# 2020 Cap Complete User Guide



# **Table Of Contents**

Welcome to 2020 Cap Complete	1
About 2020 Cap Complete	1
Hints and procedures	2
Run in Classic mode	2
Run in Drafting & Annotation mode	2
Run in Drafting & Annotation mode	3
Start 2020 Cap Complete	4
Know more about 2020 Cap Complete with the Help commands	4
What's new	6
Website	7
Community	9
2020 on Social Media	11
Training	12
2020 Training	14
Training Videos	14
Support	15
Diagnostics	16
Check for software updates	18
Check for catalog updates	20
Software Version	21
Drawing and Drafting	25
Projects	25
Create a new drawing under a project	25
Drawing Setup Wizard	26
2020 Cap Complete drafting	26
Toolbars, Ribbon, and menu	29
Toolbars	29
About 2020 Office menu	29
2020 Office ribbon	30
2020 Office ribbon	31
Show or hide a toolbar	32
Move a toolbar	33
Cap Help toolbar	34
2020 Office toolbar	37
Cap Bound toolbar	39
Cap Edit toolbar	39

Cap Part toolbar	41
Cap Standard toolbar	42
Cap Tools toolbar	42
Explorer pane	45
Display or hide the Explorer pane	45
Move the Explorer pane	47
Show or hide Explorer pane tabs	48
Auto-hide feature	48
Preferences	49
General preferences	49
Advanced preferences	50
Automation Preferences	51
Place products in a drawing	55
Place a product using the Explorer	55
Place a product using Insert Symbol	57
Place non-graphic items	58
Place panels using the Panel Placer	58
Place products from an archived catalog	60
Insert by Part Number	60
How to place items properly	61
Search for products	63
Search and replace one part	63
Search and replace a standard or a panel configuration	64
Search and replace item data	64
QuickSearch	66
Use QuickSearch from the Content tab	66
2020 Search	67
Update against a catalog	69
Update	71
Update with associated worksheet	71
Update against a visual worksheet	72
Update with associated worksheet	73
Layers	75
Layer Profiles	75
Layer On	76
Layer Off	76
Combine commands	77

Combine 2020 Cap Complete commands	77
Copy Rotate	77
Move Rotate	78
Offset Copy	80
Offset Move	81
Highlight parts in the drawing	83
Highlight by Part Number	83
Highlight by Select	83
Tags	85
Append Tag	85
New Tag	85
Change Tag Size	86
Move Tag	86
Rotate Tag	87
Show Part Number/Tag	87
Mirror items	89
Mirror Last Block x	89
Mirror Last Block y	89
Plan and 3D views	90
Convert Plan to 3D	90
Convert 3D to Plan	91
Change 3D Height	92
User-defined tag values	95
Alias values	95
Building, Floor, Department, and Person values	95
Assign user-defined tag values	95
Change the visibility of user-defined tag values	97
Assign sequential user-defined tag values	97
Custom catalogs	101
Add a symbol to a custom catalog	101
Custom items	103
View item information	103
Create a new Cap Part	104
Select objects and the insertion point	104
Specify the Tag Properties	105
Enter part information	106
Save part in a custom catalog	107

Edit a Cap Part	108
Undo a Cap Part	109
Product specification with 2020 Options	111
Specify options for one product	111
Strip Options	111
Visual Impression for 3D specification	113
Define a scene for 2020 Visual Impression	113
Visualize a scene in 2020 Visual Impression	114
Manage Scenes	115
Show Non-Plan Item List	117
Add a part to the Non-Plan Item List	117
Add NPIL table to drawing	118
Edit a non-plan item	119
Specify a NPI part	120
Send a NPI Part to the drawing	120
Refresh the Non-Plan Item List	120
Delete a NPI part	121
Delete all non plan items	121
Worksheets	123
Create a take-off window	123
Create a worksheet	124
Create a visual worksheet	124
Create an associated worksheet	126
Update with associated worksheet	128
Update against a visual worksheet	129
Create an ASCII file	130
Create a CapSIF file	132
Compare a drawing to a worksheet	133
Example - compare a drawing to a worksheet	134
Standards (Typicals)	137
Create a Cap Standard	137
Select objects and the insertion point for the standard	138
Specify tag properties for the standard	139
Enter standard information	140
Save the standard in a custom catalog	140
Redefine a Cap Standard	141
Replace a Cap Standard	142

Edit a Standard's information	143
Custom workstation	144
Large Project/Take Offs	145
Simple Take off	145
Standards Take Off	145
Bounds	147
Cap Bounds	147
Make a Bound	147
Bounds Take Off	149
Edit Bound title and text placement	149
Remove a Cap Bound	150
Create a space report	150
Command reference	153
Draw Schedules	154
Create a draw schedule from the drawing	154
Select objects for the schedule	154
Select a Title and a location	155
Choose text properties	156
Add or remove columns	157
Examples - draw schedules	158
Create a draw schedule from a worksheet	160
Create a presentation document using Plan view and 3D	161
Panel Builder	163
Best practices	163
2020 Cap Complete Mfg specific Contents	165
Herman Miller	165
Convert CADpack drawings	165
Import Vary Easy symbols	165
Import Z-Axis	165
Kimball	166
Auto-Brackets	166
Use the Auto worksurfaces and overhead bracket generator	166
Rules for Kimball bracket placement	167
Auto-Brackets exceptions	167
Kimball Xsite	168
Kimball-specific functions in the Automation palette	168
Automation Preferences	169

Create structure runs	170
Draw structure runs	170
Edit an existing structure run	171
Create elevations for a structure run	171
Modify an elevation	173
Adjust Traxx Lengths	180
Assign existing elevation	181
Break elevation link	182
Select tile options	182
Xsite tile schedule	184
Plan view structure	185
Worksheet takeoff (BOM) rules	186
AutoConnector Preference Settings	186
Special considerations for elevations and structure runs	186
Automation Center for Kimball	187
Automation Center for Kimball	187
Automation Center - Xsite KLX	187
Automation Center - Interworks EQ	188
Knoll	189
Knoll Currents	189
Automation palette	189
Place service walls	190
Place ends on service walls	190
Place add-up panels	192
Push frame away from service wall	192
Add items along the length of the service wall	193
What is a service wall run?	193
Elevation Template	194
Create or apply an elevation template	194
Apply coverings	196
Push template to opposite	198
Copy Plan to 3D MFG	199
Bind covers	200
Validate elevations	201
Errors checked by Validate elevations	203
Break link	203
Settings	206

Auto-hardware	207
Steelcase	208
Steelcase Style Number Conversion Wizard	208
Converter capabilities	208
Convert a 2020 Cap drawing	208
Auto-hardware	210
Teknion	211

# Welcome to 2020 Cap Complete

# **About 2020 Cap Complete**

2020 Cap Complete is a suite of labor-saving tools that help you visually search through thousands of furniture products, then place those products into drawings. You can output those drawings in Plan View or 3D.

- Create large-scale project drawings
- Accurately space plan with complex furniture lines using accurate Design Automation tools
- Rapidly draw walls, doors, windows, curved walls, reflected ceiling plans, custom windows, and doors directly within your drawings.
- Create Standards groups of product that are combined to represent complete assemblies like workstations
- Export drawings into 2020 Worksheet for product optioning and pricing

See Also

Run in Classic mode

Exit the Classic mode



Tip: You may also use the 2020 Office ribbon to access the application functions.

2020 Cap Complete - Release 2019.2 - Updated on February 20, 2020

# Hints and procedures

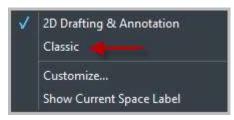
As in other Windows applications, there are many ways to perform tasks in 2020 Cap Complete. You can:

- Use the 2020 Office ribbon to select a command
- Use the 2020 Office menu to select a command (classic mode)
- Click on icons in the available toolbars

#### Run in Classic mode

## To run in Classsic mode from 2020 Cap Complete:

1. Right-click on the **Space Switch icon** at the bottom of the Cap Complete window. If the *Classic* mode is off (no checkmark next to the name). See the capture below:



2. Click it and you'll run in Classic mode (a checkmark will also appear next to its name). See the capture below:



Selecting it again will turn it off.

#### Menu bar in the Classic mode:



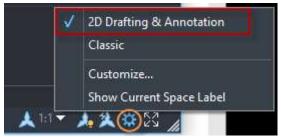
# **Run in Drafting & Annotation mode**

#### To run in *Drafting & Annotation* mode (exit the Classic mode):

1. Right-click on the **Space Switch icon** at the bottom of the Cap Complete window. If the *Drafting & Annotation* mode is off (no checkmark next to the name). See the capture below:



2. Click it and you'll run now in **2D Drafting & Annotation mode** (a checkmark will also appear next to its name). See the capture below:



Selecting it again will turn it off.

Menu bar in the 2D Drafting & Annotation mode:



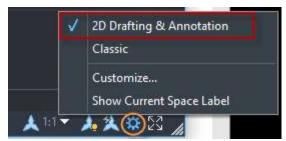
# **Run in Drafting & Annotation mode**

To run in *Drafting & Annotation* mode (exit the Classic mode):

1. Right-click on the **Space Switch icon** at the bottom of the Cap Complete window. If the *Drafting & Annotation* mode is off (no checkmark next to the name). See the capture below:



2. Click it and you'll run now in **2D Drafting & Annotation mode** (a checkmark will also appear next to its name). See the capture below:



Selecting it again will turn it off.

Menu bar in the 2D Drafting & Annotation mode:



## **Start 2020 Cap Complete**

2020 Cap Complete is an all-in-once space-planning application.

- 1. Make sure the Windows Search box on taskbar is displayed.
- 2. In the Windows search box, located next to Start, start typing *2020* then select **2020 Cap Complete** from the list of apps.

To toggle between **2D Drafting & Annotation** and **Classic** mode, see <u>Run in Classic mode</u>

Run in 2D Drafting & Annotation mode

Know more about 2020 Cap Complete with the Help commands

The Cap Help toolbar offers the same options as the 2020 Help ribbon and 2020 Office menu. Note: Make sure you are <u>running in *Classic* mode</u> to see the 2020 Office menu.

