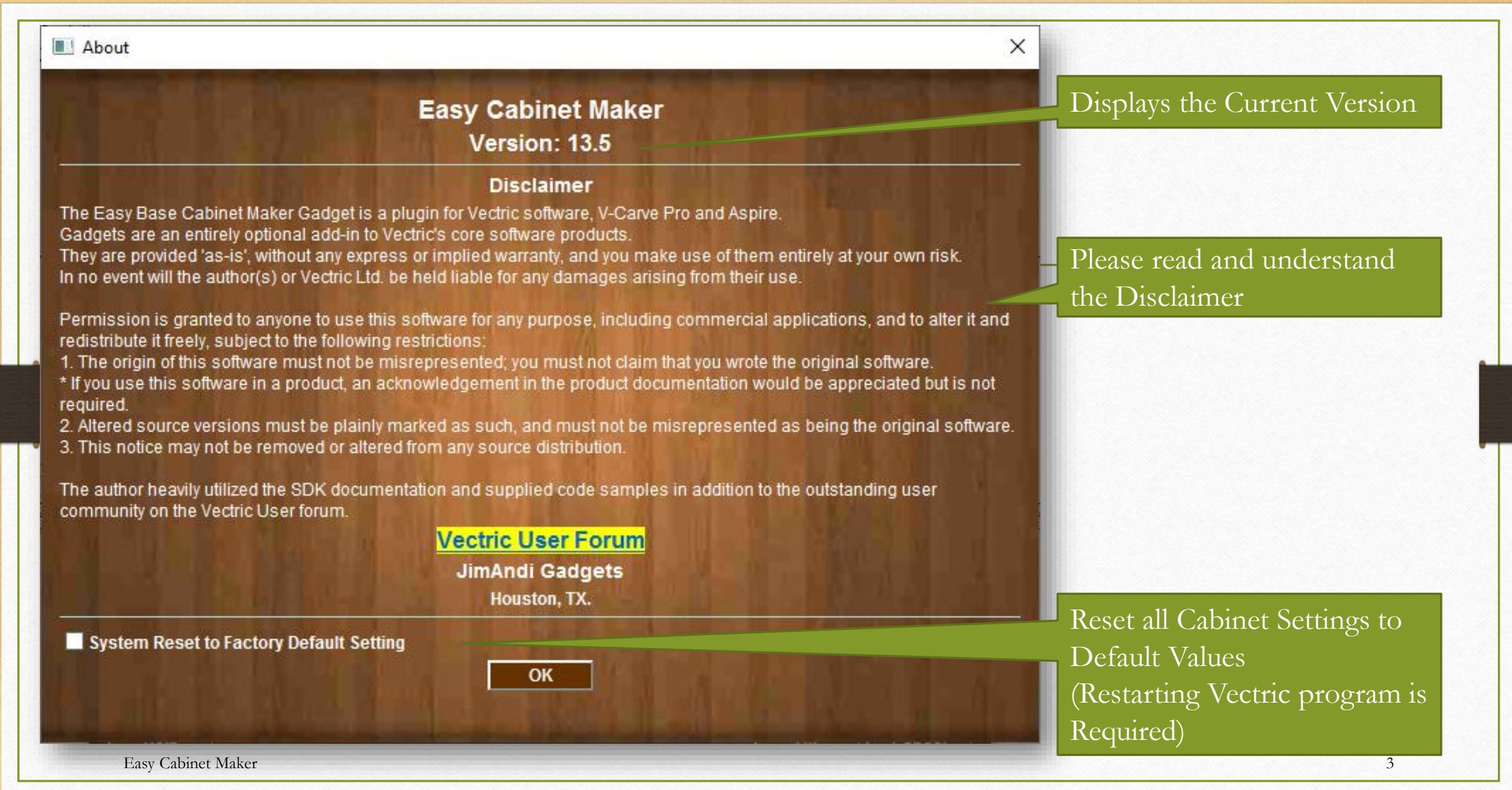
The Easy Cabinet maker gadget is a plug-in program for the Vectric Aspire or VCarve Pro products.

The gadget produces a face frame style cabinet in the upper (wall) or lower (base) or both configuration. The program is designed on being 100% parametrically driven. This design allows the user to have complete control of all variables being defined by the user. The solution also produces the following:

1. Complete cabinet drawings with toolpaths
2. Two styles of bill materials
 1. print ready shop cut list
 2. Excel ready “.csv” file for material needs
3. Optional sheet layouts for variable material thicknesses
4. Face frame layouts
5. Drawer slide and rear mount pilot holes
6. Import and Export configuration capabilities
7. Supports imperial or metric inputs
8. And many other features



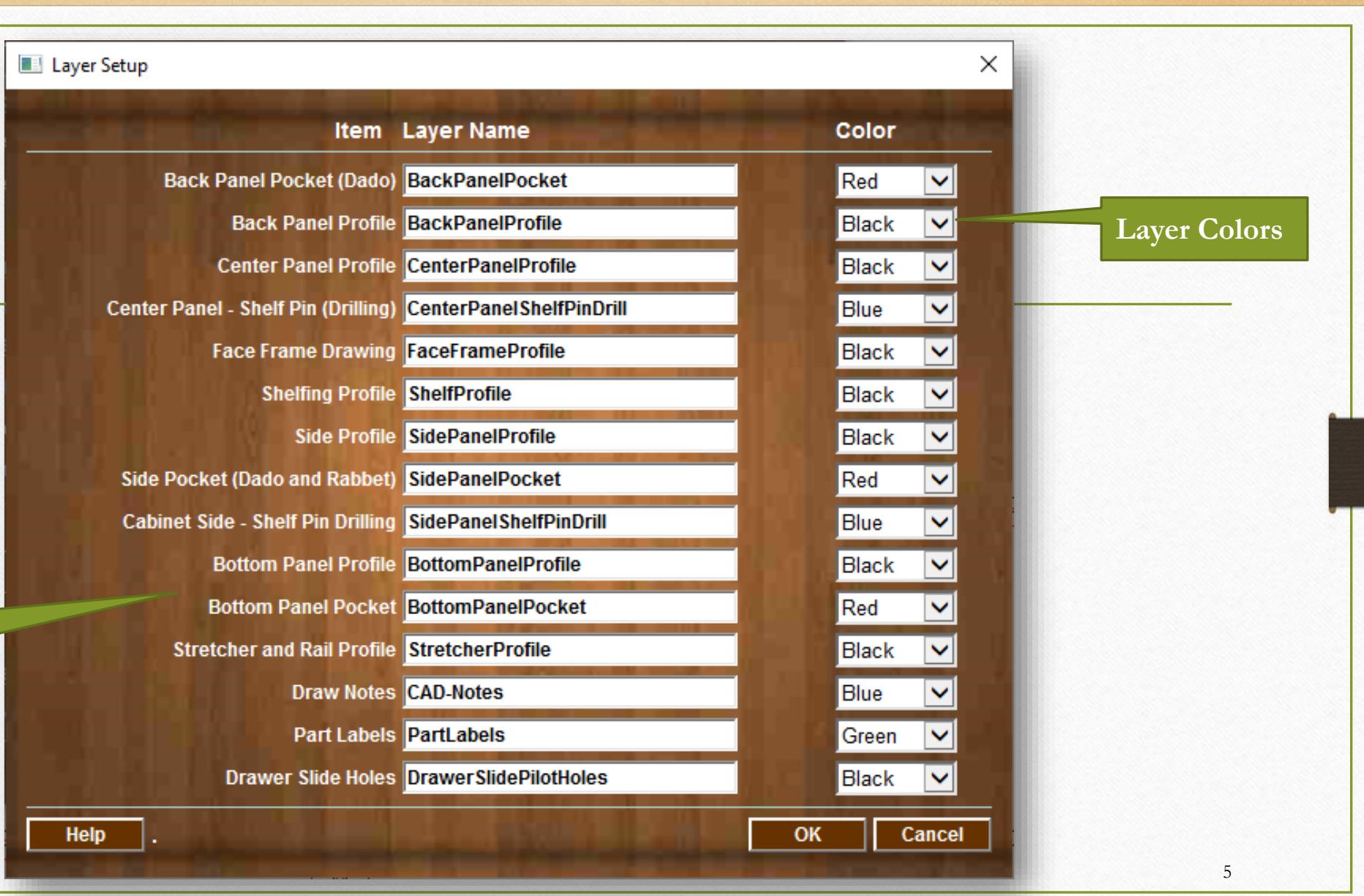
About Screen



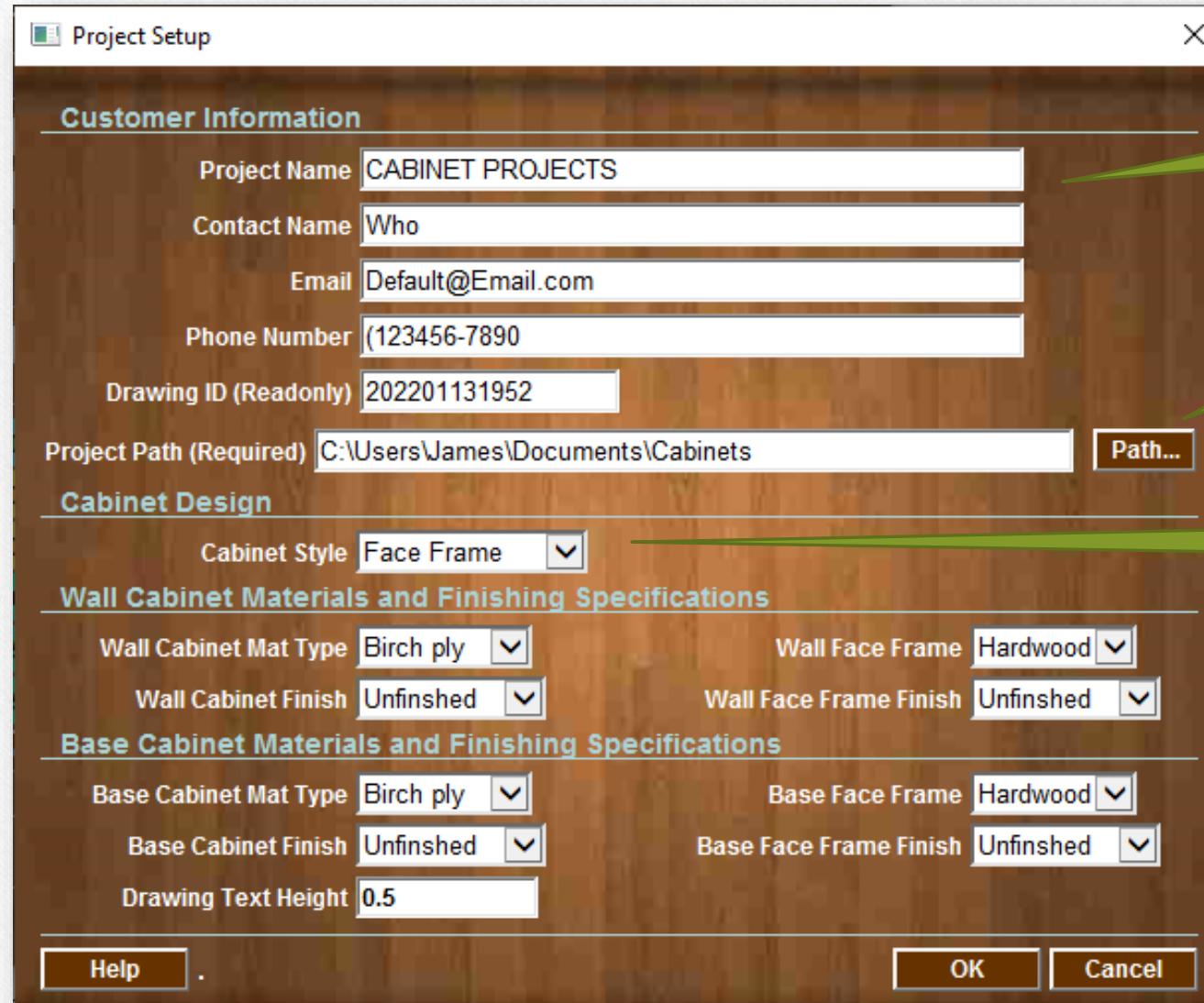
Main Screen



Layer Setup



Project Setup



Project And Contact Information

Project Path is required. All logs and BOM will be written

Cabinet Style
(Face Frame or No Face Frame)

Select Material Types and Finish's

Base Cabinet Setup



Wall Cabinet Setup

Enter Material Thickness

Shelf Values

Wall Cabinet Center Panel

Wall Cabinet Face Frame Values

Number of Shelves

Sheet Material Thickness

Carcass Thickness	0.75	Backing Material Thickness	0.5
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Shelving Information

Shelf Material Thickness	0.75	Shelf Nosing Width	1.125
Shelf Nosing Thickness	0.75	Shelf Pin Hole Top Spacing	4
Shelf Pin Hole Bottom Spacing	3	Shelf Pin Hole Rear Spacing	2
Shelf Pin Hole Front Spacing	1.75	Shelf Pin Hole Spacing	2
Shelf Front Clearance	0.25	Shelf End Clearance	0.18

Face Frame Information

Material Thickness	0.75	Stile Width	2.25
Top Rail Width	1.75	Center Stile Width	1.75
Bottom Rail Width	1.25	Top Reveal	0.25
Bottom Rail Reveal	0.0625	Cabinet Side Reveal	0.0625

Cabinet Design Features

Add Center Panel	No	Center Face Frame	Yes	Shelf Count	2
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Help . OK Cancel

Easy Cabinet Maker

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Milling Settings Menu

Milling Setting

Cabinet Construction Specifications and Notations

Back Dado Height	0.25	Dado Height	0.375
Dado Clearance	0.01	Shelf Pin Length	0.5
Part Gap	0.5	Shelf Pin Diameter	0.194

Add Joint Notes: Yes

Assembly Preferences

Base Assembly Holes	Yes <input checked="" type="checkbox"/>	Wall Assembly Holes	Yes <input checked="" type="checkbox"/>
Assembly Hole Max Space	12	Assembly Hole Min Space	2
Assembly Hole Diameter	0.125	Assembly Hole Start and End Space	1

Drawer Slide Pilot Hole Preferences

Pilot Hole Diameter	0.125	Pilot Hole Depth	0.25
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Construction Style

Dado Types	Through <input checked="" type="radio"/>	Dado Blind Amount	0.75
------------	--	-------------------	------

Default Bit Settings

Profile Bit Dia	0.25	Pocket Bit Dia	0.25
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Help **OK** **Cancel**

Default values for Milling

Assembly Holes and Placement

Milling Types

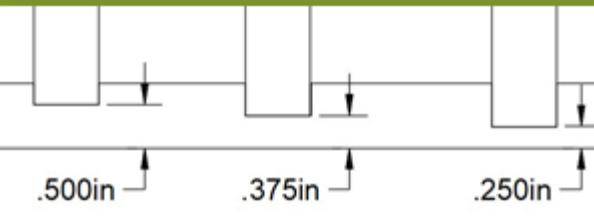
Drawer Slide Pilot Holes Details

Default Bit Diameter

Note: Back Dado Height and Dado Height are measurements from the material back to the bottom of the Dado. Sheet goods vary in thickness, a 3/4" plywood is never 3/4" it is usually 23/32" thick or less. This will ensure the overall dimensions of the cabinet will be accurate regardless of thickness of the material being used.