Different ways of using Help commands

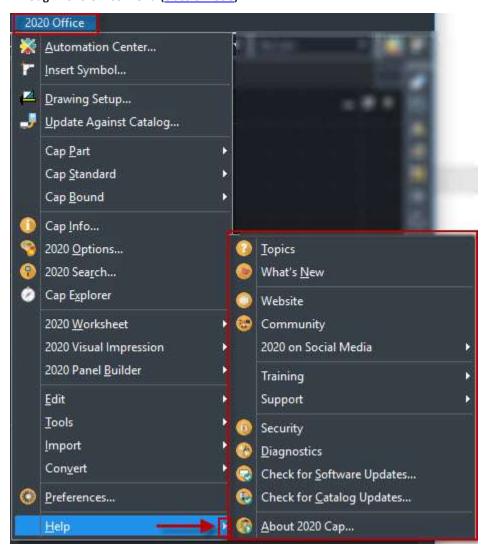
#### Through Cap Help toolbar



Through 2020 Help ribbon



Through 2020 Office menu (classic mode)



See Also

What's new

Website

Community

2020 on Social Media

**Training** 

Support

**Diagnostics** 

**Check for software updates** 

Check for catalog updates

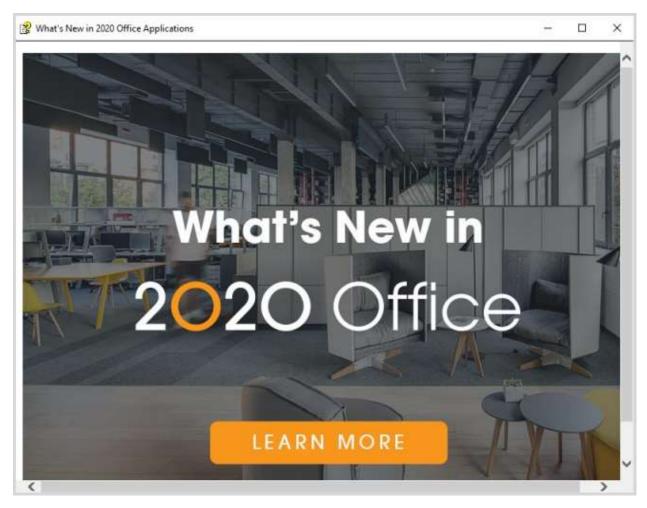
About 2020 Cap

#### What's new

The What's New appears when you open a 2020 Office application or you may access it from the 2020 Office Help menu or Help toolbar within a 2020 Office application. It can also be accessed from the Start Menu or while you are installing the content or software.

Note: Access to the What's New requires an active internet connection.

Clicking the image (LEARN MORE button) in the What's New now accesses a web page.



Below is a list of all the information you might find in the What's New web page.

View announcements on 2020 Office

- Read about and download manufacturer catalog updates
- View information about new commands, software fixes and known issues
- Download software or catalog updates. See also Check for software updates, Check for catalog updates
- Download PDF versions of the 2020 Office user manuals
- Download PDF files of Release Notes (What's New) as they become available
- Find training courses for 2020 Office software
- View a list of upcoming industry events in which 2020 will participate
- Obtain 2020's contact information
- Resources

#### Website

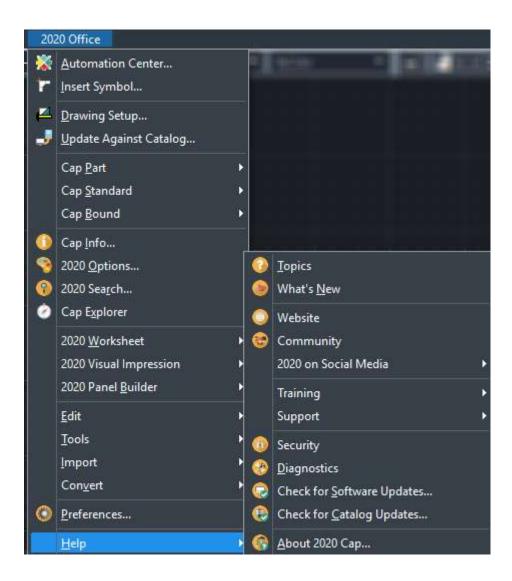
This Help option takes you to the 2020spaces.com web site.

Different ways of accessing the Website.

#### Through 2020 Help ribbon (Website button)



Through 2020 Office menu (Classic mode) - Help > Website



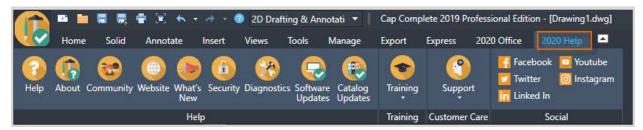


## Community

This Help option takes you to the Cube forum of the 2020spaces.com web site where you can find and share information on 2020 Office products and its community.

Different ways of accessing the Community

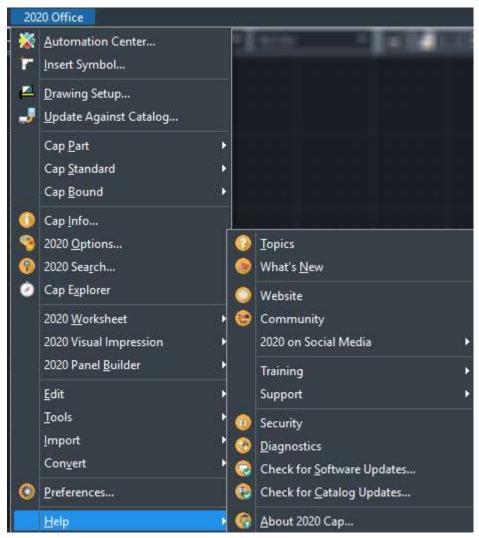
Through 2020 Help ribbon - Community button:



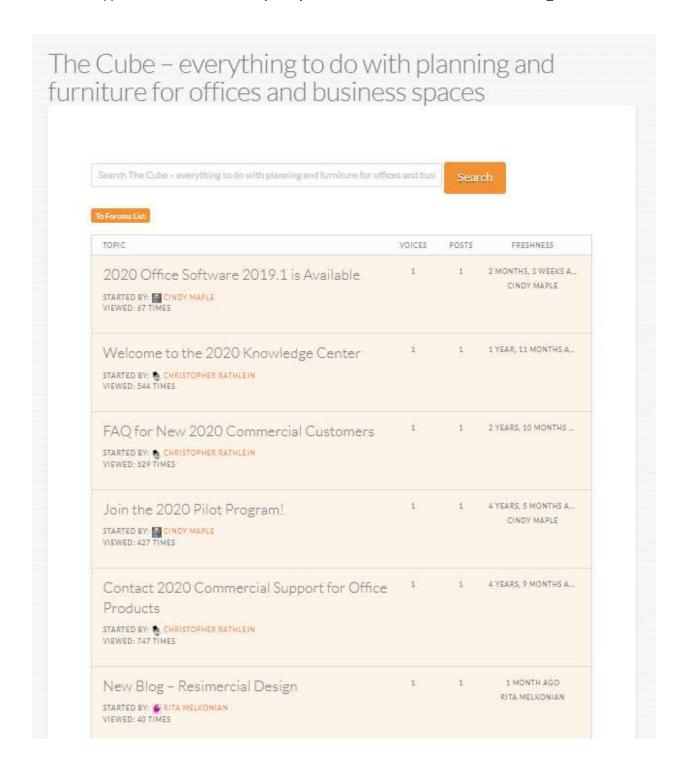
Through Cap Help toolbar



Through the 2020 Office menu (in Classic mode) - Help >







#### 2020 on Social Media

This Help option takes you to the 2020 social media platforms so you can stay informed and share as you deem appropriate.

Different ways of accessing the Social media website

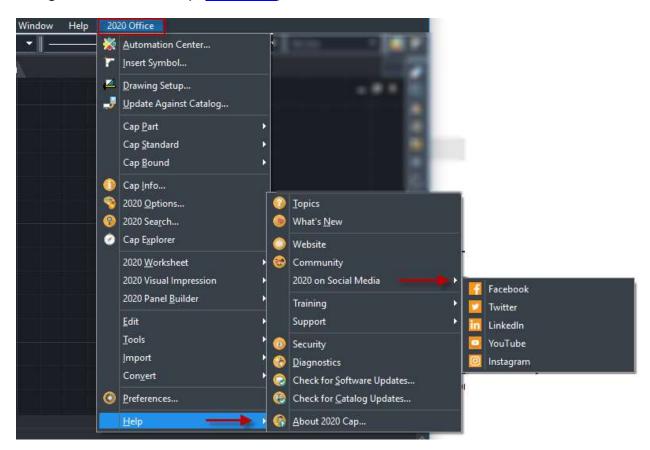
#### Through 2020 Help ribbon



#### Through Cap Help toolbar



#### Through the 2020 Office menu (in Classic mode)



## **Training**

The **2020 Training** option takes you to the 2020 Training page of the 2020 website where you can see scheduled training, sign up for classes, and learn more about what each class offers.

The **Training Videos** option takes you to the e-learning page of the 2020 website where you can watch videos that provide basic information about the 2020 Cap functionality.

Different ways of accessing the 2020 Training and Training Videos websites

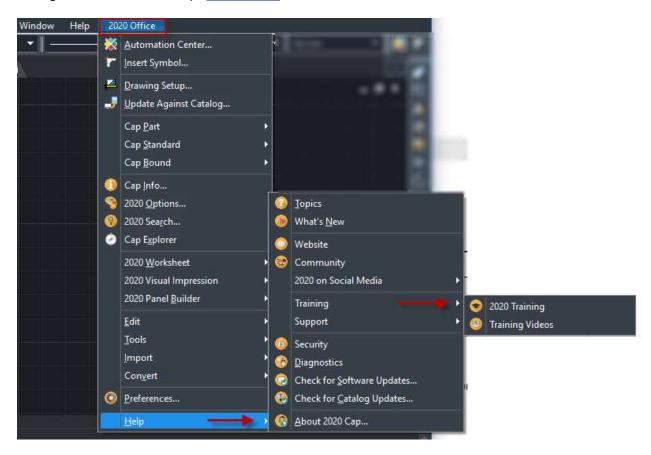
### Through 2020 Help ribbon - Training button



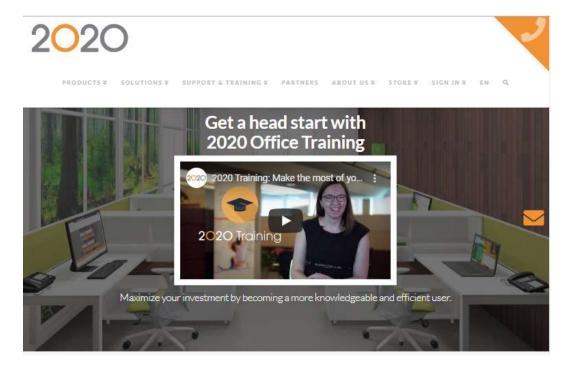
#### Through Cap Help toolbar



## Through the 2020 Office menu (in Classic mode)



# 2020 Training



# **Training Videos**



## **Support**

The **Knowledge Center** option opens a web page where you can access, at any time, many topics relating to 2020 Office applications. Researching an issue within an application is now possible without needing to contact Support.

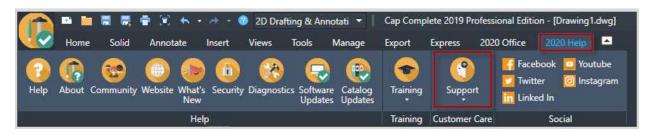
The **Live Chat** option opens a web page where you are required to enter information in preparation for starting a live chat with a Support agent.

The **Email Us** option opens a web page where you can send 2020 an e-mail regarding an issue and to access the 2020 Community page.

When contacting support, you may be instructed to select **Remote Support**.

Different ways of accessing 2020 Support

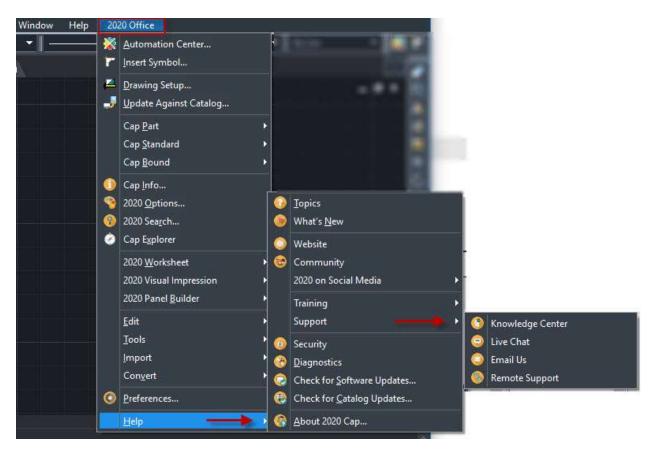
#### Through 2020 Office Help ribbon



#### Through Cap Help toolbar



Through the 2020 Office menu (in Classic mode):



## **Diagnostics**

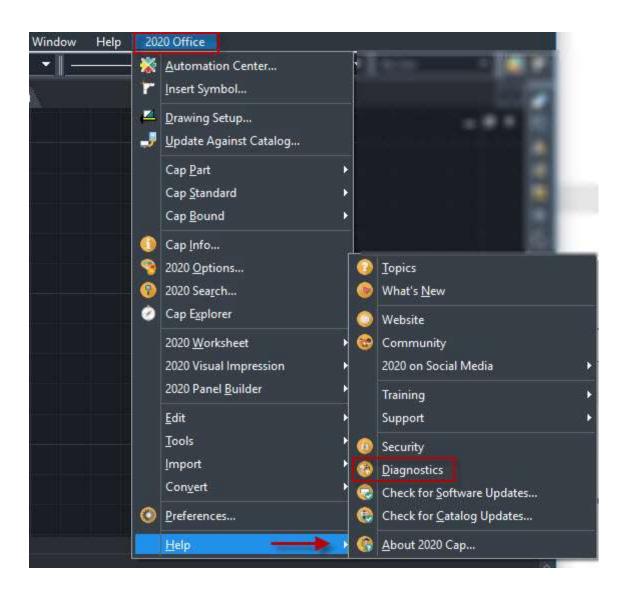
The **Diagnostics** command is used by technical support to troubleshoot 2020 software.

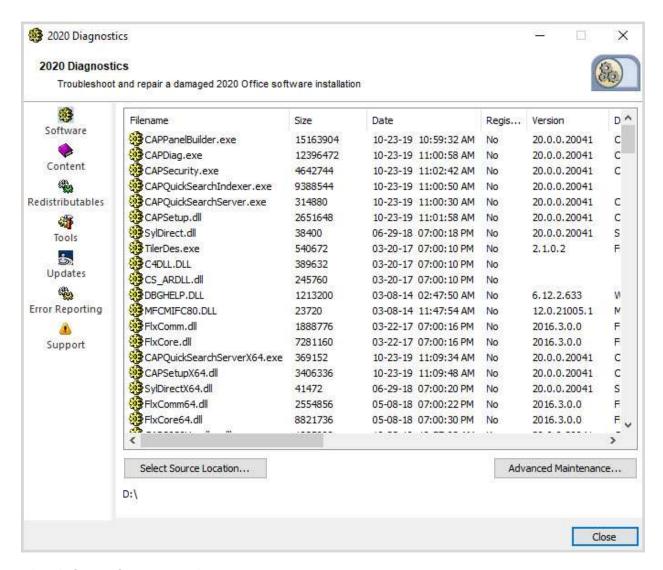
Different ways of accessing the Diagnostics window

#### Through 2020 Help ribbon



Through the 2020 Office menu (in Classic mode)



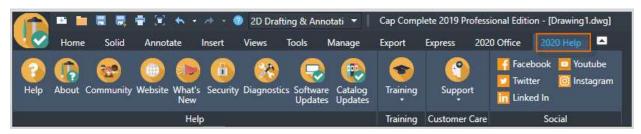


## **Check for software updates**

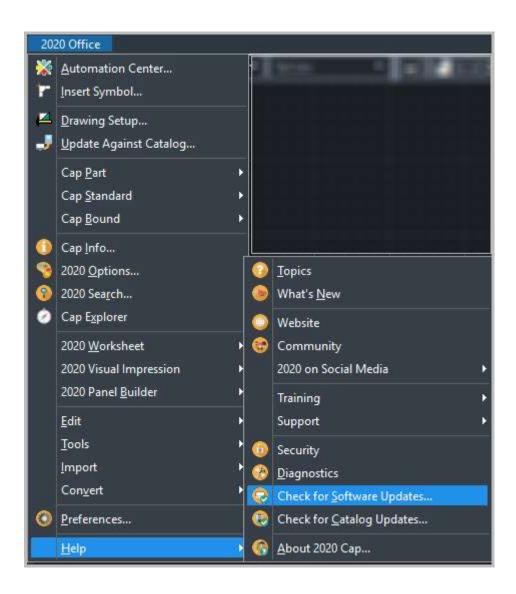
You can access from the 2020 Office help menu or via the 2020 Help toolbar:

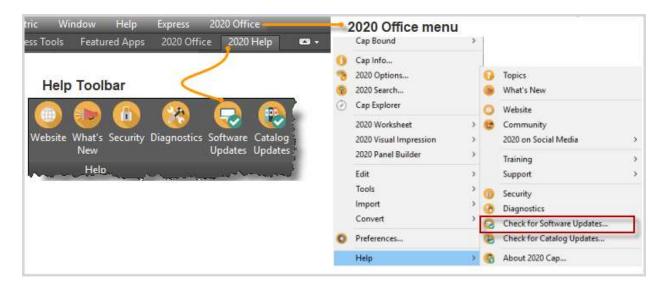
Different ways of accessing the Software Updates window

Through 2020 Help ribbon (Software Updates button)



Through 2020 Office menu (Classic mode)





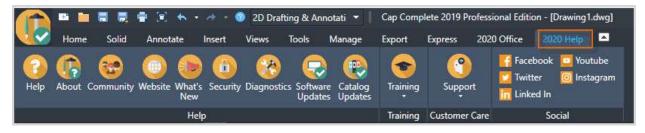
The **Update Manager** appears. From here you can view updates for your system, view update descriptions, and download and install updates.

For help on Update Manager click on the Help link on the bottom right of the Update Manager window.

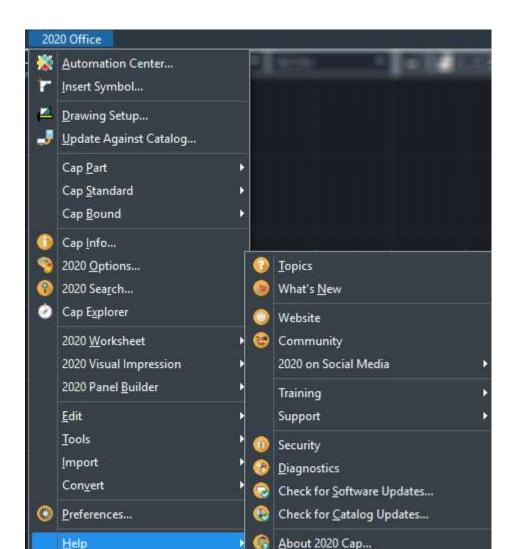
## **Check for catalog updates**

Different ways of accessing the catalog updates window

#### Through 2020 Help ribbon (Catalog Updates button)



Through the 2020 Office menu (in Classic mode) - (Check for Catalog Updates option)



The **Update Manager** appears. From here you can view catalog updates for 2020 Cap Complete, update descriptions, time, and file size.

For help on Update Manager click on the Help link on the bottom right of the Update Manager window.

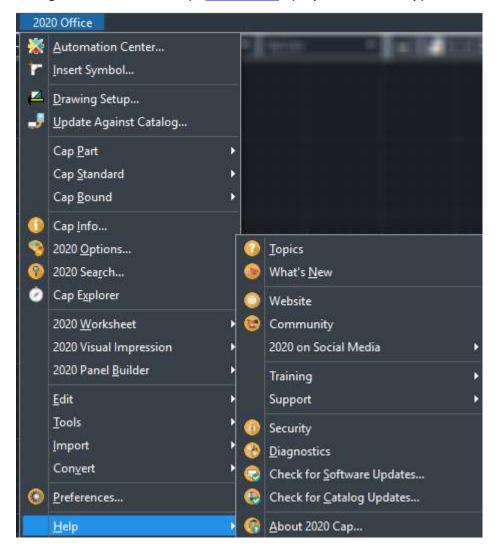
#### **Software Version**

Different ways of accessing the software version window

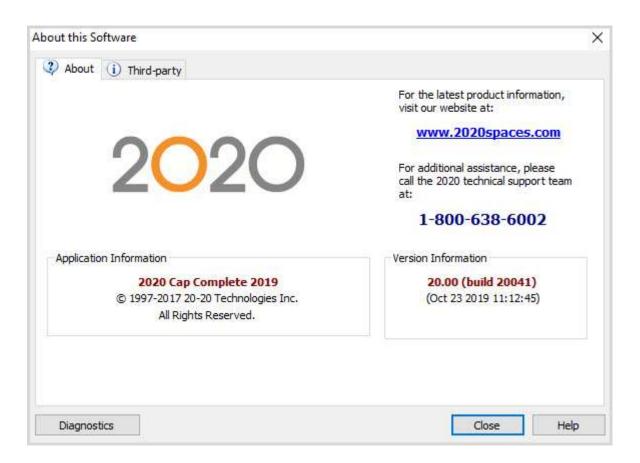
Through 2020 Help ribbon (About button)



Through the 2020 Office menu (in Classic mode) - (Help > About 2020 Cap)



The picture below shows an example of Information that can be displayed in the *About this Software* window:



# **Drawing and Drafting**

# **Projects**

Project Support is a way of setting up and maintaining your drawings and worksheets. Users and administrators can easily organize their worksheets, drawings, and associated data under a **Project** folder. In addition, Project Support has the ability to set defaults for all of your Worksheets to be the same or set defaults on a per project basis.

To use projects in 2020 Cap Complete, see Create a new drawing under a project.

For more information about how Projects are used in 2020 Worksheet, see the Projects section in the 2020 Worksheet help.

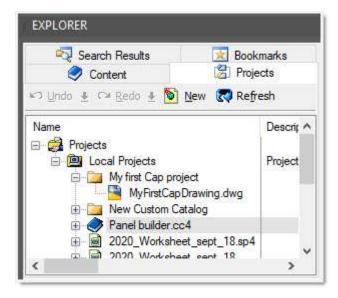
# Create a new drawing under a project

Launch the Drawing Setup Wizard.

- 1. Select Drawing Setup on the 2020 Office toolbar. You may also use the 2020 Office ribbon.
- 2. In the Drawing Setup Wizard, click New Drawing.
- 3. In the Select Project dialog box, decide where to store the new drawing.

  Note: The Wizard creates a default folder called My Projects. The purpose of My Projects is to create a shortcut to project folders that you are working in. The benefit is that you don't have to go through several layers of sub-folders to get to your project folder. Project folders removed from this list are not deleted.
- 4. To create a new project folder, click All Projects, then click the New button.
- 5. A new project folder appears. Type the name for this project.
- 6. Click Next to continue.
- 7. Use the Drawing Setup screen to setup the drawing Plot Size and Plot Scale.
- 8. Click Next to continue.
- 9. In the last dialog box, enter a unique file name, then click Finish to close the Wizard and open the new drawing in 2020 Cap Complete.