Material Back or Bottom

Dado Height Amount Value

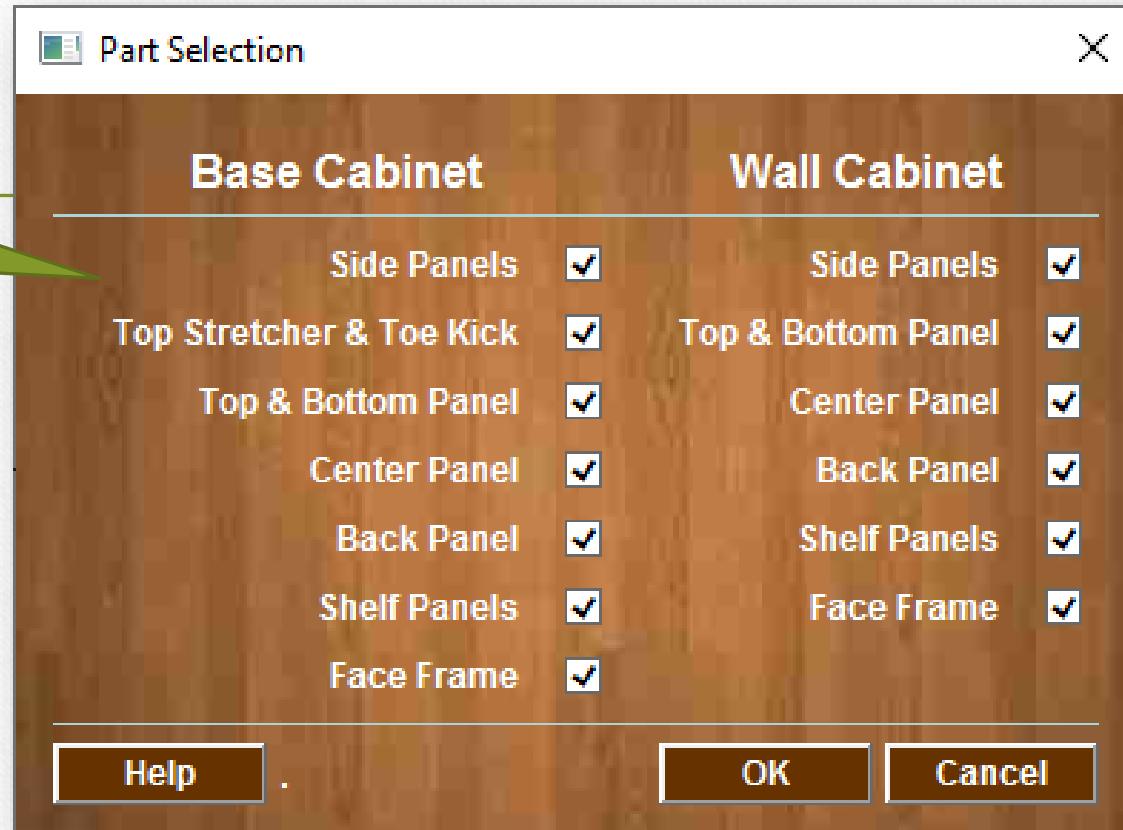


Easy Cabinet Maker

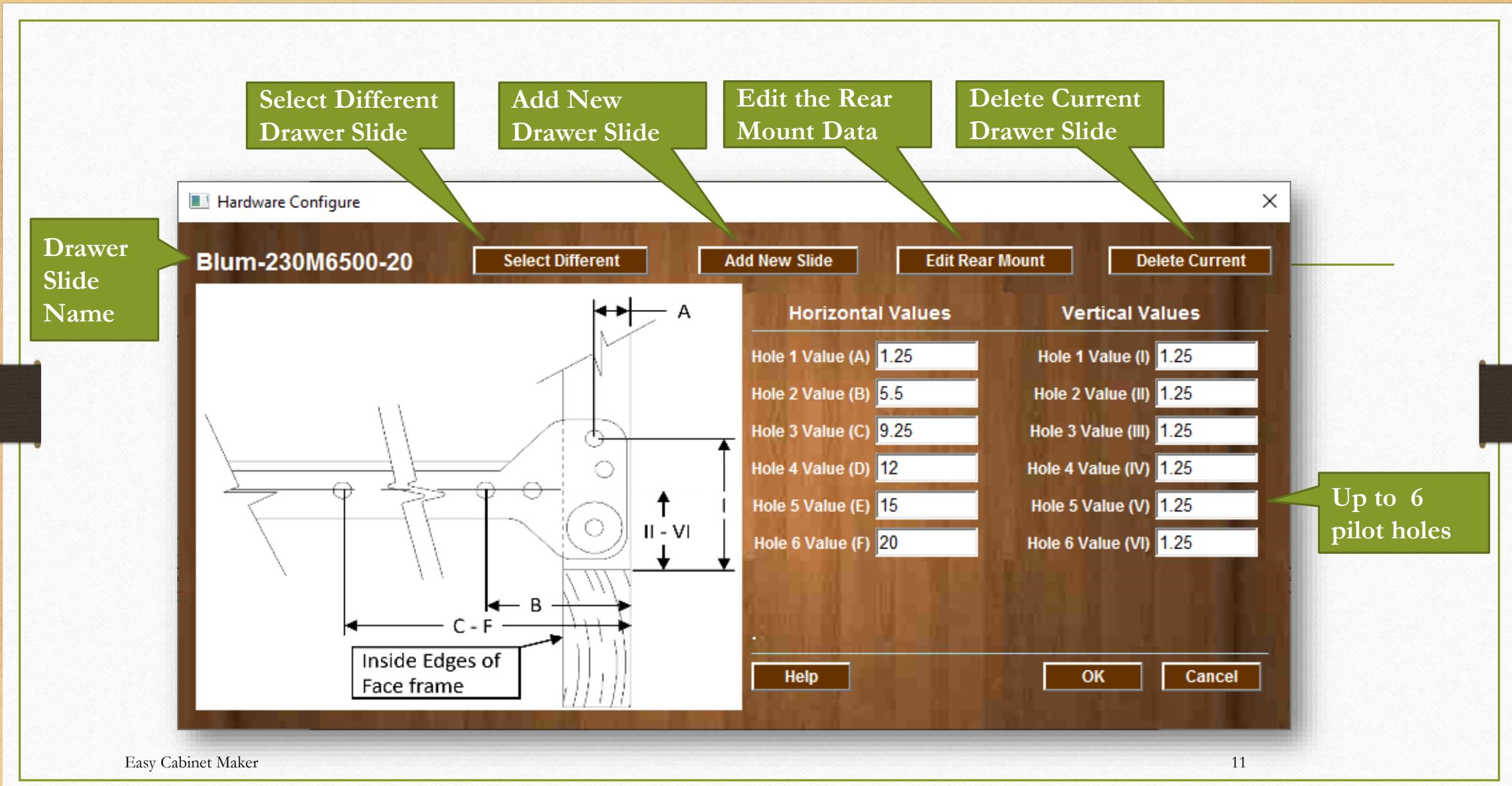
9

Part Selection Menu

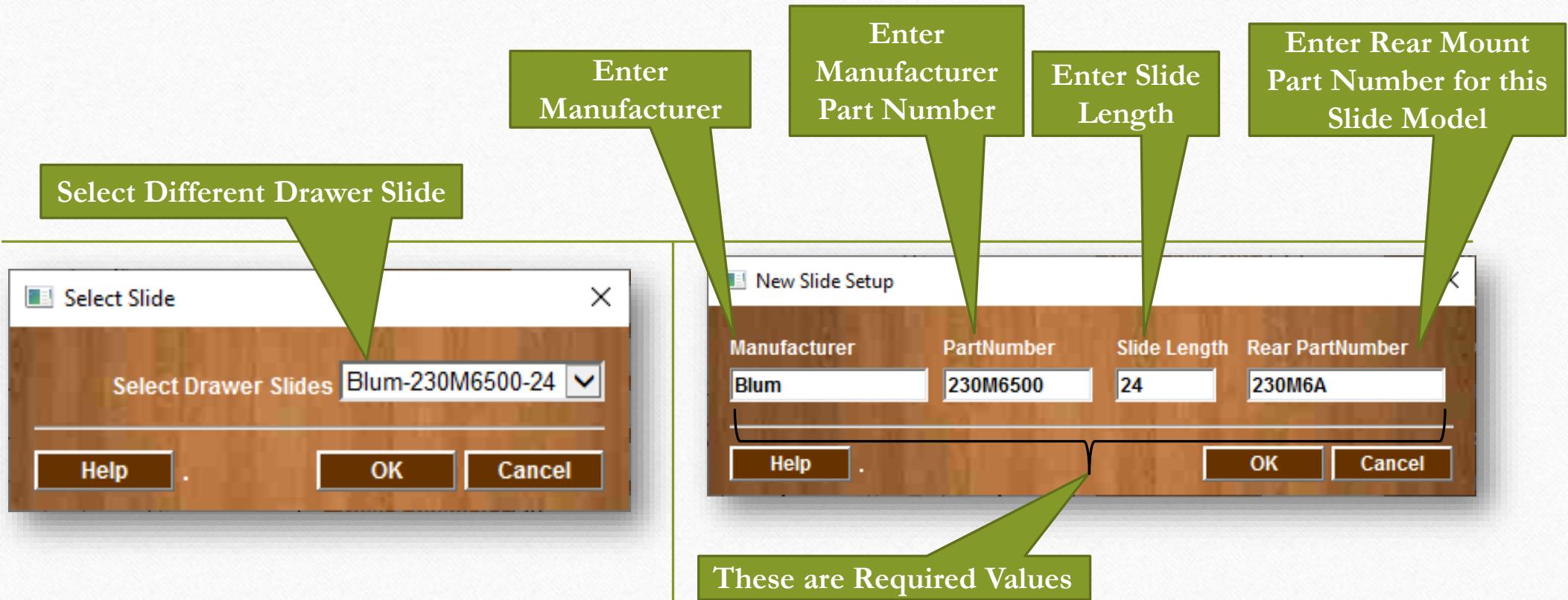
Select which parts
to be displayed on
the drawing



Slide Mount Menu



Slide Mount Settings

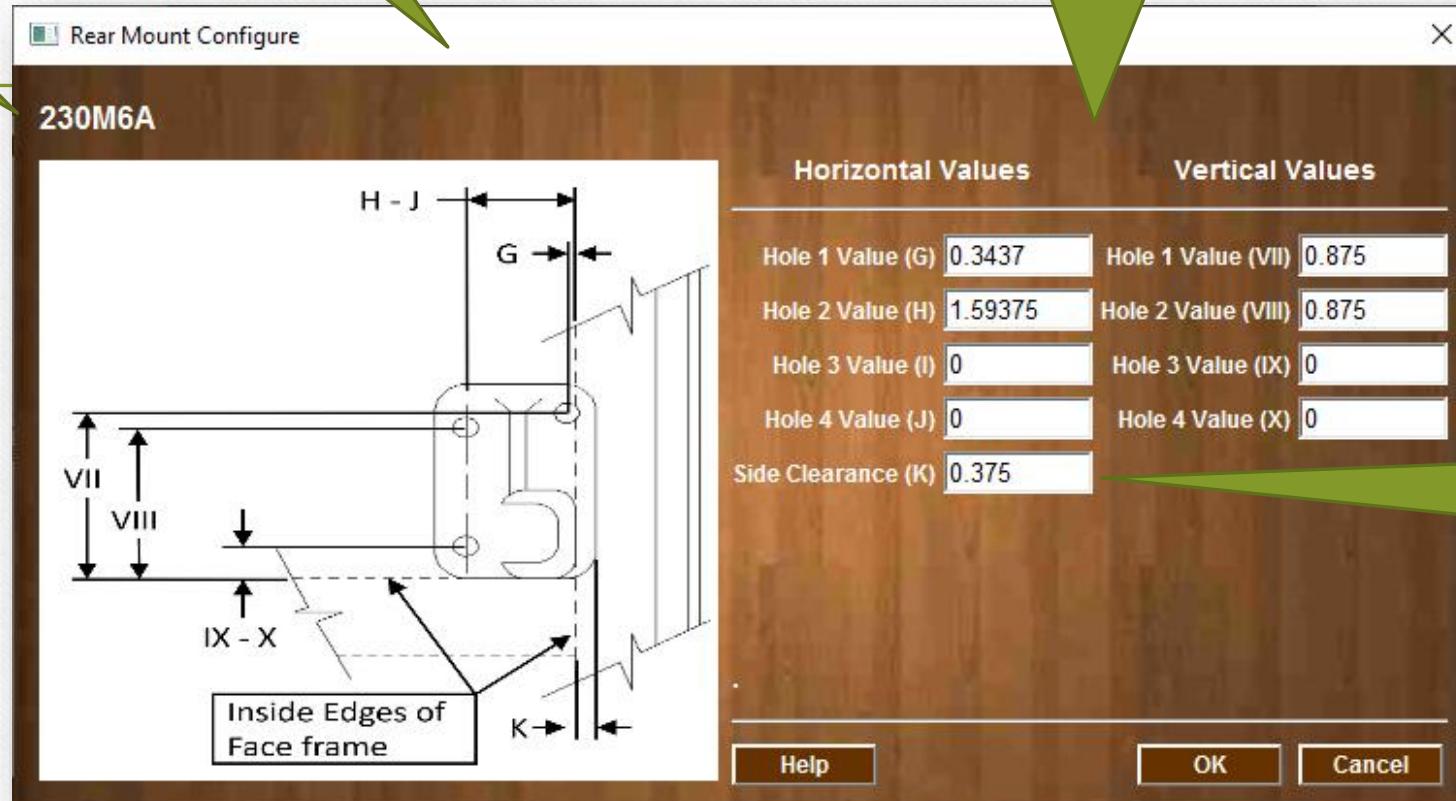


Rear Drawer Slide Mount Menu

Rear Mount Part Number

Select Different Drawer Slide

Note: Each Hole Must Have Both (H & V) Values



Up to 4 Holes Can Be Enter

Rear Side Clearance Values can be (+ or -)