You can access the drawing from the **Projects** tab of the <u>Explorer pane</u>. Simply double-click on the drawing to open it.



See Also

2020 Office menu, toolbar and ribbon

## **Drawing Setup Wizard**

Use the Drawing Setup Wizard to create a new drawing under a project folder and to set up the plot size and scale of a new, current, or existing drawing.

1. Select **Drawing Setup** on the <u>2020 Office toolbar</u>. You may also use the <u>2020 Office ribbon</u>.

The Drawing Setup Wizard opens with three options:

**New Drawing** — to create a new drawing and apply setup. This drawing will be saved under a project folder. For more information about this option see <u>Create a new drawing under a project</u> in the <u>Projects</u> section

**Current Drawing** — to modify setup of a drawing that is already open **Existing Drawing** — to open a drawing and modify setup

If you opened a blank drawing, select Current Drawing.

- 2. Select the **Plot Size** and **Plot Scale** you think you might use. If you use a different size or scale when you actually plot it doesn't matter. This is simply setting up your beginning paper size.
- 3. Click Finish.

See Also

2020 Office menu, toolbar and ribbon

# 2020 Cap Complete drafting

Before using 2020 Cap Complete, make sure to set **OSNAP** settings to **Node** and to toggle **ORTHO** on.

1. Right-click on the **Object Snap icon** at the bottom of the Cap Complete window and select **Settings**.

2. Make sure that the ONLY object snap mode checked is **Node**. 2020 Cap Complete is designed to utilize Node snapping. While occasionally other types of snapping are required to complete a layout, you can turn on those other snap nodes as needed. By limiting your snap node to node only, you limit the possibility of incorrectly snapping parts together.



3. Make sure that the **Ortho Mode** is also on. In **Ortho Mode** mode, cursor movement is constrained to the horizontal or vertical axis. Note that in some instances you might need to turn **Ortho Mode** off.

Note: More information about **Object Snap** and **Ortho Mode** is available within 2020 Cap Complete's help system.

# Toolbars, Ribbon, and menu

### **Toolbars**

With the 2020 Cap Complete toolbars you can perform frequent tasks quickly by clicking icons.

You can easily customize toolbars. See the following topics for more information:

- Show or hide a toolbar
- Move a toolbar



Fip: You may also use the 2020 Office ribbon to access the application functions.

There are several built-in toolbars in 2020 Office, each representing a category of commands. You may change their position to suit your needs. See the topics below for information on each toolbar.

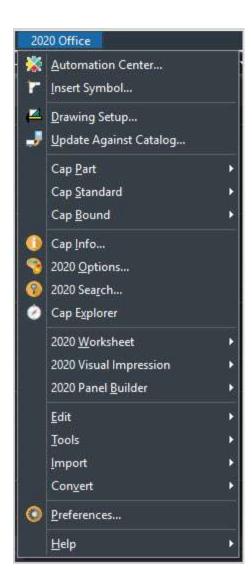
Buttons with a small black triangle in the lower-right corner are flyout toolbars that contain related commands. With the cursor over the icon, hold down the left button on your mouse until the flyout toolbar displays.

- Cap Bound toolbar
- 2020 Office toolbar
- Cap Edit toolbar
- Cap Part toolbar
- <u>Cap Standard toolbar</u>
- Cap Tools toolbar
- Cap Help toolbar
- Automation palette for Knoll Currents and Equity products only. See the help file on <u>Manufacturer-specific information</u>.

### About 2020 Office menu

Note: Make sure you are running in Classic mode to see the 2020 Office menu.

The 2020 Office menu at the top right contains all 2020 Cap Complete functions.



## 2020 Office toolbar

For information about the 2020 Office toolbar, click here.

### 2020 Office ribbon

For information about the 2020 Office ribbon, click here.

## 2020 Office ribbon

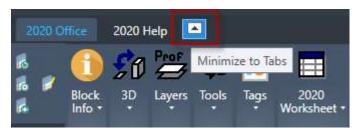
The 2020 Office ribbon provides quick access to common tasks. The commands and functions on this ribbon are organized to follow the usual workflow of a designer, making locating a command more intuitive and overall faster when compared to using toolbars and menus.

To get help on specific command in the **2020 Office** ribbon, click on its image in the capture below (your mouse pointer will change into a hand when you hover any image).



#### To hide the 2020 Office ribbon:

Click the Minimize to Tabs button.



#### To show the 2020 Office ribbon:

Click the Show Full Ribbon button.



### 2020 Office ribbon

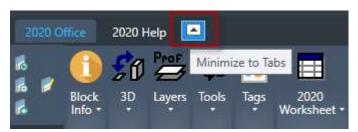
The 2020 Office ribbon provides quick access to common tasks. The commands and functions on this ribbon are organized to follow the usual workflow of a designer, making locating a command more intuitive and overall faster when compared to using toolbars and menus.

To get help on specific command in the **2020 Office** ribbon, click on its image in the capture below (your mouse pointer will change into a hand when you hover any image).



#### To hide the 2020 Office ribbon:

Click the Minimize to Tabs button.



### To show the 2020 Office ribbon:

Click the Show Full Ribbon button.

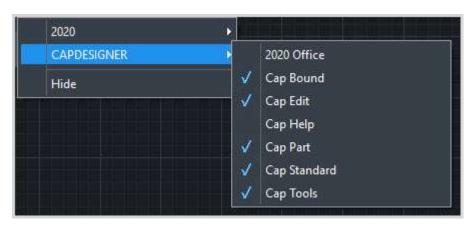


See Also 2020 Office menu, toolbar and ribbon

## Show or hide a toolbar

This allows you to show or hide a toolbar.

Right-click in empty area of any 2020 Cap Complete toolbar displayed on screen then select CAPDESIGNER.

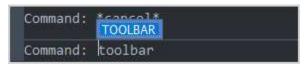


Select the toolbar name to toggle the toolbar on and off.

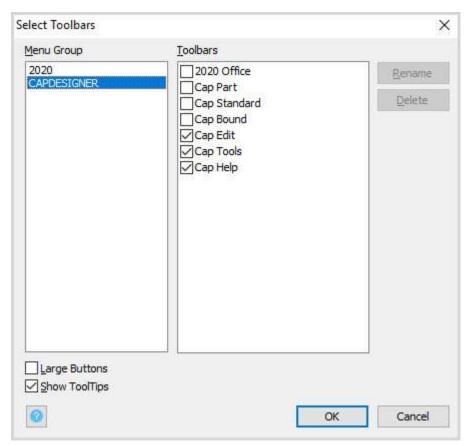
If it is off (no checkmark next to the name), click it and the toolbar will appear on your screen (a checkmark will also appear next to its name). Selecting it again will turn it off.

You can also use the command prompt:

Type toolbar at the Command prompt and press Enter.



1. In the **Select toolbars** window, beneath **Menu Group**, select **CAPDESIGNER**.



- 2. If it is off (no checkmark next to the name), click it and the toolbar will appear on your screen (a checkmark will also appear next to its name). Selecting it again will turn it off.
- 3. Click OK.

To show or hide the 2020 Office ribon, click here.

### Move a toolbar

You can display or hide toolbars, and you can save your selections as a workspace. You can also create your own toolbars.

A toolbar can be *floating* or *docked*. A floating toolbar is displayed anywhere in the drawing area, and you can drag a floating toolbar to a new location, resize it, or dock it. A docked toolbar is attached to any edge of the drawing area. A toolbar docked at the top edge of the drawing area is located below the existing toolbars. You can move a docked toolbar by dragging it to a new docking location. Click-hold the left edge of the toolbar to move it around. To dock/undock a toolbar, double-click on the left edge.





Tip: You may also use the 2020 Office ribbon to access the application functions.

# Cap Help toolbar

The Cap Help toolbar offers the same options as the 2020 Help ribbon and 2020 Office menu. Note: Make sure you are running in *Classic* mode to see the 2020 Office menu.

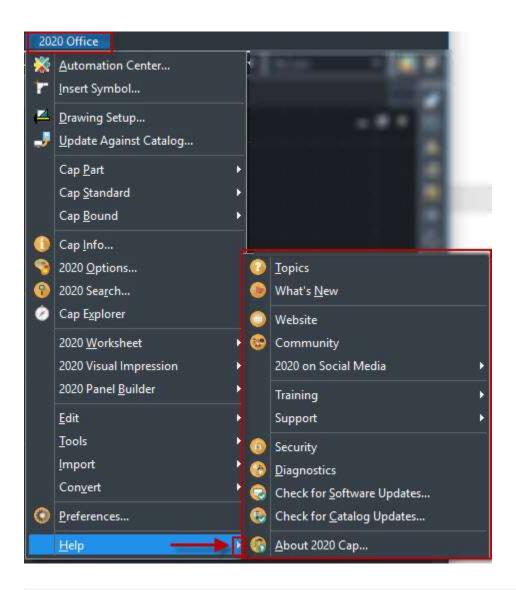
### Cap Help toolbar



### 2020 Help ribbon

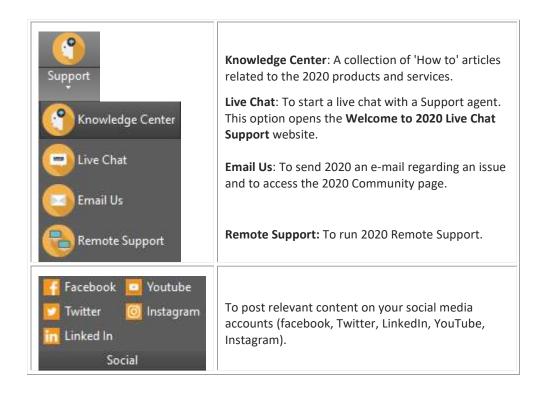


2020 Help from 2020 Office menu (classic mode)



Icon	Description
Help	Opens the 2020 Cap online help.
About	The 2020 Cap Version Information (number and date), the Website: https://www.2020spaces.com/, the 2020 technical support team telephone number, etc.
Community	The Cube forum of the 2020spaces.com website where you can find and share information on 2020 Office applications and its community.

Website	Website: https://www.2020spaces.com/ View the 2020 Technologies website.
What's New	A web-based What's New allows for easier updates and access to the latest information concerning content and software information. Note: Access to the What's New requires an active internet connection.  Click here to know the new different ways to access the 2020 Office what's New.
Security	To view information on hardware key and software key.
Diagnostics	The Diagnostics command is used by technical support to troubleshoot 2020 software.
Software Updates	Software updates
Catalog Updates	Catalog Updates
Training  2020 Training  Training Videos	2020 Training: To schedule training, sign up for classes, and learn more about training and what each class offers.  The Training Videos option takes you to e-learning page of the 2020 website.



## 2020 Office toolbar

To display the 2020 Office toolbar, see **Show or hide a toolbar**.



Tip: You may also use the 2020 Office ribbon to access the application functions.

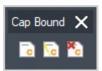


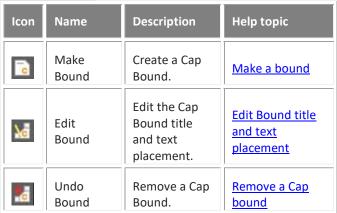
Icon	Name	Description	Help topic
×	Automation Center	Set of manufacturer-specific automation tools.	See the help file on Manufacturer- specific information
*	Insert Symbol	Place a product in the drawing using the Insert Symbol dialog.	Place a product using Insert Symbol
E	Part flyout	Click and hold to access the Make Part, Edit Part or Undo Part commands.	<u>Custom items</u>

ø	Standard flyout	Click and hold to access the Make Standard, Edit Standard or Undo Standard commands.	Standard (Typicals)
P	Bound flyout	Click and hold to access the Make Bound, Edit Bound or Undo Bound commands.	<u>Bounds</u>
1	Cap Info	View an item's information and options.	View item information
<b>%</b>	2020 Options	Add finishes or options to parts in the drawing.	Specify options
0	Explorer	Show or hide the Explorer pane.	Explorer Pane
	Cap Panel Builder	Construct and manage configurations of stack panel products.	Panel Builder
	Create Worksheet	Create a worksheet file based on the current drawing.	Create a worksheet Create an associated worksheet
Ø	Update with Associated Worksheet	Update the current drawing against its associated worksheet or update an associated worksheet against the current drawing.	<u>Update with associated worksheet</u>
•	Show Associated Worksheet	Show the worksheet associated to the current drawing.	Create an associated worksheet
<b>P</b>	Create Take-Off Window	Select an area in the drawing that will be included in worksheets and draw schedules.	Create a take-off window
	Create a Schedule	Select the objects and information that will be included in the schedule.	Create a draw schedule from the drawing
	Define Scene	Group items together to define a scene to be visualized in 2020 Visual Impression.	Define a scene for 2020 Visual Impression

4.5	Visualize Scene	Visualize a scene defined in the current drawing in 2020 Visual Impression.	Visualize a scene in 2020 Visual Impression
<b>.</b>	Update Against Visual Worksheet	Update the items in the current drawing from a worksheet that was created from this drawing.	Update against a visual woksheet
<b>.</b>	Update Against Catalog	Updates the information of parts in the drawing against manufacturer catalogs.	Update Against a Catalog

# **Cap Bound toolbar**







Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.

# **Cap Edit toolbar**



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.



Icon	Name	Description	Help topic
<i>∂</i> 0	Change 3D Height	Place an item at a different 'Z' height.	Change 3D Height
ţ	Copy Rotate	Copy and Rotate commands in a single step.	Copy Rotate
<b>*</b>	Move Rotate	Move and Rotate commands in a single step.	Move Rotate
₩.	Offset Copy	Offset and Copy commands in a single step.	Offset Copy
<b>*</b>	Offset Move	Combines the 2020 Cap Complete Offset and Move commands in a single step.	Offset Move
+	Append Tag	Adds text to the end of a tag.	Append Tag
*	New Tag	Change a tag.	New Tag
6.C	Change Tag Size	Modify the text height of a tag.	Change Tag Size
#5.0	Move Tag	Change a tag's position.	Move Tag
¢2	Rotate Tag	Rotate a tag.	Rotate Tag
P.N	Show Part Number/Tag	Toggle the attribute display between Tag and Part Number.	Show Part Number/Tag

PN	Highlight by Part Number	Marks occurrences of a part number and reports the number of symbols found in the drawing.	Highlight by Part Number
	Highlight by Select	Marks occurrences of a part number when you select one of the symbols in the drawings.	Highlight by Select
i I	Block Replace	Replace a part number with another within all or a selected area of the drawing.	Search and Replace a part
<b>/</b>	Block Info Edit	Replace user-specified data on an item.	Search and replace item data

# **Cap Part toolbar**



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.



Icon	Name	Description	Help topic
<b>□</b> C	Make Part	Create a custom part that can be stored in a custom catalog.	Create a new Cap Part
<b>©</b>	Edit Part	Edit the information of a custom part.	Edit a Cap Part
<b>6</b>	Undo Part	Breaks up a Cap part - similar to the Explode command.	Undo a Cap Part

# **Cap Standard toolbar**



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.



Icon	Name	Description	Help topic
•	Make Standard	Create a Standard.	Create a Cap Standard (Typical)
M	Edit Standard	Edit a Standard's name, description or user-defined tag values.	Edit a standard's information
M	Undo Standard	Break up a Standard.	Redefine a Cap Standard  Replace a Cap Standard  Edit a standard's information

# **Cap Tools toolbar**



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.



Icon	Name	Description	Help topic
Prof	Layer Profiles	Helps you manage layers by allowing you to save layer settings in layer profiles.	Layer Profiles

			-
i.e.	Assign	Assign user-defined tag values to the Alias 1, Alias 2, Alias 3, Building, Floor, Department, and Person columns.	Assign Alias values
ø	Mirror Last Block - X	Mirrors the last part placed along a vertical line (  ).	Mirror Last Block x
.8.	Mirror Last Block - Y	Mirrors the last part placed along a horizontal line (=).	Mirror Last Block y
<b>BN</b>	Insert by Part Number	Insert a part into a drawing by typing in the part number.	Insert by Part Number
<b>\$</b> 0	Convert Plan to 3D	Converts the symbols on the drawing from plan view to 3D view.	Convert Plan to 3D
0,3	Convert 3D to Plan	Converts the symbols on the drawing from 3D view to plan view.	Convert 3D to Plan
÷0	Copy Plan to 3D	Copies the symbols on the drawing, then converts them to 3D.	Copy Plan to 3D
OH ₩	Layer On	Turns previously turned off layers back on.	<u>Layer On</u>
OFF	Layer Off	Allows you to turn off layers by selecting symbols on the drawing.	<u>Layer Off</u>
*	Strip Options	Remove the options from one or many parts.	Strip Options
-	Send to Custom Catalog	Add a symbol to a Custom Catalog.	Add to a custom catalog

123	Area Tag	Automatically or manually put sequential letters or numbers to the <b>Alias</b> values of items on the drawing.	Assign sequential Alias values
politic :	Set Displayed Tags	Change the visibility of existing Alias values.	Change visibility of Alias values
	Show Non- Plan Item List	Display the Non-Plan Item List, a list that contains parts that do not have symbols on the drawing.	Show Non-Plan Item List

# **Explorer** pane

The **Explorer** pane is a powerful navigation and selection utility that lets you browse multiple furniture catalogs at one time, as well as find all the files that you will use and create.

The Explorer pane consists of four tabs: Content, Projects, Search, and Bookmarks.

See the following topics to display, hide, or move the **Explorer** pane and its tabs:

- Display the Explorer pane
- Move the Explorer pane
- Auto-hide feature
- Show or hide Explorer pane tabs

See also Place a product using the Explorer

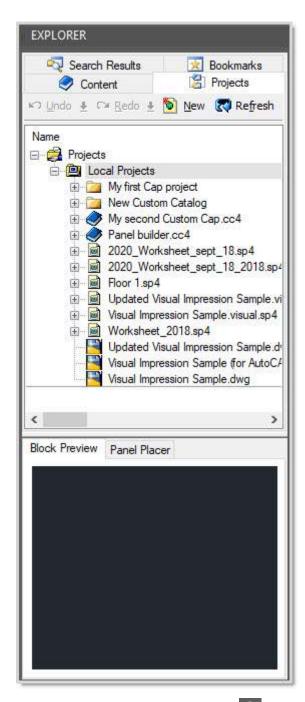
See the topics below in the **2020 Worksheet** help for details on using each tab:

- Content: displays manufacturer catalogs
- Projects: navigates to all project folders containing worksheet files and 2020 Cap Complete drawings
- Search Results: allows you to search for products and displays products found after a search.
- Bookmarks: shows the bookmarks saved on your system

# Display or hide the Explorer pane

When you start 2020 Cap Complete, the **Explorer** pane is automatically docked to the left of the drawing window and full height.

You can resize the width by moving your cursor over the right edge of the Explorer pane until you see your cursor turn into a two-sided arrow. Once this two-sided arrow appears, you can click and hold the left mouse button to resize the window.



To display or hide the **Explorer** bar, click on the <u>2020 Office toolbar</u>



Tip: You may also use the 2020 Office ribbon to access the application functions.

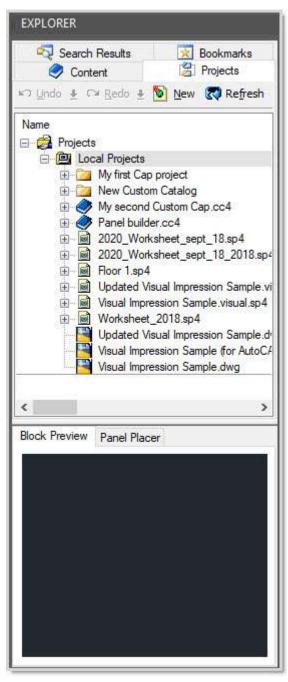
Note: If you do not want the **Explorer** bar displayed automatically when you start 2020 Cap Complete, access the **Preferences** dialog from the 2020 Office ribbon then clear the **Show Explorer palette on Cap start-up** checkbox in the **General** tab.

## Move the Explorer pane

You can move and configure the **Explorer** pane according to your preferences.

**Explorer** is normally docked at left of the screen, but you can undock it and drag it elsewhere for convenience.

- 1. Click and drag on the title bar at the top.
- Drag the Explorer pane to the location you want. The window can float above the 2020 Cap Complete screen or dock to any edge. In the image below, the Explorer pane is floating above the 2020 Cap Complete drawing area.



3. To dock/undock Explorer to its previous spot, double-click the title bar.

Note: When **Explorer** is docked you can resize the window by dragging on the vertical bar between it and the 2020 Complete drawing. When **Explorer** is floating you can use the **Auto-hide** feature. **See** <u>Auto-hide</u> feature.

# Show or hide Explorer pane tabs

By default, all of the **Explorer** pane tabs are visible when you display it.

To turn the tabs on/off, refer to the **Preferences**.

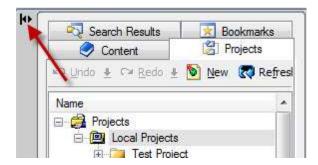
- 1. Click the **Preferences** icon on the 2020 Office ribbon.
- 2. Click the **Explorer** icon on the left pane.
- 3. Check/uncheck **Search** and **Bookmarks** under Select Which Tabs to Display.

An efficient way to work with the **Explorer** bar is to set it to <u>Auto-hide</u>.

## **Auto-hide feature**

When the **Explorer** bar is floating, you can put it on Auto-hide to see more of your 2020 Cap Complete screen.

1. Click the **Auto-hide** button.



The **Explorer** pane will collapse and only the title bar will be visible.

2. To display the Explorer pane as you work on your drawing, hover over the title bar. To cancel the Auto-hide feature, click again on the **Auto-hide** button.

## **Preferences**

Some 2020 Cap preferences are linked to 2020 Worksheet preferences. The Common, Explorer, QuickSearch, Content, Folders, Files, and User preferences are the same as in 2020 Worksheet. If you make changes to these tabs in 2020 Cap Complete, the changes will be applied to 2020 Worksheet as well.