Drawer Slide Data File

Drawer Slide Name

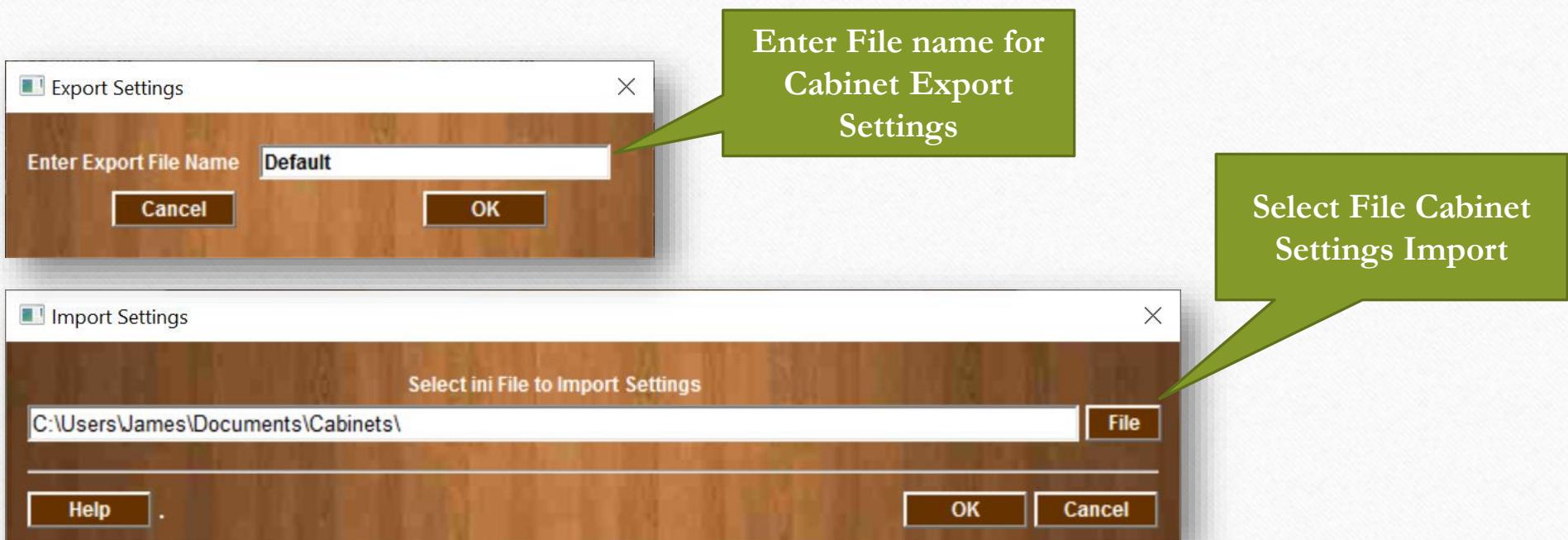
```
1
2
3 # =====
4 # Easy Gadgets are an entirely optional add-in to Vectric's core software products.
5 # They are provided 'as-is', without any express or implied warranty, and you make use of them entirely at your own risk.
6 # In no event will the author(s) or Vectric Ltd. be held liable for any damages arising from their use.
7 # Permission is granted to anyone to use this software for any purpose,
8 # including commercial applications, and to alter it and redistribute it freely,
9 # subject to the following restrictions:
10 # 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software.
11 # If you use this software in a product, an acknowledgement in the product documentation would be appreciated but is not required.
12 # 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
13 # 3. This notice may not be removed or altered from any source distribution.
14
15 # =====
16 # Easy Cabinet Hardware List
17 # Dec 2021
18
19
20 [Blum-230M6500-26]
21 Manufacturer = Blum
22 PartNumber = 230M6500
23 SlideLength = 26.0
24 SlideCenterLine1 = 1.25
25 SlideHole1 = 1.25
26 SlideCenterLine2 = 1.25
27 SlideHole2 = 5.5
28 SlideCenterLine3 = 1.25
29 SlideHole3 = 9.25
30 SlideCenterLine4 = 1.25
31 SlideHole4 = 12.0
32 SlideCenterLine5 = 1.25
33 SlideHole5 = 15.0
34 SlideCenterLine6 = 1.25
35 SlideHole6 = 20.0
36 RearCenterLineA = 0.875
37 RearHoleA = 0.34375
38 RearCenterLineB = 0.875
39 RearHoleB = 1.59375
40 RearCenterLineC = 0.0
41 RearHoleC = 0
42 RearCenterLineD = 0.0
43 RearHoleD = 0
44 RearSideClearance = 0.375
45 RearPartNumber = 230M6A
46
47 [Blum-230M6500-24]
48 Manufacturer = Blum
49 PartNumber = 230M6500
```

Rear Mount Name

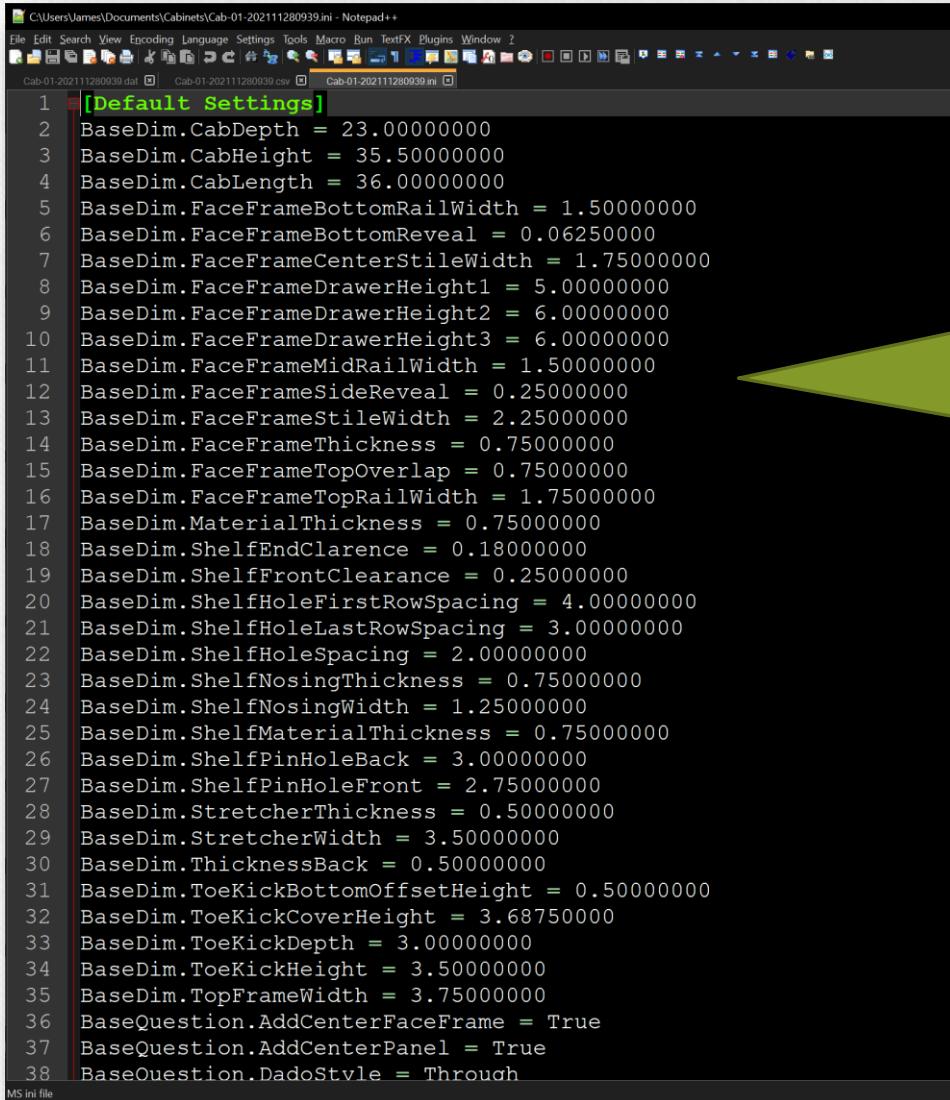
Import & Export Settings Menus

The Import & Export function can allow the user to save all of the cabinet settings to a file and be recalled as needed.

The system will automatically append “-YYYYMMDDHHMM” to the file name to ensure the export file name is unique.



Export & Import File Structure



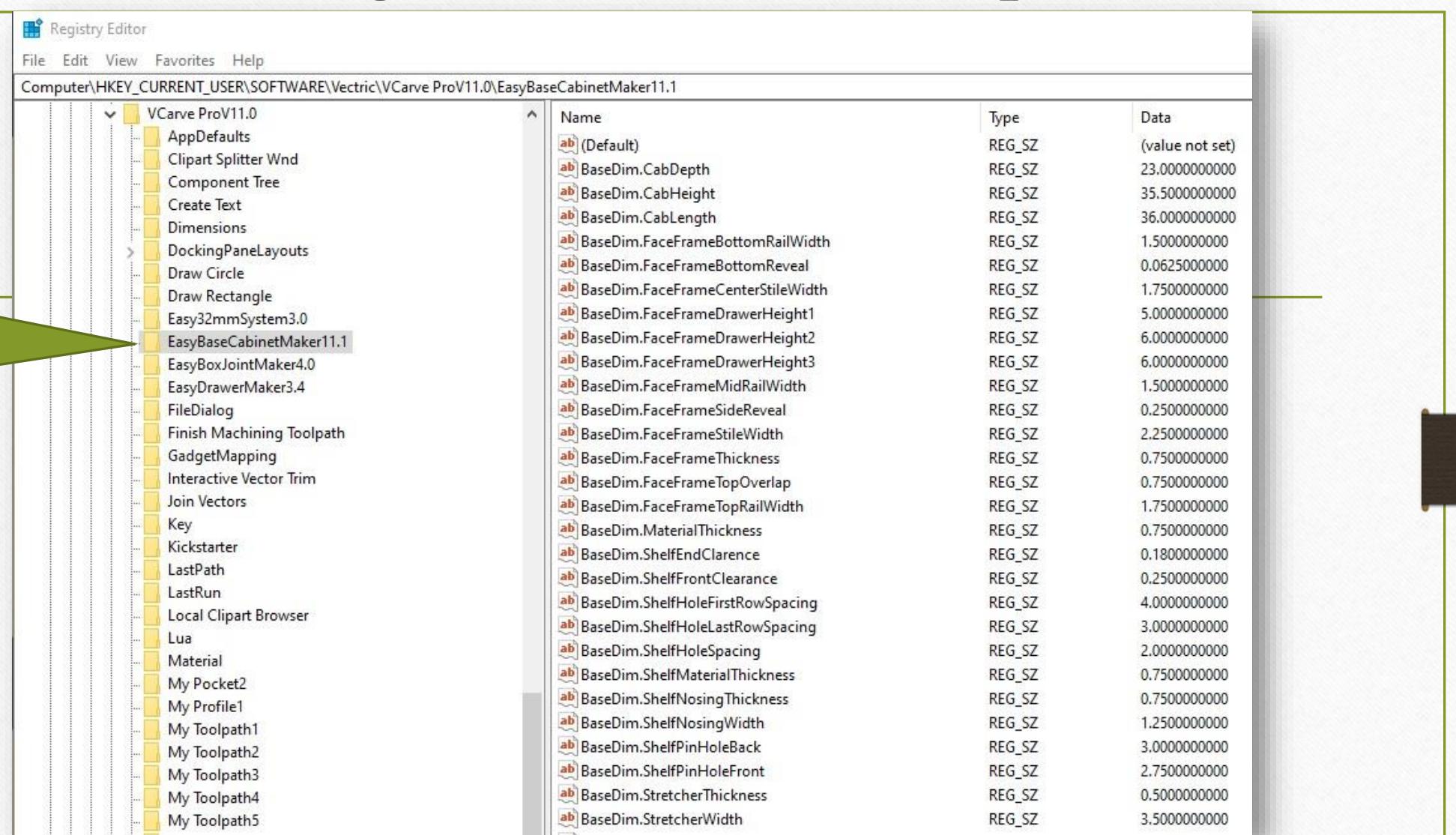
The screenshot shows a Notepad++ window displaying an .ini file named 'Cab-01-202111280939.ini'. The file contains numerous configuration parameters for a cabinet design, such as dimensions for base frames, shelves, and toe kicks. A green arrow points from the text block below to the '[Default Settings]' section of the ini file.

```
1 [Default Settings]
2 BaseDim.CabDepth = 23.00000000
3 BaseDim.CabHeight = 35.50000000
4 BaseDim.CabLength = 36.00000000
5 BaseDim.FaceFrameBottomRailWidth = 1.50000000
6 BaseDim.FaceFrameBottomReveal = 0.06250000
7 BaseDim.FaceFrameCenterStileWidth = 1.75000000
8 BaseDim.FaceFrameDrawerHeight1 = 5.00000000
9 BaseDim.FaceFrameDrawerHeight2 = 6.00000000
10 BaseDim.FaceFrameDrawerHeight3 = 6.00000000
11 BaseDim.FaceFrameMidRailWidth = 1.50000000
12 BaseDim.FaceFrameSideReveal = 0.25000000
13 BaseDim.FaceFrameStileWidth = 2.25000000
14 BaseDim.FaceFrameThickness = 0.75000000
15 BaseDim.FaceFrameTopOverlap = 0.75000000
16 BaseDim.FaceFrameTopRailWidth = 1.75000000
17 BaseDim.MaterialThickness = 0.75000000
18 BaseDim.ShelfEndClarence = 0.18000000
19 BaseDim.ShelfFrontClearance = 0.25000000
20 BaseDim.ShelfHoleFirstRowSpacing = 4.00000000
21 BaseDim.ShelfHoleLastRowSpacing = 3.00000000
22 BaseDim.ShelfHoleSpacing = 2.00000000
23 BaseDim.ShelfNosingThickness = 0.75000000
24 BaseDim.ShelfNosingWidth = 1.25000000
25 BaseDim.ShelfMaterialThickness = 0.75000000
26 BaseDim.ShelfPinHoleBack = 3.00000000
27 BaseDim.ShelfPinHoleFront = 2.75000000
28 BaseDim.StretcherThickness = 0.50000000
29 BaseDim.StretcherWidth = 3.50000000
30 BaseDim.ThicknessBack = 0.50000000
31 BaseDim.ToeKickBottomOffsetHeight = 0.50000000
32 BaseDim.ToeKickCoverHeight = 3.68750000
33 BaseDim.ToeKickDepth = 3.00000000
34 BaseDim.ToeKickHeight = 3.50000000
35 BaseDim.TopFrameWidth = 3.75000000
36 BaseQuestion.AddCenterFaceFrame = True
37 BaseQuestion.AddCenterPanel = True
38 BaseQuestion.DadoStyle = Through
```

All of the Gadget data can be exported to a standard “.ini” file. This file is used to Export and Import all of the user inputs for the current cabinet design. This feature allows the user to create a cabinet style and store it based on a project at a later time import the complete cabinet setting for additional cabinet layouts.