#### See:

- **General preferences**
- **Advanced preferences**
- **Automation preferences**

For the other tabs, see the following topics in the **2020 Worksheet** help:

- Common preferences
- **Explorer preferences**
- QuickSearch preferences
- Content preferences
- Folders and files preferences
- User preferences

# **General preferences**

1. From the 2020 Office menu select Preferences.



By default, **Preferences** opens to the **General** tab.

2. Change any of the following and then click **Apply**.

Preference	Description		
Automatically Load Layer Profile	You can set 2020 Cap Complete to load a Layer  Profile group upon launch. Click to search for the layer profile (*.prf) document.		
Miscellaneous	Use "My Projects" to organize large project trees.		
Tooltips	If Show tooltips for Cap Parts and Cap Standards is checked, you will see a tooltip indicating the Part Number, Mfg and Cat whenever your mouse pointer hovers over the Cap part. If the mouse pointer is over a Standard you will see the Standard name and description.		
Panel Placer	If the setting Switch between Panel Placer is checked, when you insert a panel that belongs to a panel line supported by Panel Placer, the Block Preview will switch to the Panel Placer tab.		



Fip: You may also use the 2020 Office ribbon to access the application functions.

# **Advanced preferences**

Use the **Advanced Preferences** to control how products are previewed and inserted into a drawing from the Explorer pane.

- ${\bf 1.} \quad \hbox{From the {\bf 2020~Office} menu select {\bf Preferences}.}$ 
  - Or
  - Click the **Preferences** icon on the <u>2020 Office ribbon</u>.
- 2. Click **Advanced** on the left.
- 3. Change any of the following, then click **Apply**.

Preference	Description		
Insert	This controls how products appear in the Preview Pane and how they are inserted into the drawing. You may choose to preview products in 3D or Plan View.		
Units	Check your preference of measurement units.		
Prompt	Check <b>None</b> , or check the prompts you want to appear when you drag and drop parts from Explorer into the drawing. For example, you may have 2020 Cap. Complete automatically prompt you to change the <b>Tag</b> of the item you are inserting into your drawing.		
Block Preview	<b>Display Block Preview</b> : Toggle the Explorer preview feature ON or OFF. If ON, Explorer displays a Preview of the part you have selected, in Plan View or 3D.		
	<b>Show Insertion Point</b> : Toggles the Insertion Point feature ON or OFF. If ON, the preview window shows the Insertion Point as a yellow X (on lower left in drawings above).		
	2D Optimized (fastest), Wireframe, Hidden Line (slowest), Flat Shaded, Flat Shaded with Wireframe - these options are functional only if you have checked 3D View. They control appearance of the 3D preview in Explorer.		
Restore last location in the content when using Insert Symbol	Checked by default. Check this so that the <u>Insert Symbol</u> dialog box will remember the last selection made so you will not have to always start selecting from the manufacturer level.		
Add non-Plan Item List table automatically to the drawing	When at least one part exists in the Non-Plan Item list, display the NPIL table on the drawing.		

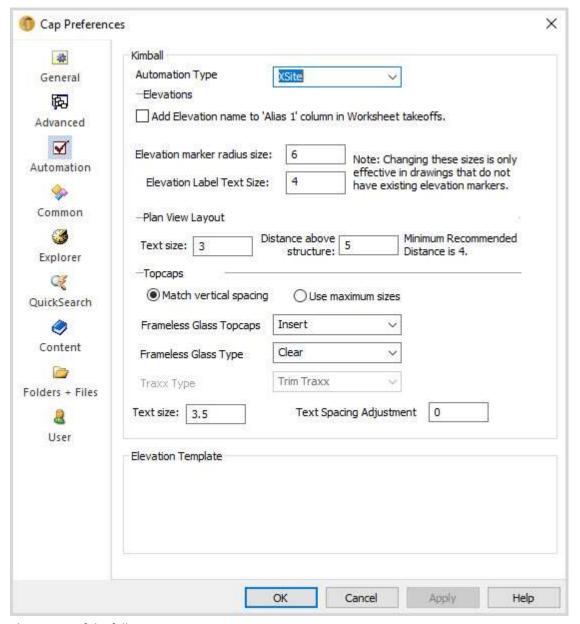
## **Automation Preferences**

You can set preferences to adjust the behavior of Xsite tools.

1. From the **2020 Office** menu select **Preferences**. Or

Click the **Preferences** icon on the <u>2020 Office ribbon</u>.

#### 2. Click Automation.



#### 3. Change any of the following settings:

**Add Elevation name in 'Alias 1' column**, when checked, will place the Elevation name in the Alias 1 column for every Xsite Part associated with the Elevation. This will allow identical parts to be listed separately for each Elevation they are associated with.

Note: When generating an order list for Xsite this should be unchecked to allow consolidation of like part numbers.

The **Elevation marker** radius size will control the size of the link arrow symbol used in new drawings. This should only be changed before any elevations have been created in a drawing file, otherwise the markers will be placed in incorrect locations and the size will not change.

Note: If you need to change the size of the arrow after creating an elevation, use the scale command to change the size of an elevation marker in an existing drawing.

**Plan View Layout -** enter the plan view layout's text size and distance above structure. See <u>Plan view structure</u>.

The **Topcap** controls can be used to select the desired default size when elevations are created. This default can be changed after the elevation is created — see <u>Modify an elevation</u>.

4. Click **OK**.

# Place products in a drawing

In this section, you will learn how to place products in a drawing using 2020 Cap Complete.

#### See:

Place a product using the Explorer

Place a product using Insert Symbol

Place non-graphic items

Place panels using the Panel Placer

Place products from an archived catalog

**Insert by Part Number** 

How to place items properly

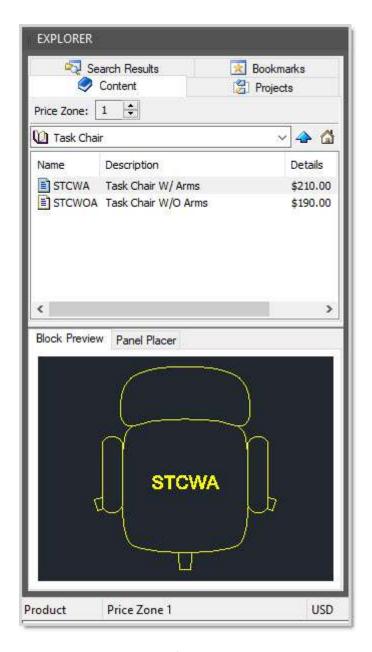
# Place a product using the Explorer

1. If the Explorer pane is not displayed, click on the 2020 Office toolbar.



Tip: You may also use the 2020 Office ribbon to access the application functions.

- 2. On the Content tab, click the manufacturer you want. Keep selecting until you drill down to the product.
- 3. Hover your mouse over a single product and you will see its preview (if available) in the **Block Preview** pane.



Notice the X on one corner of the product — this is the Insertion Point around which the product will pivot when you place it in the drawing.

Note: If you cannot see the X on the corner(s) of the product, verify your 2020 Cap **Preferences** > **Advanced** settings. Uncheck Show Insertion Point, check it back on and then click OK. If the X still does not appear when placing an item, the setting for nodes may not be set properly. Type **DDPTYPE** and in the following window, click the **X** choice and click **OK**.

If there is no symbol available for the product, you can still add a block graphic that will represent the part in the drawing. See Place non-graphic items.

- 4. Click on the product name (not the Preview) and drag it to position in the drawing. Notice the Insertion Point.
- 5. Click once to place the product.

- 6. Rotate the product then click again.
- 7. To place the same product without choosing another command, right-click.

Note: The right-click setting - repeat the last command must be set in User Preferences.

Note: You can also use the **Projects**, **Search Results** or **Bookmarks** tab to place products on the drawing. **See** <u>Use QuickSearch from the Content tab</u> for a quick way of finding a part number without having to drill down to the product.

## Place a product using Insert Symbol

If you prefer to use a pop-up dialog box to insert symbols, this feature will provide you with that capability. This feature is helpful if you do not want Explorer to take up too much space on your screen.

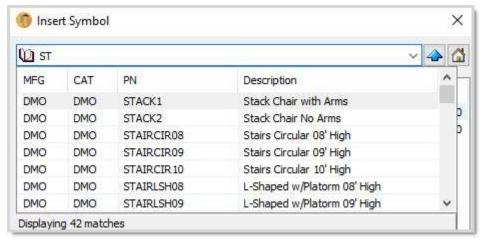
1. Click on the 2020 Office toolbar.



Tip: You may also use the 2020 Office ribbon to access the application functions.

2. In the **Insert Symbol** dialog box, click on the manufacturer. Keep clicking until you drill down to the product.

Note: If you know the beginning of the part number you can type it in and the <u>QuickSearch</u> feature will display a list of possible matches, up to a maximum of 50. This list will contract as you type in more of the part number. Select an item from the list by clicking on it.



3. Click **Show Preview** to show the block preview.

If there is no symbol available for the product, you can still add a block graphic that will represent the part in the drawing. See <u>Place non-graphic items</u>.

4. Click on the product to select it.

The dialog box will disappear and the crosshairs will appear with the symbol that you selected.

- 5. Click to place the symbol on your drawing.
- 6. Rotate the symbol then click again.

Notes:

- After placing a symbol into your drawing, right-click to immediately place the same symbol in your drawing.
- By default, the dialog box will remember the last selection made so you will not have to always start selecting from the topmost level. If you want to change this setting, do the following:

From the **2020 Office** menu select **Preferences**, or click the Preferences icon on the 2020 Office ribbon, then click the **Advanced** tab.

Clear the checkmark beside Restore the last location in the Content when using Insert Symbol.

If you disabled **QuickSearch** through <u>Preferences</u>, you will not see a list of matches as you type in the Part Number.

## Place non-graphic items

- 1. When you hover your mouse pointer over a part that does not have a symbol, a message box appears.
- 2. If you are placing the product from <u>Explorer</u>, drag and drop the part into the drawing. If you are using <u>Insert Symbol</u> or <u>Insert by Part Number</u>, click on the part.
- 3. Click to place the block graphic on your drawing. The block graphic will contain the tag if it is present in the catalog, otherwise it will have the part number. This block graphic has no special significance and will not be used to determine the actual size of the part.

Note: You can also drag and drop a non-graphic item to the Non-Plan Item List.

# Place panels using the Panel Placer

The Panel Placer allows you to easily place panels at specific angles on your drawing. For a list of manufacturers, see the <u>What's New</u> file. The Panel Placer also allows you to place panel configurations created from <u>Panel Builder</u>.

This tool restricts the angle at which panels will be placed, only displaying angles supported by the line. It also automatically leaves a gap in between panels if the line does not allow panels to connect corner to corner.

You can choose the panel that the tool will place, as well as choose a new starting point for the tool to begin placement.

1. Place a panel on the drawing using either the Explorer or the Insert Symbol command.

If the panel you selected belongs to a panel line supported by Panel Placer, the Block Preview will switch to the Panel Placer tab.

Note: If you do not want the Block Preview to automatically switch to the Panel Placer tab, you can turn the option off in 2020 Cap Complete **Preferences**, **General** tab.

The Placer displays the part number of the current panel and the next panel (panel to be placed).

By default, the panel to be placed next is the same as the current panel.

2. If you want to change the next panel, hover your mouse over the part in Explorer. The Panel Placer validates whether a valid part is selected from the Explorer and displays "Select a valid part" if the part is not valid.