Registry Data - Recalling values across multiple sessions

All data is stored in the system registry and can be accessed using the Microsoft Regedit tool



Name	Type	Data
ab (Default)	REG_SZ	(value not set)
ab BaseDim.CabDepth	REG_SZ	23.0000000000
ab BaseDim.CabHeight	REG_SZ	35.5000000000
ab BaseDim.CabLength	REG_SZ	36.0000000000
ab BaseDim.FaceFrameBottomRailWidth	REG_SZ	1.5000000000
ab BaseDim.FaceFrameBottomReveal	REG_SZ	0.0625000000
ab BaseDim.FaceFrameCenterStileWidth	REG_SZ	1.7500000000
ab BaseDim.FaceFrameDrawerHeight1	REG_SZ	5.0000000000
ab BaseDim.FaceFrameDrawerHeight2	REG_SZ	6.0000000000
ab BaseDim.FaceFrameDrawerHeight3	REG_SZ	6.0000000000
ab BaseDim.FaceFrameMidRailWidth	REG_SZ	1.5000000000
ab BaseDim.FaceFrameSideReveal	REG_SZ	0.2500000000
ab BaseDim.FaceFrameStileWidth	REG_SZ	2.2500000000
ab BaseDim.FaceFrameThickness	REG_SZ	0.7500000000
ab BaseDim.FaceFrameTopOverlap	REG_SZ	0.7500000000
ab BaseDim.FaceFrameTopRailWidth	REG_SZ	1.7500000000
ab BaseDim.MaterialThickness	REG_SZ	0.7500000000
ab BaseDim.ShelfEndClarence	REG_SZ	0.1800000000
ab BaseDim.ShelfFrontClearance	REG_SZ	0.2500000000
ab BaseDim.ShelfHoleFirstRowSpacing	REG_SZ	4.0000000000
ab BaseDim.ShelfHoleLastRowSpacing	REG_SZ	3.0000000000
ab BaseDim.ShelfHoleSpacing	REG_SZ	2.0000000000
ab BaseDim.ShelfMaterialThickness	REG_SZ	0.7500000000
ab BaseDim.ShelfNosingThickness	REG_SZ	0.7500000000
ab BaseDim.ShelfNosingWidth	REG_SZ	1.2500000000
ab BaseDim.ShelfPinHoleBack	REG_SZ	3.0000000000
ab BaseDim.ShelfPinHoleFront	REG_SZ	2.7500000000
ab BaseDim.StretcherThickness	REG_SZ	0.5000000000
ab BaseDim.StretcherWidth	REG_SZ	3.5000000000

Tool Selection for Part Profile

Tool Database

Material: Imported

Online

Machine: CNC Router

End Mill (0.2500 inch) UpDown

Notes: 1/4 Dia

Tool Type: End Mill

Geometry

Units: inches

Diameter (D): 0.25 inches

No. Flutes: 4

Cutting Parameters

Pass Depth: 0.15 inches

Stepover: 0.125 inches, 50 %

Feeds and Speeds

Spindle Speed: 24000 r.p.m

Feed Units: inches/min

Feed Rate: 60 inches/min

Plunge Rate: 45 inches/min

Tool Number

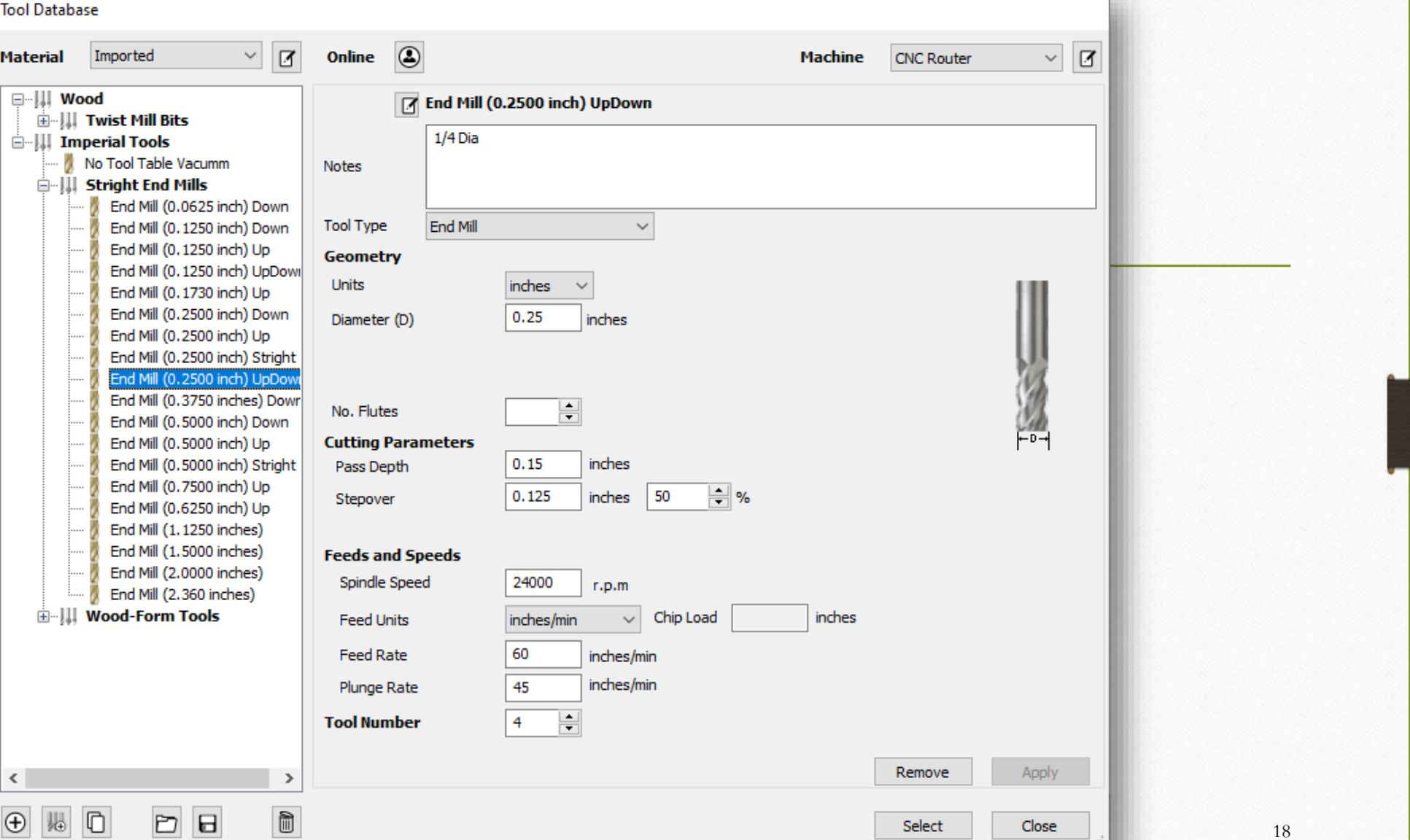
4

Remove Apply

Select Close

Easy Cabinet Maker

(+), (-), (C), (F), (S), (Delete)



Layers and Toolpaths

The screenshot displays the Easy Cabinet Maker software interface, specifically focusing on the **Layers** and **Toolpaths** tabs.

Layers Tab: This tab is currently selected, showing a list of layers on the left and a 2D View window on the right. The 2D View shows a cabinet frame with various layers visible. The layers listed include:

- Layer 1
- NotesProfile
- PartLabels
- BackPocketProfile-Base
- BackPanelProfile-Base
- CenterPanelProfile-Base
- PinHoles-Base
- FaceFrameProfile-Base
- Base
- SidePanelPocket-Base
- DrillShelfPinProfile-Base
- TopBottomPanelProfile-Base
- TopBottomPocket-Base
- StretcherProfile-Base

Toolpaths Tab: This tab is also visible on the right side of the interface. It includes sections for **Material Setup** (XY Datum, Set ...), **Toolpath Operations** (various icons for different toolpath types), and a list of **Toolpaths** (Sheet 1). The **Toolpaths** list contains the following items, many of which are checked:

- 1-Base Center Drilling
- 1-Base Shelf Profile
- 1-Base Center Panel Profile
- 1-Base Side Drilling
- 1-Base TopBottom Pockets [Clear]
- 1-Base TopBottom Pockets
- 1-Base Side Pockets [Clear]
- 1-Base Side Pockets
- 1-Base Side Profile
- 1-Base Back Pockets [Clear]
- 1-Base Back Pockets
- 1-Base Back Panel Profile
- 1-Base Stretcher Rails Profile
- 1-Base Top Bottom Profile** (highlighted in blue)

A green callout box points from the text below to the **Toolpaths** list.

Text: Verbose naming for Layer and Toolpaths to assist in easy identification

Easy Cabinet Maker

File Edit Model Machine Toolpaths View Gadgets Help

2D View 3D View

XY Datum
Set ... Z 0 0.2° 0.75°
Home Pos: X:0.0 Y:0.0 Z:0.8

Toolpaths

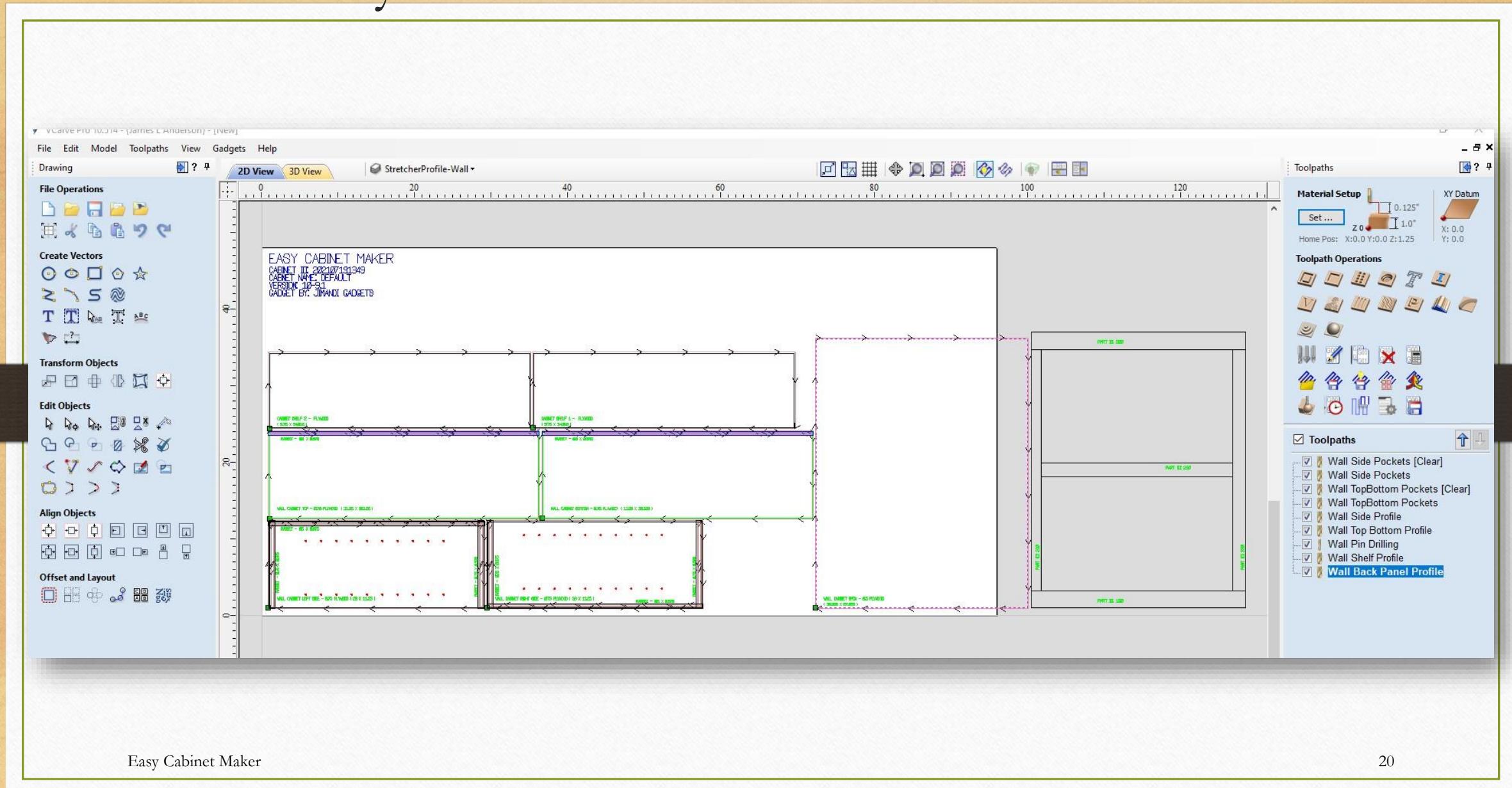
Drawing Modeling Layers Clipart Sheets Toolpaths