Note: If the panel you want to place next is already somewhere in the drawing, click the hyperlink beside **Next** then select the panel from the drawing.

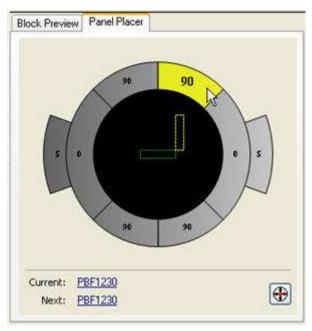
3. If you want to change the current panel, click the hyperlink beside **Current**. Select the panel on the drawing.

The Panel Placer validates whether a valid part is selected in the drawing and displays "Select a valid part" if the part is not valid.

Note: Click the button if you want to center the window on the current panel in the drawing.

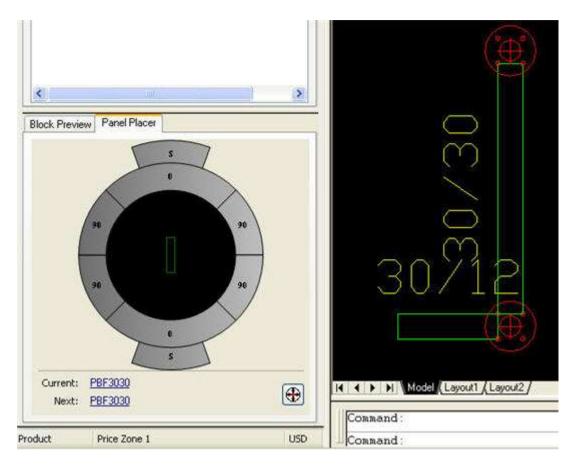
4. If you hover your mouse pointer over an angle button you will see where the next panel will be placed.

The **S** buttons add a spacer between the current and next panel.



5. Click the angle.

The buttons of the Panel Placer will rotate to align with the current panel, so subsequent panels you will place will be in reference to that angle.



## Place products from an archived catalog

The steps for adding products from an archived catalog are the same as adding from the current catalog. See Use multiple versions of the same catalog in the 2020 Worksheet help for instructions on archiving a catalog.

- 1. Add the product from the archived catalog. You can <u>drag and drop</u> from the Explorer bar or use <u>Insert</u>.
- 2. Click <u>Cap Info</u> to view the item's information. Notice that the **MFG** code appears as though the item came from the actual manufacturer, not the archived catalog's **MFG** code. This is normal. After you <u>create a worksheet</u>, display the **Alt MFG** column in the worksheet to view the **MFG** code of the archived catalog. This is how you can differentiate the archived catalog from the current one.

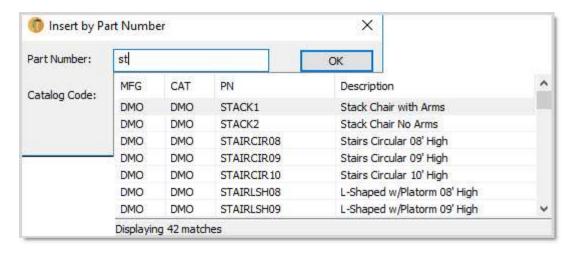
Note: For more information, see Add products from an archived catalog in the 2020 Worksheet help.

# **Insert by Part Number**

Use this command to insert a part by typing in the part number.

- 1. Click on the Cap Tools toolbar. You may also use the 2020 Office ribbon.
- 2. In the **Insert by Part Number Dialog** box, start typing the part number.

As you type in the part number, the <u>QuickSearch</u> feature will display a list of possible matches, up to a maximum of 50. This list will contract as you type more characters.



Note: If you want the program to show only matches from a specific catalog, type the Catalog Code first.

3. Select the product from the list.

The Part Number and Catalog Code are filled out automatically.

4. Click **OK**.

If there is no symbol available for the product, you can still add a block graphic that will represent the part in the drawing. See <u>Place non-graphic items</u>.

5. Place the product on the drawing.

Note: If you disabled **QuickSearch** through <u>Preferences</u>, you will not see a list of matches as you type in the Part Number.

#### See Also

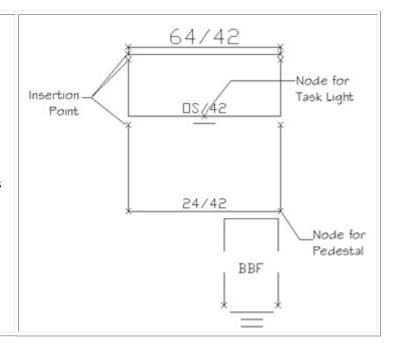
<u>Place a product using Insert Symbol</u> 2020 Search Explore

# How to place items properly

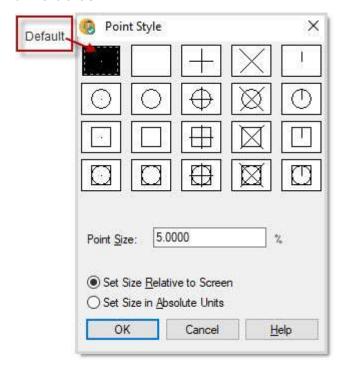
To properly place items in a drawing you need to know how to "snap" items together. Begin by selecting panels from the <u>Explorer</u> bar and "snapping" them together using their connection nodes. 2020 Cap symbols have connection nodes in a variety of convenient locations.

- Panels have nodes on each corner.
- Worksurfaces have nodes on the rear to connect to the panels.
- Worksurfaces also have nodes on the front to connect to pedestals.
- Overhead storage units have nodes in the center for task lights.

Note: Each Manufacturer provides symbols with different locations for nodes. The graphic is a general suggestion as to where nodes may be located. Each Manufacturer may vary slightly.



You can view the nodes by typing DDPTYPE at the command prompt and pressing Enter. Change the point type to an X or a circle.



You must type the  ${\tt REGEN}$  at the command prompt to have the changes take effect.

# Search for products

You can search for products in several ways:

Search and replace one part

Search and replace a standard or a panel configuration

Search and replace item data

QuickSearch

2020 Search

# Search and replace one part

Use **Block Replace** to quickly replace a part with another. The replacement part will inherit and display any visibility settings of the original symbol.

1. Click the Block Replace icon in the <u>Cap Edit toolbar</u>.



- 2. Under **Replace Type**, select **Part**.
- 3. Under **Objects**, choose to search among **Select(ed) Objects** or **All Objects**. Select Objects takes you back to the drawing temporarily.

4. Under **Filter by**, start typing the **Part Number** and the <u>QuickSearch</u> feature will display a list of possible matches, up to a maximum of 50. This list will contract as you type more characters.

Note: If you want **QuickSearch** to look only in a certain catalog, type in the **Catalog** code first before you type the **Part Number**.

OR, click the **Search Catalog** icon to browse the installed catalogs.

OR, click Select Object to select the object on the drawing.

- 5. Under **Replace With** use the options explained in **Step 4** to choose the replacement part.
- 6. Check Copy Assigned Tag Values if the part has an appended tag.
- 7. Click Replace.

Note: If you disabled **QuickSearch** through <u>Preferences</u>, you will not see a list of matches as you type in the Part Number.

## Search and replace a standard or a panel configuration

Use **Block Replace** to quickly replace a standard or a panel configuration with another. The replacement item will inherit and display any visibility settings of the original symbol.

- 1. Click the Block Replace icon in the <u>Cap Edit toolbar</u>.
- 2. Under Replace Type, select Standard/Panel Config.
- 3. Under **Objects**, choose to search among **Select(ed) Objects** or **All Objects**. Select Objects takes you back to the drawing temporarily.
- 4. Under **Filter by**, start typing the **Standard Name** and the <u>QuickSearch</u> feature will display a list of possible matches, up to a maximum of 50. This list will contract as you type more characters.
  - OR, click the **Search Part** icon to browse the saved standards or panel configurations.
  - OR, click Select Object to select the object on the drawing.
- 5. Under **Replace With** use the options explained in **Step 4** to choose the replacement standard/config.
- 6. Check Copy Alias Tag Values if the block/part as an appended tag.
- 7. Click Replace.

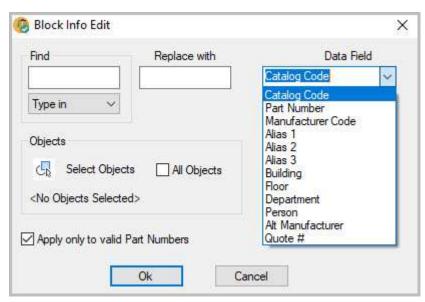
Note: If you disabled **QuickSearch** through <u>Preferences</u>, you will not see a list of matches as you type in the Standard Name.

# Search and replace item data

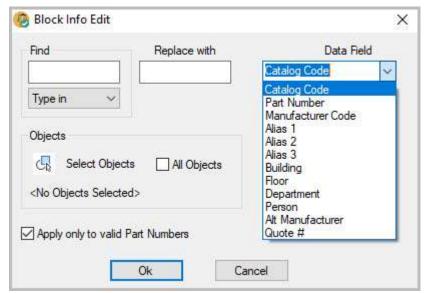
Use the **Block Info Edit** to reassign item information based on your preferences and in blocks, individually, or throughout an entire design. You can change information such as the Catalog code, Manufacturer code, and Alias tags.

Here's a business situation where Block Info Edit may be very useful: Some product lines are made up items that are a subset or a group of subsets from other product lines whose purpose is to quick ship or apply special pricing. This causes extra work for designers in completing the space plan in one product line and then place the order from another product line. Associated Worksheets do not allow users to change the Catalog or Manufacturer code within the Worksheet, so Block Info Edit allows swapping of any selected objects up to en entire design.

1. Click on the <u>Cap Edit toolbar</u>.



2. Under **Find**, click the arrow down and select:



**Type in** to type in the text or code based on the Data Field you select.

**All items** to replace all items with the replacement information based on the Data field selected. **Empty field** to replace all empty fields with the replacement information based on the Data field selected.

- 3. Under **Replace with**, type in the text or code based on the Data Field you select.
- 4. Under **Data field**, select the item data to be replaced.
- 5. Under Objects, click **Select Objects** and make your selection on the drawing or click **All Objects**.

- 6. Check **Apply only to valid Part Numbers** if you are replacing the Catalog Code or to replace the Part Number value to validate the new PN in the catalog.
- 7. Click OK.

### QuickSearch

2020 Cap Complete's QuickSearch feature displays a list of possible matches as you type in a part number. This feature is available from the <a href="Explorer pane">Explorer pane</a>'s Content tab, the <a href="Insert Symbol">Insert Symbol</a> dialog box, the <a href="Insert by Part Number">Insert by Part Number</a> dialog box and the <a href="Block Replace">Block Replace</a> dialog box.

See Use QuickSearch from the Content tab

To change QuickSearch behavior:

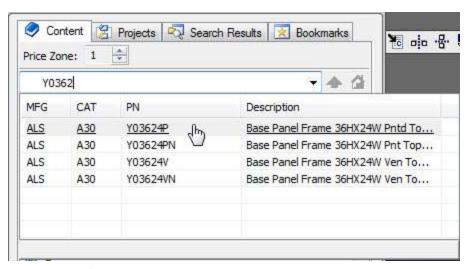
- From the 2020 Office menu, select Preferences, then click QuickSearch.
   Or
  - Click the **Preferences** icon on the <u>2020 Office ribbon</u>.
- 2. Click the **QuickSearch** icon on the left pane.