Toolpath Operations

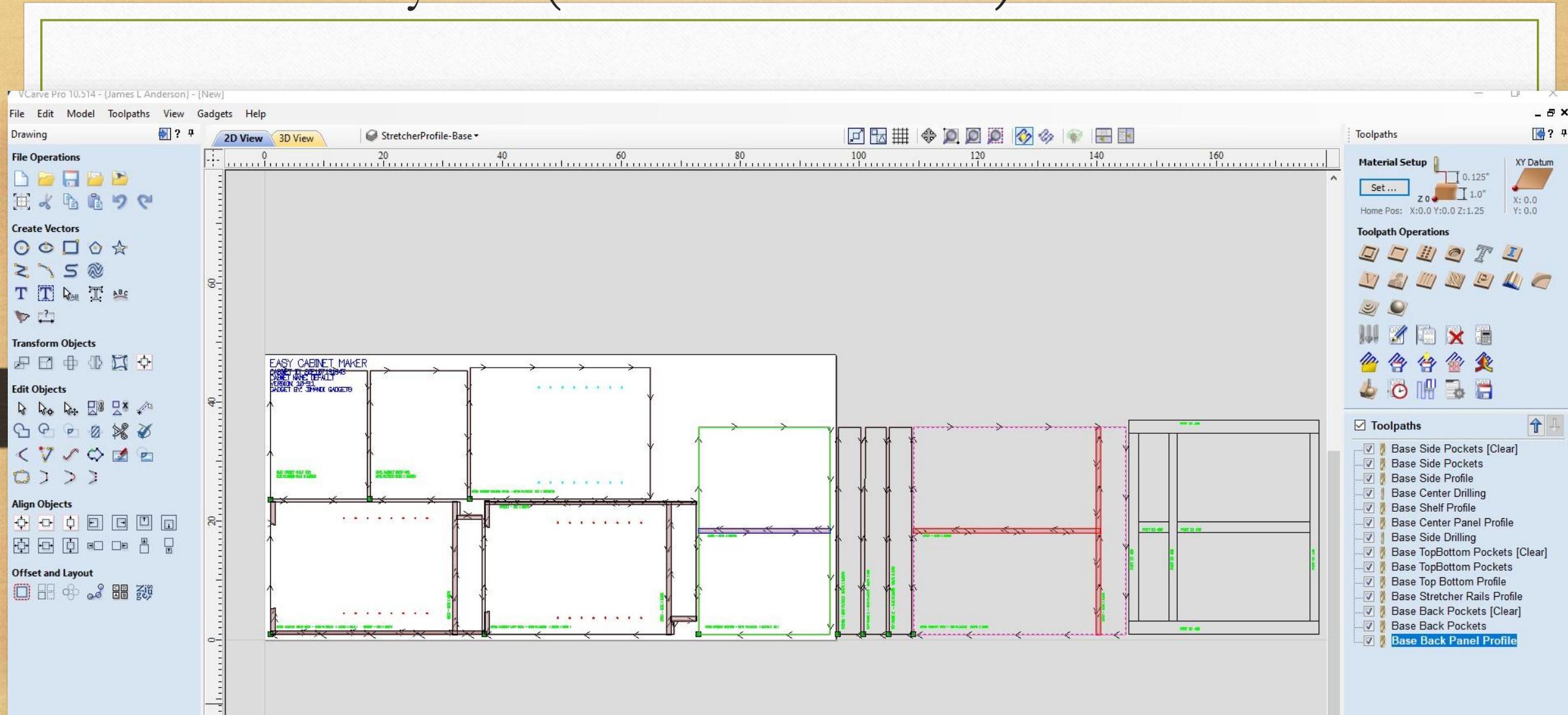
Toolpaths Sheet 1

19

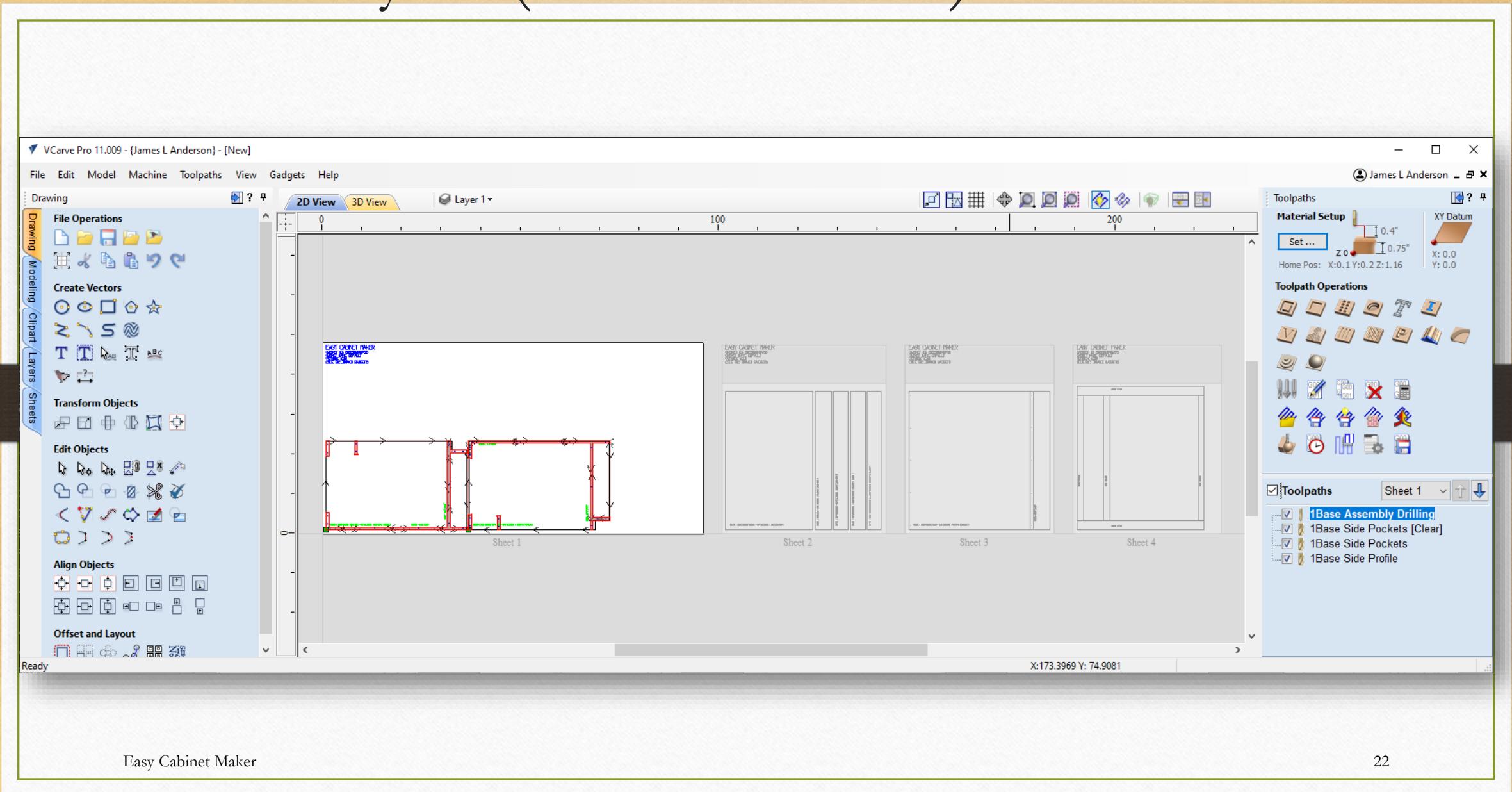
Wall Cabinet Layout



Base Cabinet Layout (With Sheets Off)



Base Cabinet Layout (With Sheets On)



Sheet Labels

The screenshot shows the Easy Cabinet Maker software interface with four sheet labels displayed. The leftmost sheet label contains the following information:

EASY CABINET MAKER
CABINET ID: 202201132209
CABINET NAME: DEFAULT
MATERIAL: 3/4" BIRCH PLY

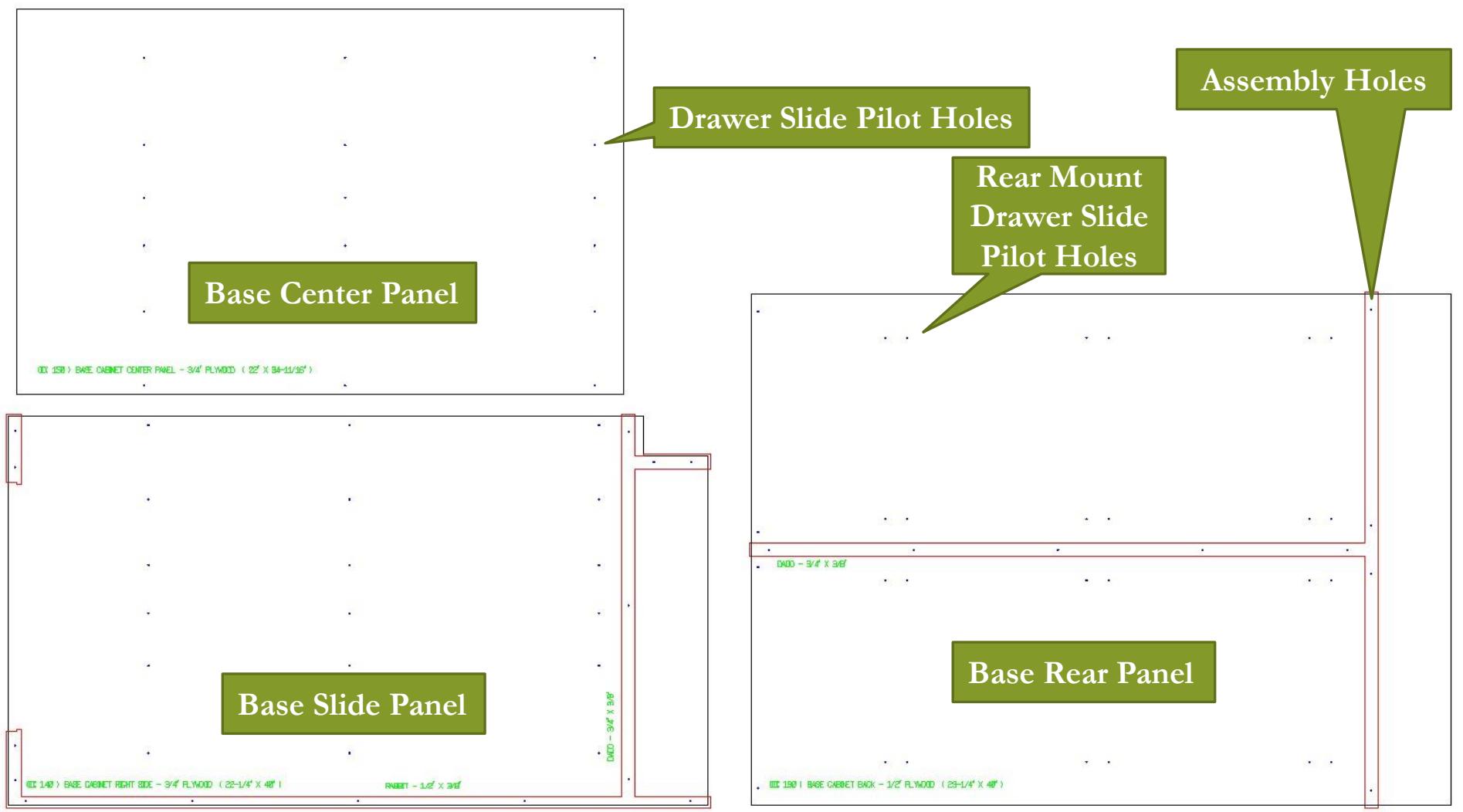
The other three sheet labels are identical, showing the same cabinet design details.

The software interface includes a toolbar on the left with various tools for drawing, modeling, and editing objects. A toolpath panel on the right displays the current toolpath setup, material setup, and operations planned for the cabinet parts. The toolpath panel lists the following operations:

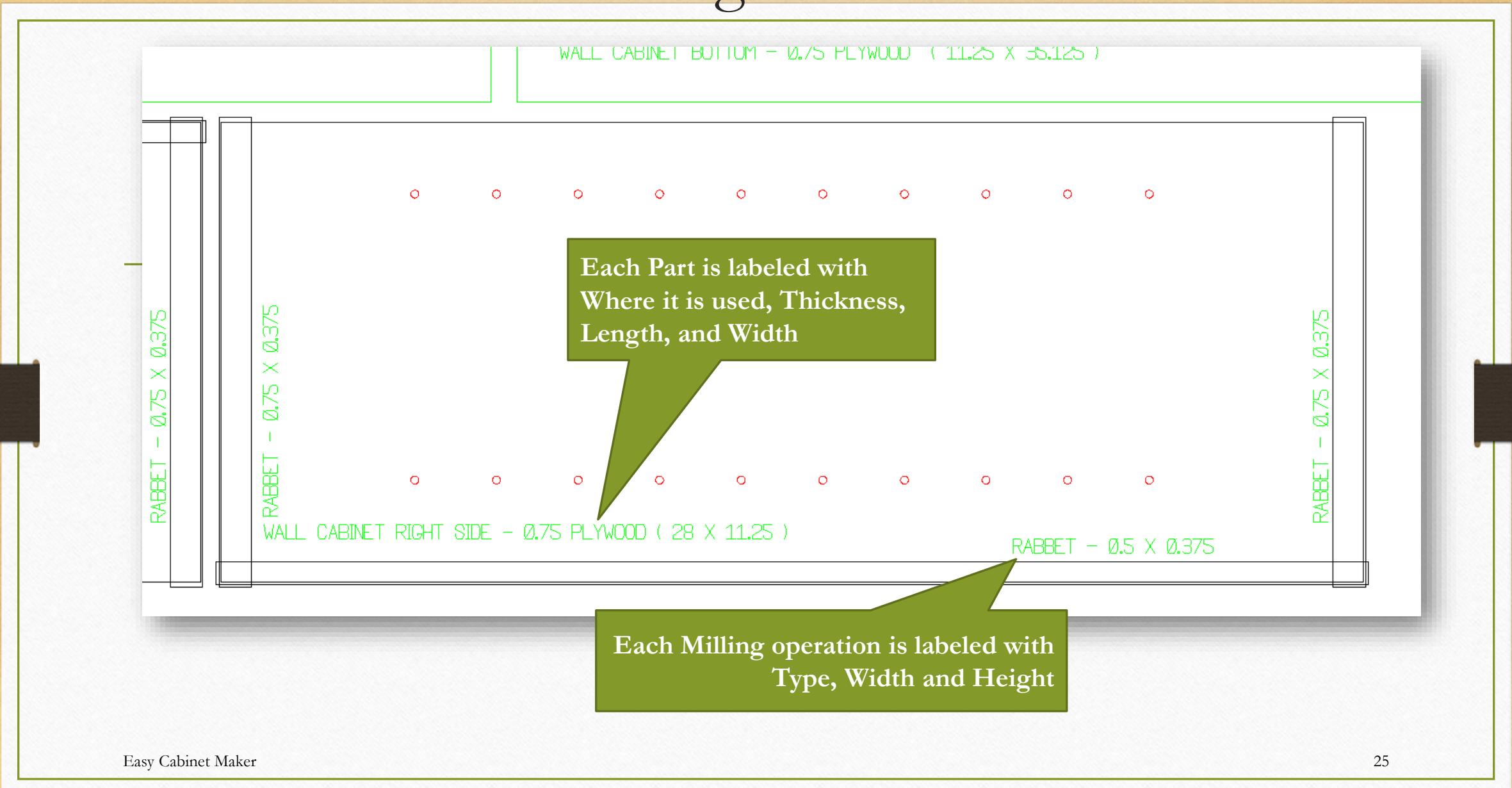
- 1Base Assembly Drilling
- 1Base Side Pockets [Clear]
- 1Base Side Pockets
- 1Base Side Profile

The status bar at the bottom indicates the current coordinates: X:173.3969 Y: 74.9081.

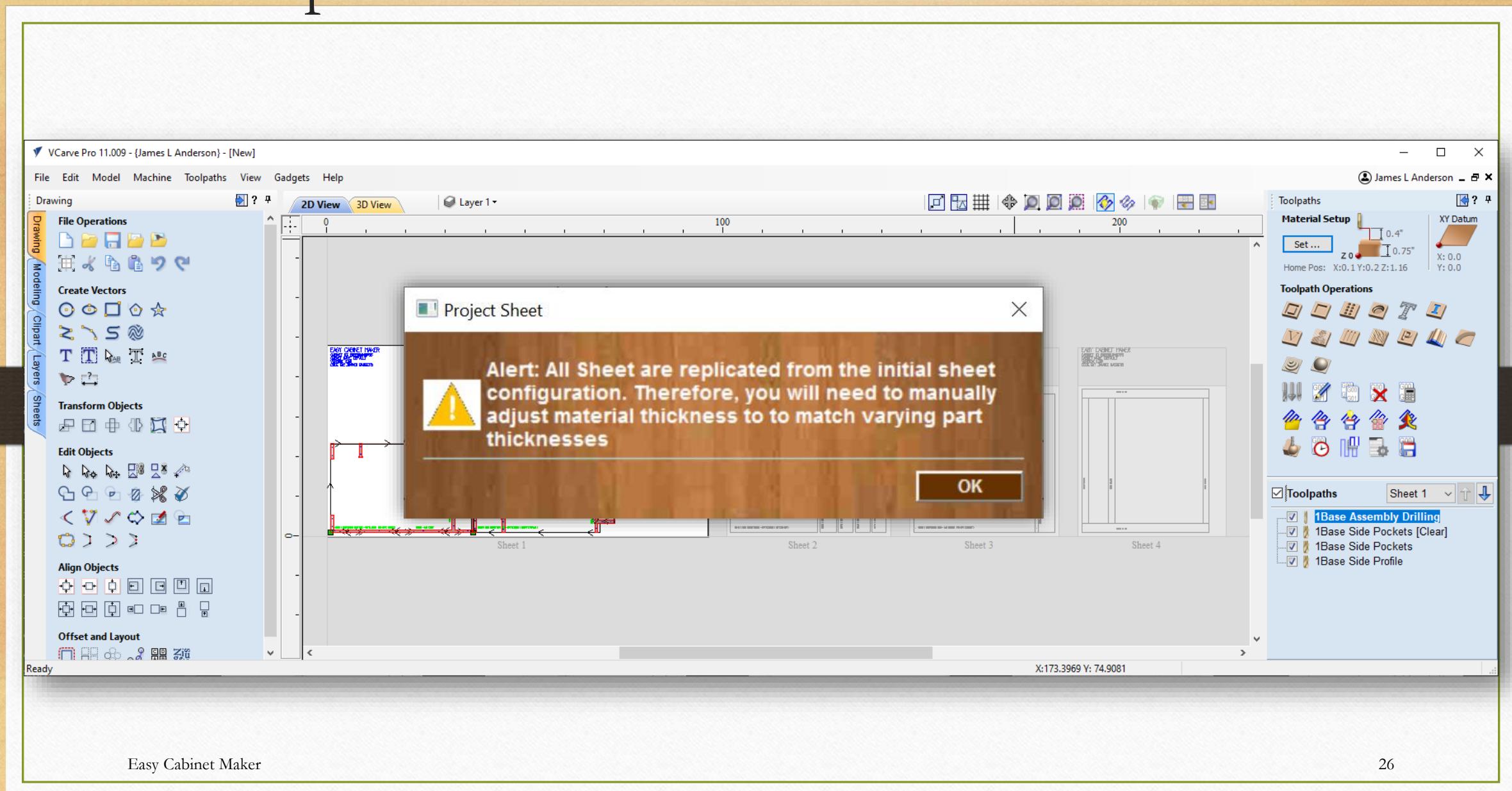
Base Parts – Drawer Slide Pilot Holes



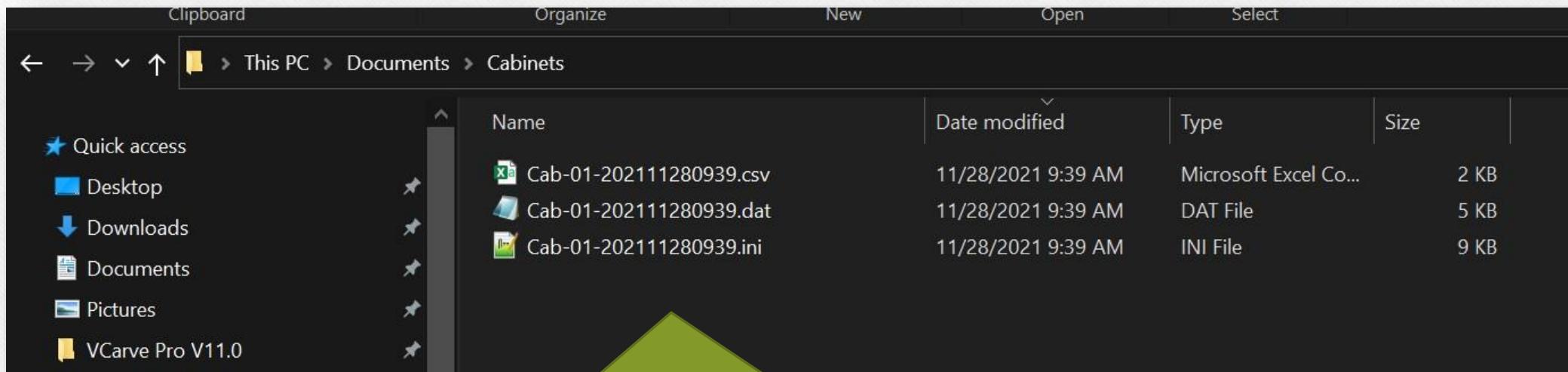
Part Identification and Milling Notation



Process Completion



Bill of Material Files



All project files (csv, dat, and ini) are stored in the Project directory

Edit CSV file in Excel or Text editor

```
Type,Cabinet, ID, Part Name, Count, Thick, Material, Finish, Width, Length
Wall, Default, 20, Left Side Panel, 1, 0.75, Birch ply, Unfinished, 11.25, 11.25
Wall, Default, 30, Right Side Panel, 1, 0.75, Birch ply, Unfinished, 11.25, 27.25
Wall, Default, 40, Top Panel, 1, 0.75, Birch ply, Unfinished, 12, 35.125
Wall, Default, 50, Bottom Panel, 1, 0.75, Birch ply, Unfinished, 12, 35.125
Wall, Default, 60, Cabinet Shelf, 2, 0.75, Birch ply, Unfinished, 9.75, 34.015
Wall, Default, 70, Shelf Nose (Not Shown), 2, 0.75, Hardwood, Unfinished, 1.125, 34.015
Wall, Default, 80, Back Panel, 1, 0.5, Birch ply, Unfinished, 26.5625, 35.125
Wall, Default, 90, Face Frame Stile, 2, 0.75, Hardwood, Unfinished, 2.25, 28
Wall, Default, 100, Face Frame Top, 1, 0.75, Hardwood, Unfinished, 1.75, 31.5
Wall, Default, 110, Face Frame Bottom, 1, 0.75, Hardwood, Unfinished, 1.25, 31.5
Wall, Default, 120, Center Face Frame, 1, 0.75, Hardwood, Unfinished, 1.75, 25
Base, Default, 130, Cabinet Left Side, 1, 0.75, Birch ply, Unfinished, 22.25, 35.5
Base, Default, 140, Cabinet Right Side, 1, 0.75, Birch ply, Unfinished, 22.25, 35.5
Base, Default, 150, Cabinet Center Panel, 1, 0.75, Birch ply, Unfinished, 22, 30.1875
Base, Default, 160, Cabinet Shelf, 2, 0.75, Birch ply, Unfinished, 21.5, 16.265
Base, Default, 170, Shelf Nose (Not Shown), 2, 0.75, Birch ply, Unfinished, 1.25, 16.265
Base, Default, 180, Cabinet Bottom, 1, 0.75, Birch ply, Unfinished, 22, 34.75
Base, Default, 190, Toe Kick, 1, 0.75, Birch ply, Unfinished, 4.1875, 34.75
Base, Default, 200, Top Stretcher, 2, 0.75, Birch ply, Unfinished, 3.75, 34.75
Base, Default, 210, Cabinet Back, 1, 0.5, Birch ply, Unfinished, 34.75, 35.5
Base, Default, 220, Face Frame Stile, 2, 0.75, Hardwood, Unfinished, 2.25, 32
Base, Default, 230, Face Frame Top Rail, 1, 0.75, Hardwood, Unfinished, 1.75, 31.5
Base, Default, 240, Face Frame Bottom Rail, 1, 0.75, Hardwood, Unfinished, 1.5, 31.5
Base, Default, 250, Face Frame Mid Rail, 1, 0.75, Hardwood, Unfinished, 1.75, 31.5
Base, Default, 260, Face Frame Center, 1, 0.75, Hardwood, Unfinished, 1.75, 5
Base, Default, 270, Face Frame Center, 1, 0.75, Hardwood, Unfinished, 1.75, 22.25
```

Excel ready (.csv) Bill of Materials

```
===== Cabinet Cut-list =====
Project Run Date ID: 202201132001
Cabinet Project Name: Easy Cabinet Maker
Cabinet Name: Default
Drawing Units: inches

==== Wall Cabinet Size ====
Cabinet Finish = Unfinished
Face Frame Finish = Unfinished
Ply Thickness = 0.7500 as 3/4"
Cabinet Height = 28" (28.0000)
Cabinet Width = 36" (36.0000)
Cabinet Depth = 12" (12.0000)
Cabinet Diagonal = 44-25/32" (44.787562796495)
Face Frame Diagonal = 45-19/32" (45.607017003966)

==== Base Cabinet Size ====
Cabinet Finish = Unfinished
Face Frame Finish = Unfinished
Ply Thickness = 0.7500 as 3/4"
Cabinet Height = 35-1/2" (35.5000)
Cabinet Width = 36" (36.0000)
Cabinet Depth = 23" (23.0000)
Cabinet Diagonal = 50-7/32" (50.204581464245)
Face Frame Diagonal = 48-5/32" (48.166378315169)
Drawer Slides Model = Blum-230M6500-20
Drawer Rear Mount = 230M6A
Drawer Slides Count = 1 (L&R)

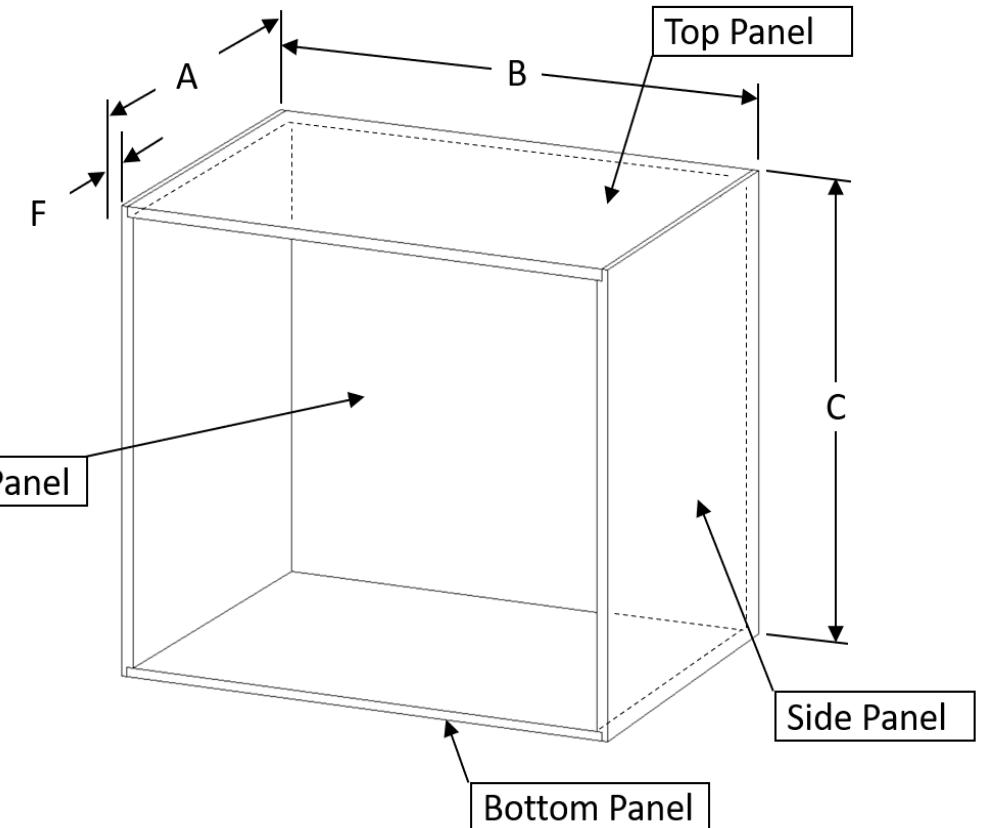
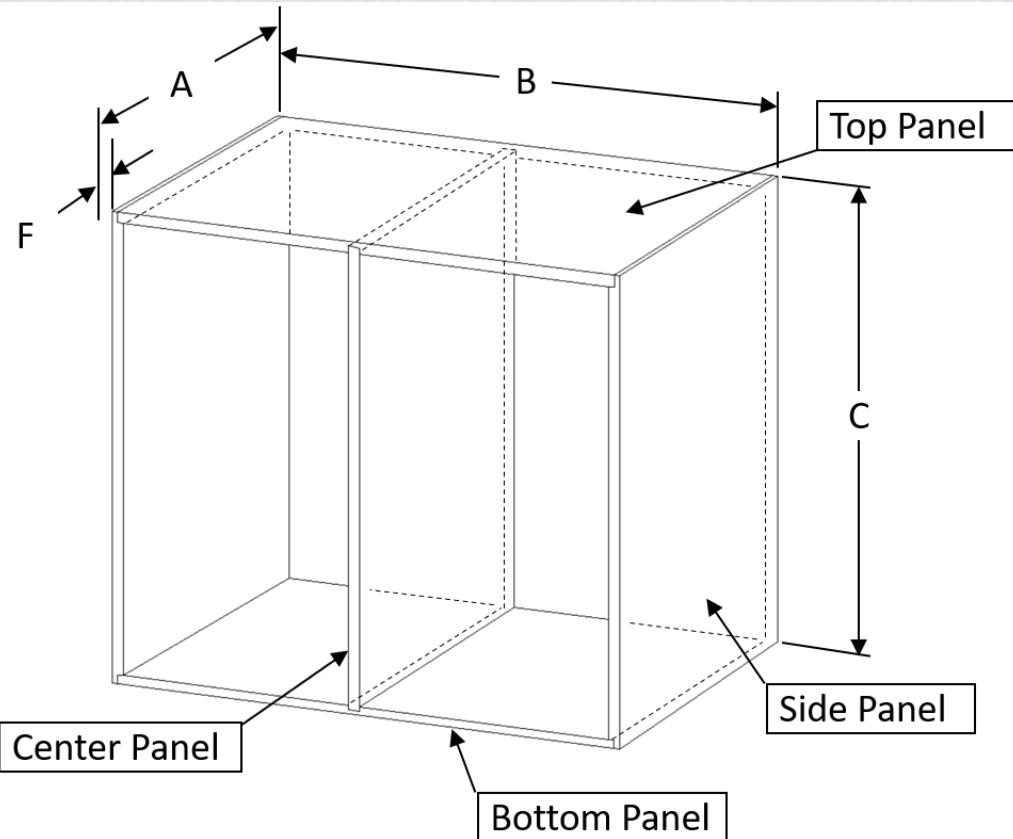
===== Cabinet Cut-list =====
ID | Part Name | Type | No | Thick | Material | Width | Length
20 | Left Side Panel | Wall | 1 | 3/4" | Birch ply | 11-1/4" | 11-1/4"
30 | Right Side Panel | Wall | 1 | 3/4" | Birch ply | 11-1/4" | 27-1/4"
40 | Top Panel | Wall | 1 | 3/4" | Birch ply | 12" | 35-1/8"
50 | Bottom Panel | Wall | 1 | 3/4" | Birch ply | 12" | 35-1/8"
60 | Cabinet Shelf | Wall | 2 | 3/4" | Birch ply | 9-3/4" | 34"
70 | Shelf Nose (Not Shown) | Wall | 2 | 3/4" | Hardwood | 1-1/8" | 34"
80 | Back Panel | Wall | 1 | 1/2" | Birch ply | 26-9/16" | 35-1/8"
90 | Face Frame Stile | Wall | 2 | 3/4" | Hardwood | 2-1/4" | 28"
100 | Face Frame Top | Wall | 1 | 3/4" | Hardwood | 1-3/4" | 31-1/2"
110 | Face Frame Bottom | Wall | 1 | 3/4" | Hardwood | 1-1/4" | 31-1/2"
120 | Center Face Frame | Wall | 1 | 3/4" | Hardwood | 1-3/4" | 25"
130 | Cabinet Left Side | Base | 1 | 3/4" | Birch ply | 22-1/4" | 35-1/2"
140 | Cabinet Right Side | Base | 1 | 3/4" | Birch ply | 22-1/4" | 35-1/2"
150 | Cabinet Center Panel | Base | 1 | 3/4" | Birch ply | 22" | 30-3/16"
160 | Cabinet Shelf | Base | 2 | 3/4" | Birch ply | 21-1/2" | 16-1/4"
170 | Shelf Nose (Not Shown) | Base | 2 | 3/4" | Birch ply | 1-1/4" | 16-1/4"
180 | Cabinet Bottom Rail | Base | 1 | 3/4" | Birch ply | 22" | 34-3/4"
190 | Face Frame Mid Rail | Base | 1 | 3/4" | Birch ply | 1-3/4" | 24-3/16"

===== Cabinet Cut-list =====
250 | Face Frame Mid Rail | Base | 1 | 3/4" | Hardwood | 1-3/4" | 31-1/2"
260 | Face Frame Center | Base | 1 | 3/4" | Hardwood | 1-3/4" | 5"
270 | Face Frame Center | Base | 1 | 3/4" | Hardwood | 1-3/4" | 22-1/4"

===== EOF =====
```

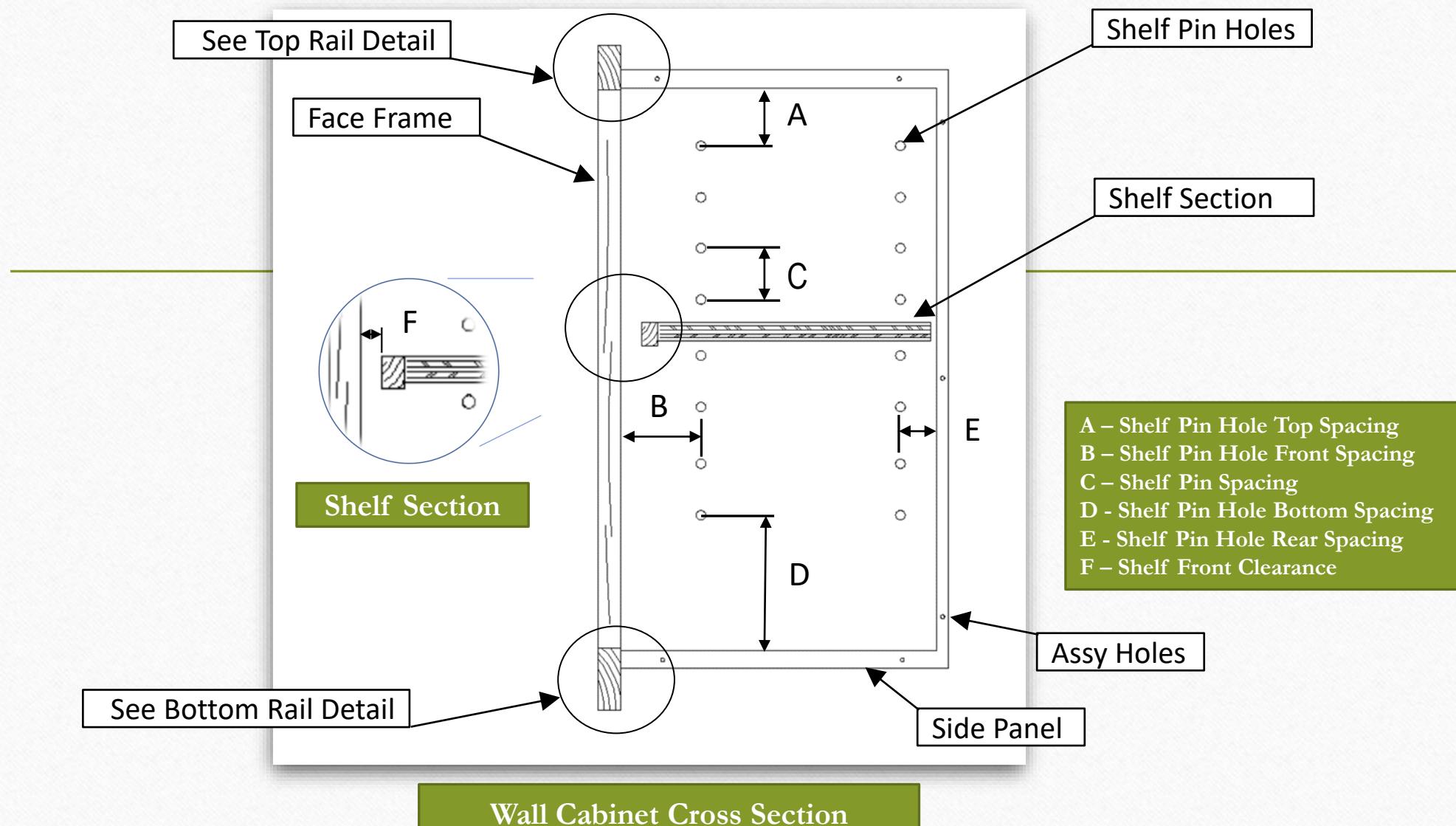
Print ready (.dat) Shop Bill of Materials

Wall Cabinet Carcass with and without Center Panel

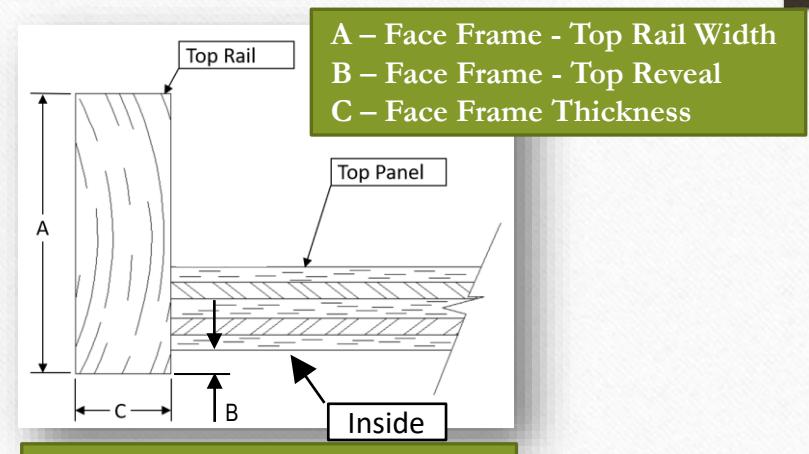
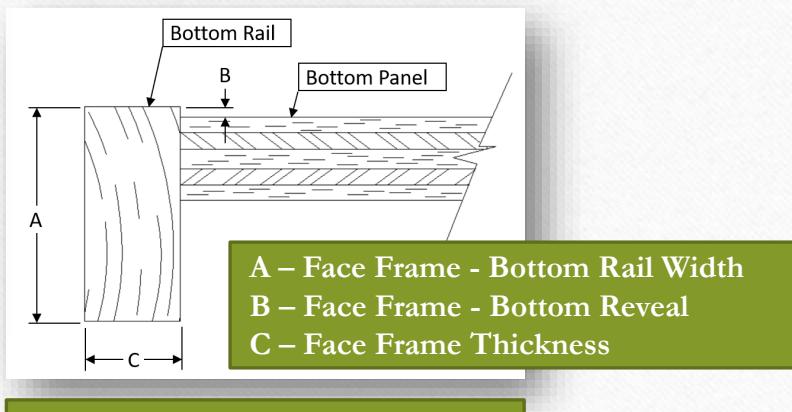
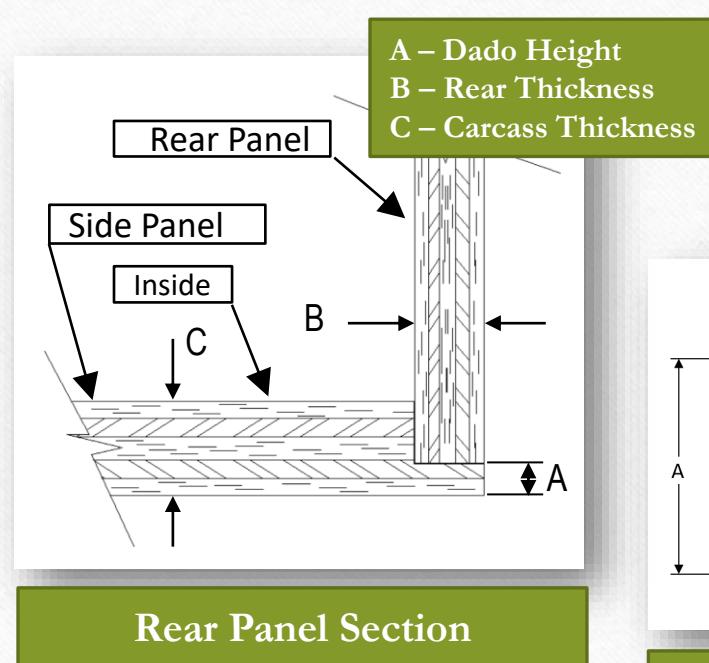
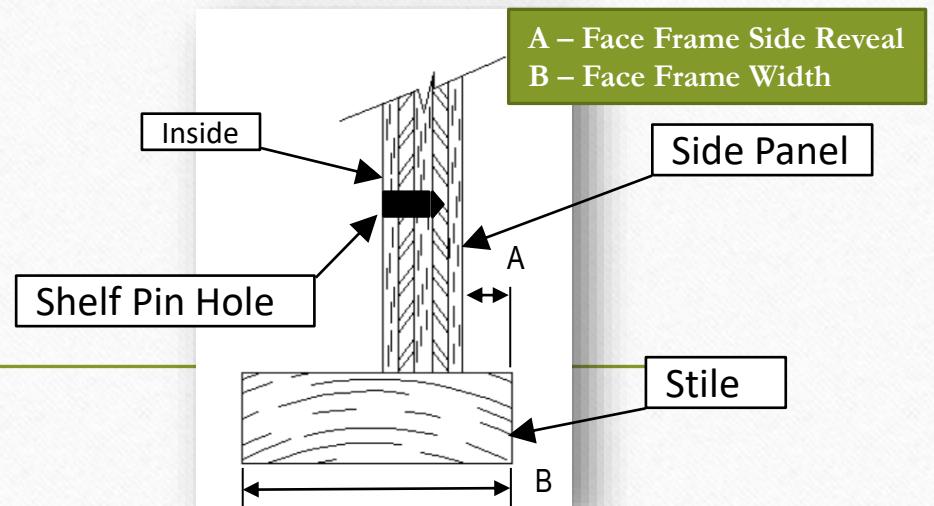
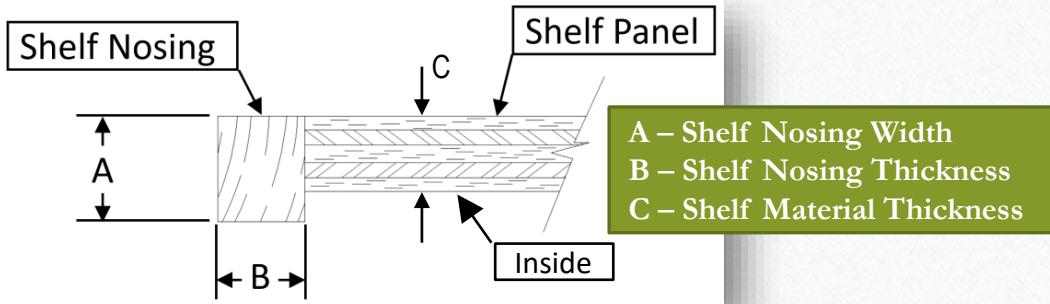


Note: The face frame is not shown

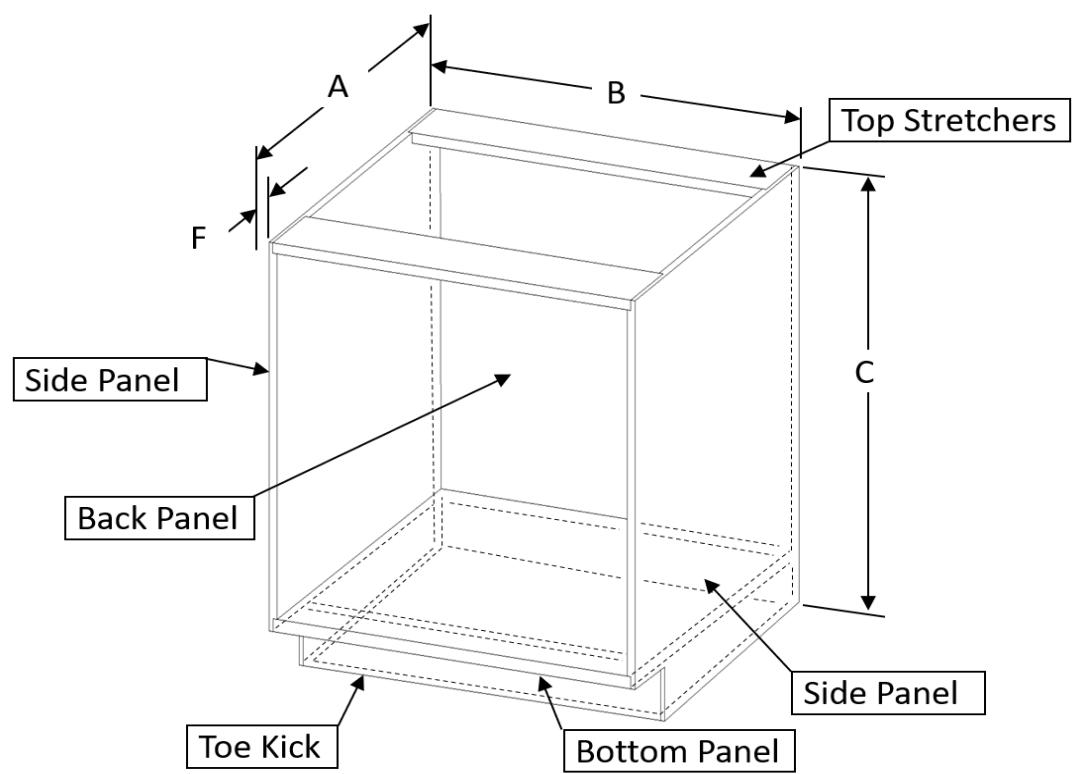
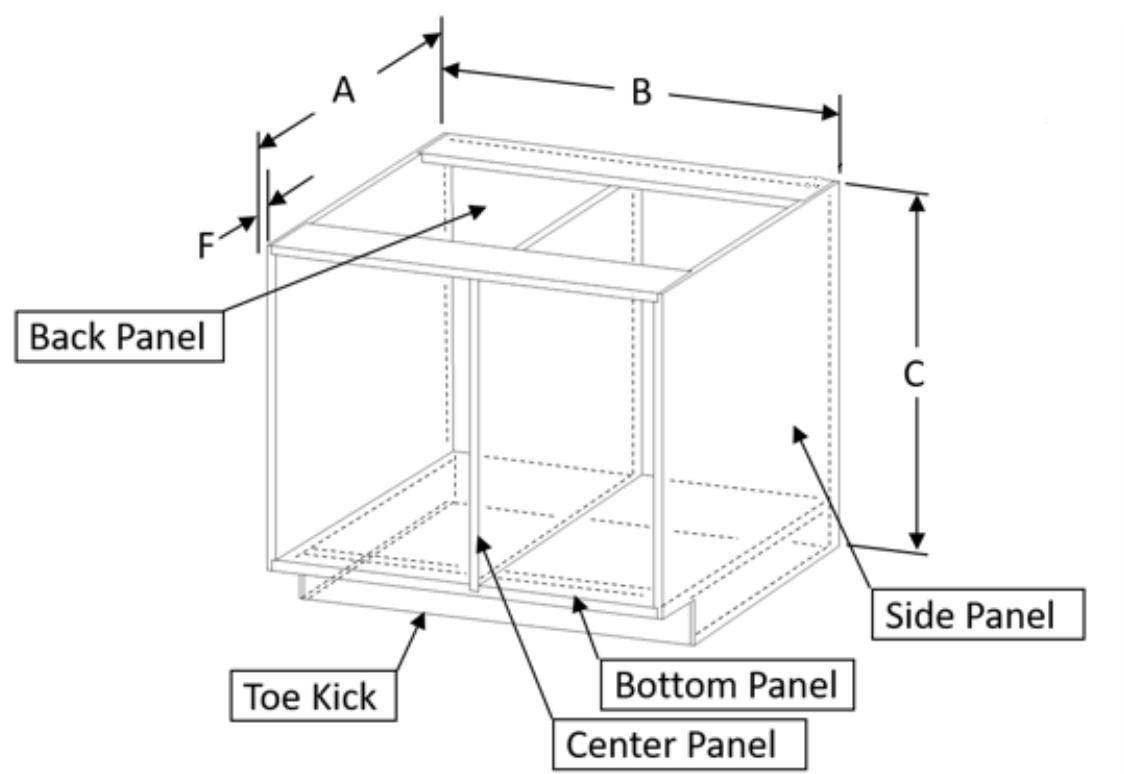
Wall Cabinet Side Cross Section Details



Wall Cabinet Part Details

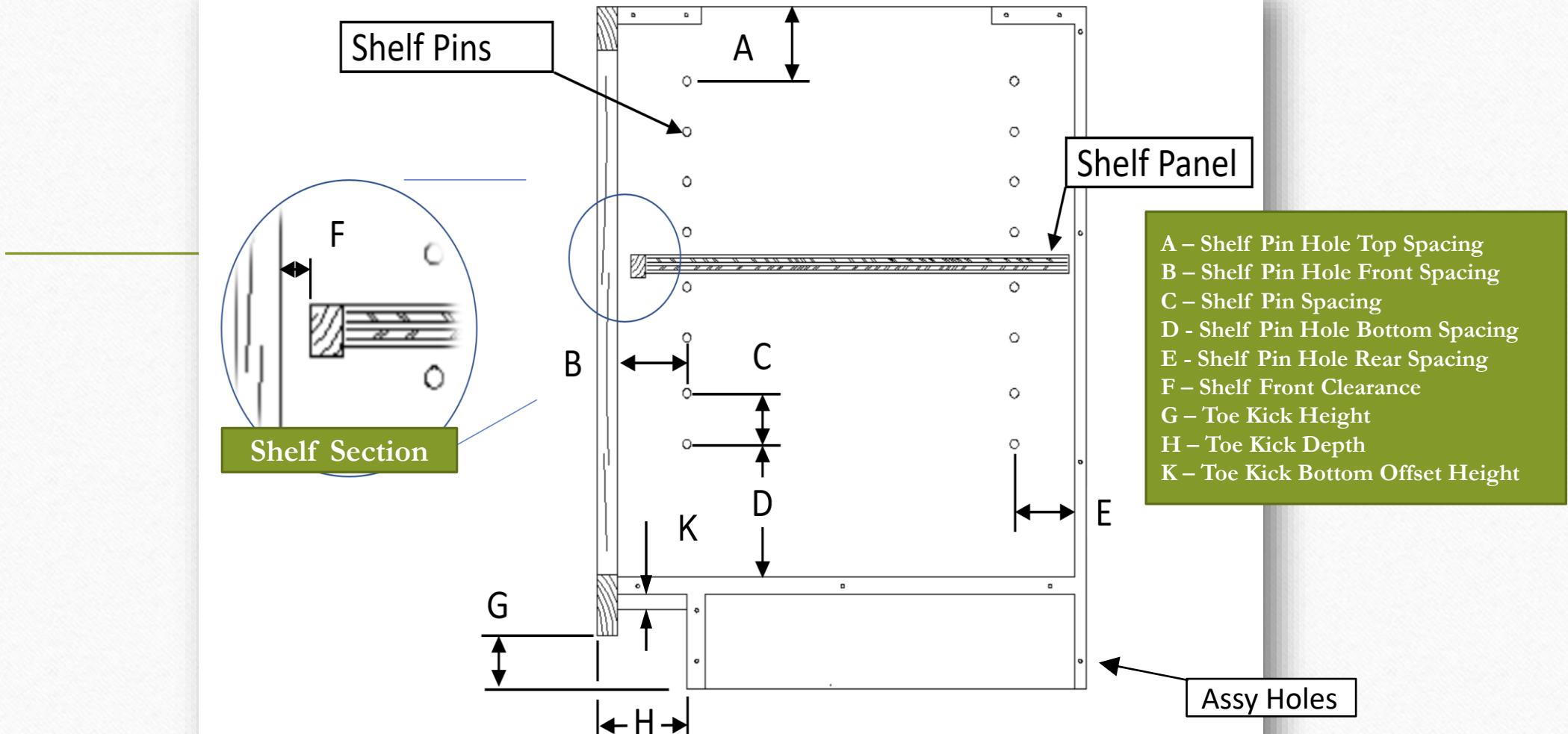


Base Cabinet Carcass with and without Center Panel

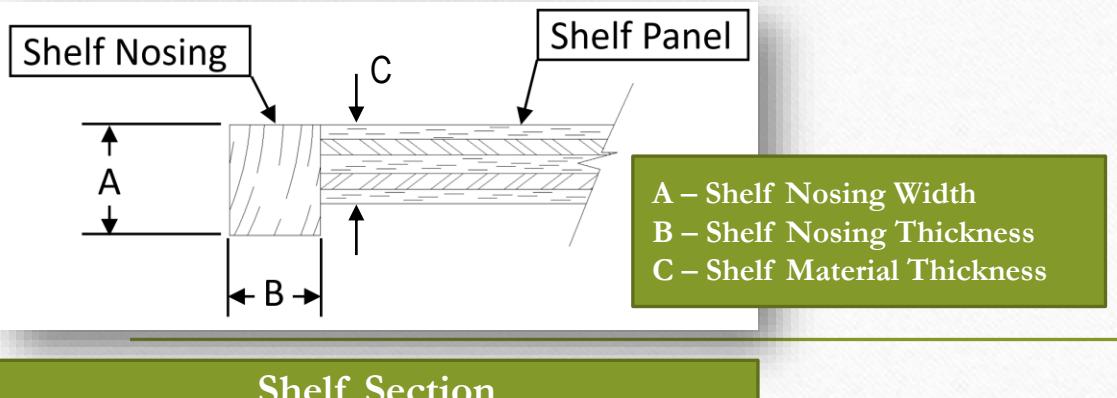


Note: The face frame is not shown

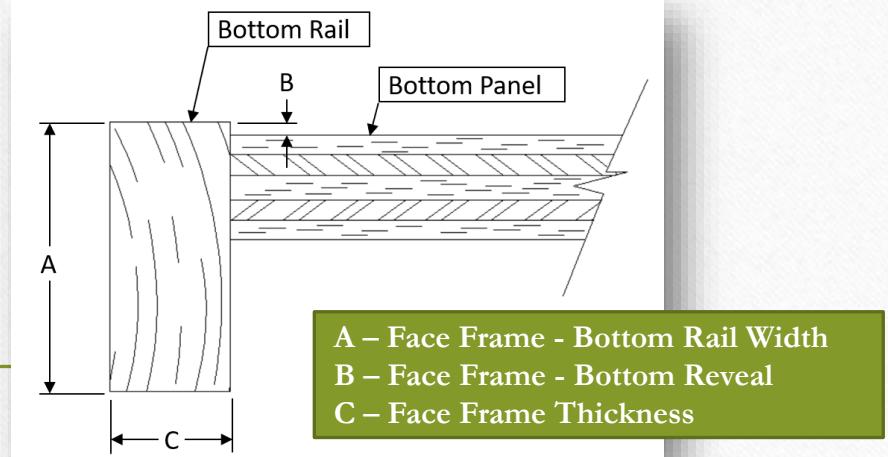
Base Cabinet Side Cross Section Details



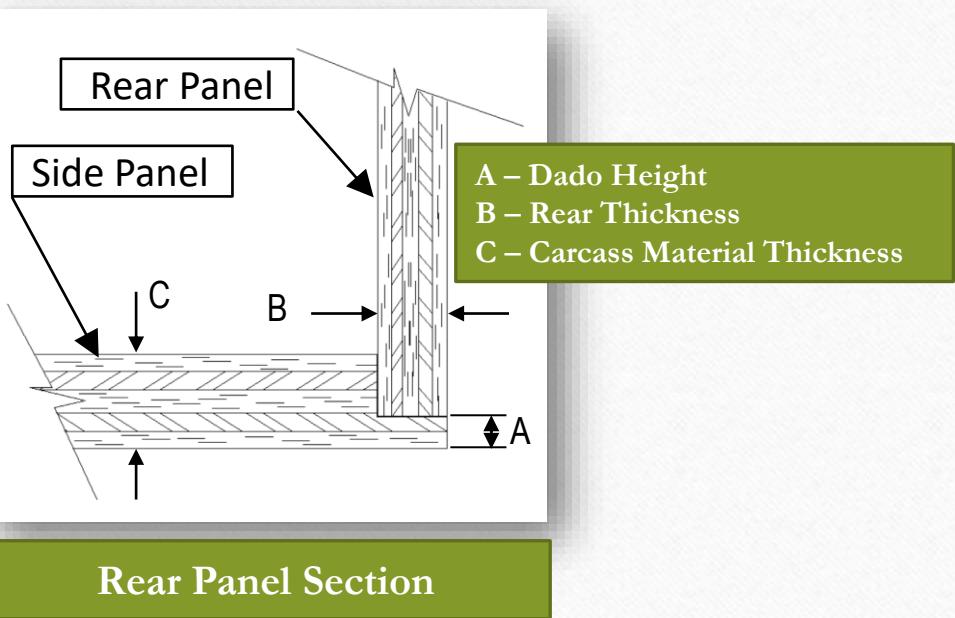
Base Cabinet Part Details



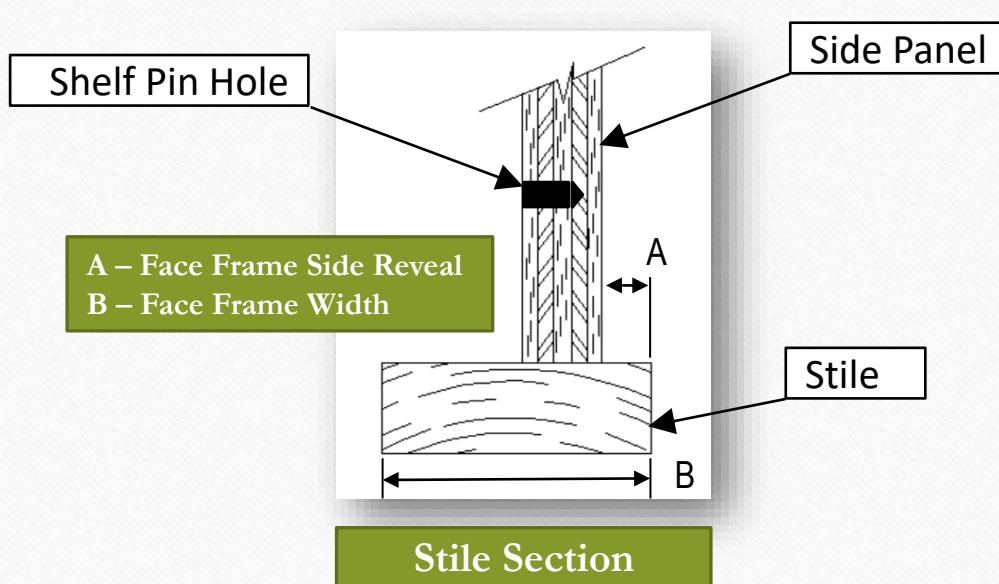
Shelf Section



Bottom Rail Section

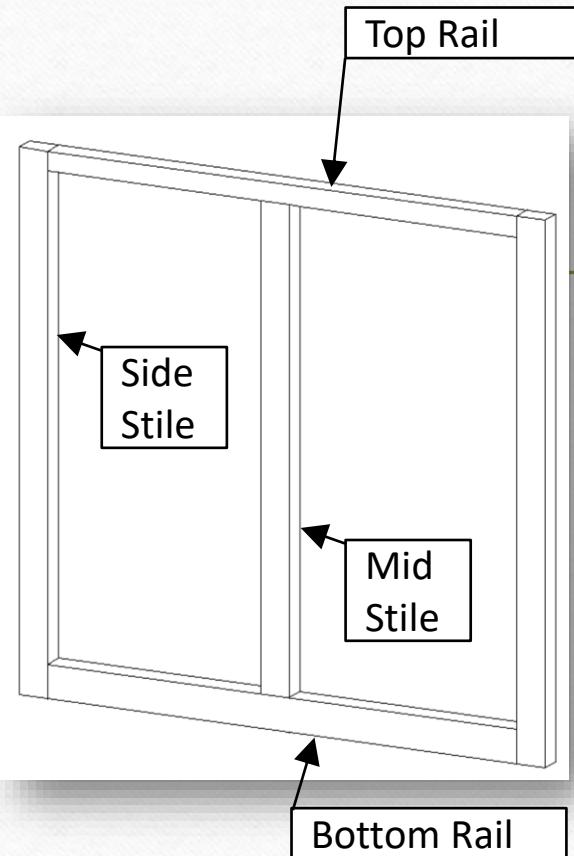


Rear Panel Section

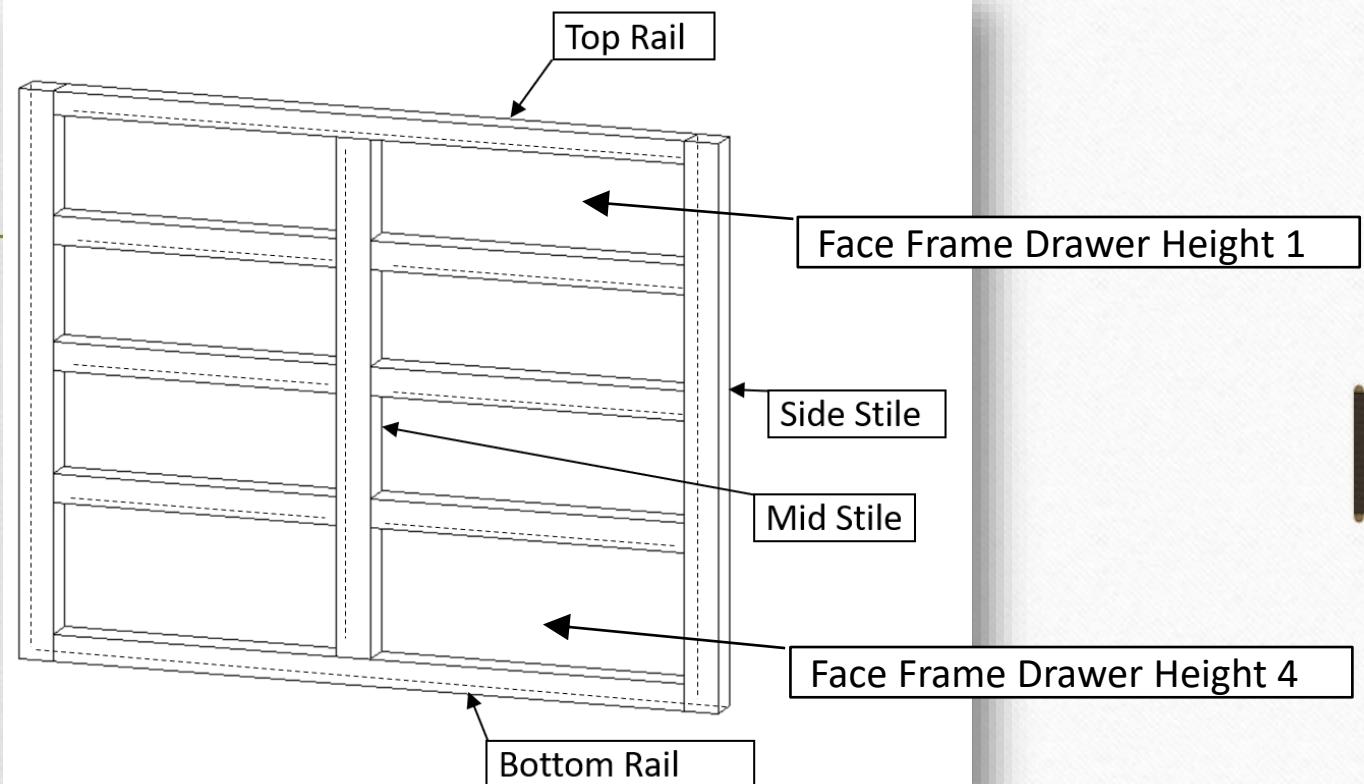


Stile Section

Face Frame Part Layout



Wall Cabinet
Face Frame



Base Cabinet
Face Frame

The End