For more information see QuickSearch preferences in the 2020 Worksheet help.

### Use QuickSearch from the Content tab

1. In the Explorer pane's Content tab, begin typing in a part number in the QuickSearch field.

As you type in the part number, the program will display a list of possible matches, up to a maximum of 50. This list will contract as you type more characters.



2. Select an item from the list by **double-clicking** on it.

Note: By default, QuickSearch displays a maximum of 50 matching parts. This number can be changed in the **Preferences** dialog. See QuickSearch preferences in the 2020 Worksheet help for details.

### 2020 Search

**2020 Search** is a tool to search for products in: manufacturer's catalogs, <u>custom catalogs</u>, and <u>2020 worksheets</u>.

This tool is useful when searching multiple catalogs for products with a common element (panels, for example). **2020 Search** displays the search results in the <u>Explorer pane</u>'s **Search** tab.

To access 2020 Search, from the 2020 Office menu select 2020 Search.

See the following topics in the **2020 Worksheet** help for the two types of criteria you can also use to search:

- Search by part number
- Search by part description

# Update against a catalog

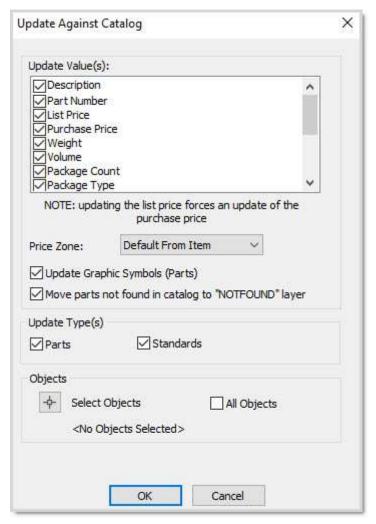
Updating against a catalog applies information from the manufacturer catalog to your drawing. Catalog information includes data such as part numbers, part descriptions, list prices, weights and volumes. **Update Against Catalog** will also allow you to update against different price zones.

1. Click on the 2020 Office toolbar.



Tip: You may also use the 2020 Office ribbon to access the application functions.

2. Under **Update Value(s)**, select the data to update. By default, all fields are checked.



- 3. Select the Prize Zone.
- 4. Check if you want to **Update graphic symbols**.
- 5. Check if you want to Move parts not found in catalog to the "NOTFOUND" layer.
- 6. Under **Update Type(s)**, check whether you want to update **Parts** and/or **Standards**.

7. Check **All Objects** to update all objects on the drawing.

Or, click **Select Objects** to choose objects on the drawing. Press Enter to confirm your selection.

8. Click **OK**.

See also Update against a visual woksheet

# **Update**

# Update with associated worksheet

If you created an associated worksheet for the drawing, you can:

- update the drawing if you made changes to the worksheet
- update the worksheet if you made changes to the drawing
- Click on the <u>2020 Office toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select whether you want to update the associated worksheet based on the current drawing, or update the current drawing based on the associated worksheet. 2020 Cap Complete determines which file is newer and automatically selects the appropriate action.



- 3. If you selected **Update Drawing** and you want to open the associated worksheet after updating it, check **Open the associated worksheet when finished**.
- 4. Click Start
- 5. If the associated worksheet is open with unsaved changes, you will see a warning message before the command proceeds with an update worksheet or update drawing. Read the warning carefully before clicking **Yes** or **No**.
- 6. If there were items added to the worksheet before you updated the drawing, you will see a message asking you if you want to add a non-plan item list table to the drawing. Click **Yes** if you want to place the table. Display the non-plan item list in order to send non-plan items to the drawing.

If items were deleted in the worksheet before you updated the drawing, these items will also be removed from the drawing.

Note: Standards created in Worksheet are considered as non-planned. When you update the drawing against the associated worksheet, the Standard will be listed in the Non-plan item list.

If you <u>created the associated worksheet</u> based on a <u>take-off window</u> in the drawing, this region will be taken into account during the update. For example, if you added a part to the drawing that is not within the take-off window, then updated the worksheet, that part will not be added to the worksheet.

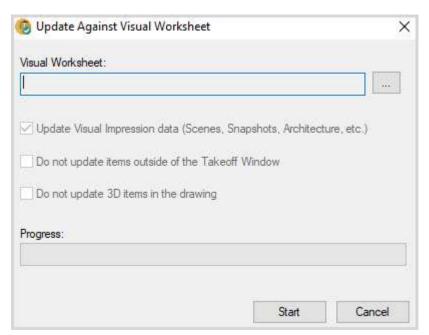
## Update against a visual worksheet

If you <u>created a visual worksheet</u> for the drawing, you can update the drawing with any finish changes made in 2020 Worksheet or <u>2020 Visual Impression</u>. Those changes will then appear in subsequent visualizations. **Update against Visual Worksheet** does not transfer any product additions, deletions, or changes made in the Worksheet. It allows users to use Worksheet with 2020 Visual Impression to make changes without impacting the integrity of the original drawing.

All worksheets "know" what drawings they originated from. Worksheets created through a "Save As" of the original worksheet retain the drawing relationship, allowing you to update a drawing from other versions of the original worksheet. This is helpful when different scenarios of options are presented to the customer for feedback. In creating versions of the original worksheet and specifying each scenarios with different finishes, any of the versions can be used to update the drawing.

- 1. Click Update Against Visual Worksheet on the 2020 Office toolbar.

  You may also use the 2020 Office ribbon or 2020 Office menu.
- 2. Under Visual Worksheet, select the worksheet you want to update against.



- 3. Choose whether you want to update:
  - scenes, snapshots, or other from the worksheet to the current drawing.

- 2020 Office applications
  - items not included in the current Takeoff.
  - 3D items in the current drawing.
  - 4. Click Start.

#### See also:

- Update against associated worksheet
- 2020 Visual Impression for 3D specification

## Update with associated worksheet

If you <u>created an associated worksheet</u> for the drawing, you can:

- update the drawing if you made changes to the worksheet
- update the worksheet if you made changes to the drawing
- on the <u>2020 Office toolbar</u>. You may also use the 2020 Office ribbon.
- 2. Select whether you want to update the associated worksheet based on the current drawing, or update the current drawing based on the associated worksheet. 2020 Cap Complete determines which file is newer and automatically selects the appropriate action.



3. If you selected **Update Drawing** and you want to open the associated worksheet after updating it, check Open the associated worksheet when finished.

- 4. Click Start.
- 5. If the associated worksheet is open with unsaved changes, you will see a warning message before the command proceeds with an update worksheet or update drawing. Read the warning carefully before clicking **Yes** or **No**.
- 6. If there were items added to the worksheet before you updated the drawing, you will see a message asking you if you want to add a non-plan item list table to the drawing. Click **Yes** if you want to place the table. Display the non-plan item list in order to send non-plan items to the drawing.

If items were deleted in the worksheet before you updated the drawing, these items will also be removed from the drawing.

Note: Standards created in Worksheet are considered as non-planned. When you update the drawing against the associated worksheet, the Standard will be listed in the Non-plan item list.

If you <u>created the associated worksheet</u> based on a <u>take-off window</u> in the drawing, this region will be taken into account during the update. For example, if you added a part to the drawing that is not within the take-off window, then updated the worksheet, that part will not be added to the worksheet.

# Layers

2020 Cap Complete provides the following tools to manage layers:

**Layer Profiles** 

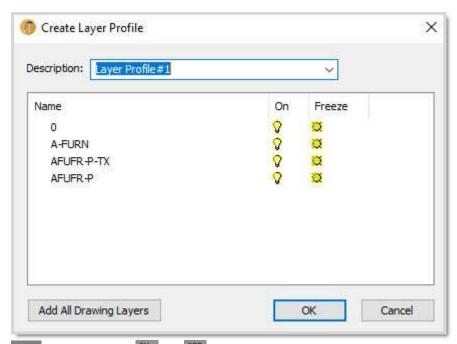
Layer On

**Layer Off** 

# **Layer Profiles**

The Layer Profile Manager helps you manage layers by allowing you to save settings in layer profiles. With the help of a layer profile you can easily create installation plans, presentation plans, and in-house documents with consistency.

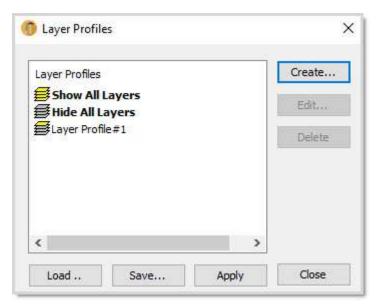
- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. In the Layer Profiles dialog, click Create.
- 3. In the **Create Layer Profile** dialog, give the layer profile a **Description**, and click the light bulb under **On** to show or hide layers.



Note: You can use the and buttons on the <u>Cap Tools toolbar</u> to turn layers quickly on and off before selecting **Layer Profiles**. Then, when you open **Layer Profiles** the settings you just changed will come up when you create a profile.

4. Click OK.

The new profile you just created is now under Layer Profiles.



- 5. Continue creating the layer profiles you would like to use in your drawing.
- 6. In order for you to see your layer settings take effect within your drawing, highlight the **Layer Profile** and click **Apply**. You will see the layers automatically turn on and off based on the layer profiles you established.
- 7. You must save your layer profile to reuse it the next time you open the drawing. Click the **Save** button. This will open up a window where you can save your layer profile.

After saving your layer profile you can also use it on other drawings. All you have to do is open **Layer Profiles**, highlight the layer profile you would like to apply to your drawing and click **Apply**.

Note: You can set 2020 Cap Complete to load a layer profile upon launch. From the **Preferences** dialog, on the **General** tab under **Automatically Load Layer Profile** browse to the layer profile you want to load. This could be a great way to create consistency within an office for establishing drawings. Everyone within an office could use a common layer profile.

# Layer On

Layer On turns previously <u>turned off</u> layers back on.

Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.

# **Layer Off**

Use this command to turn layers off by simply selecting symbols on the drawing.

- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select a symbol on the drawing. The layer is turned off.

You can keep selecting layers. Press Esc or Enter when done.

To turn all layers back on, click ...

## Combine commands

## **Combine 2020 Cap Complete commands**

The following 2020 Cap Complete commands combine commands in a single step:

**Copy Rotate** 

**Move Rotate** 

**Offset Copy** 

Offset Move

## **Copy Rotate**

**Copy Rotate** combines the Copy and Rotate commands in a single step.

Before doing **Copy Rotate**, make sure that **Osnap** mode is on, with the **Node** mode checked in **Object Snap Settings**. It is also recommended to turn on **Ortho** mode.

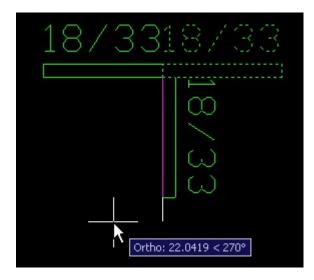
- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.
- 3. Press Enter to confirm your selection.
- 4. Specify the base point.



5. Specify the second point. This will be the point where the copied object will be inserted and rotated.



6. When the copied object appears, rotate it.



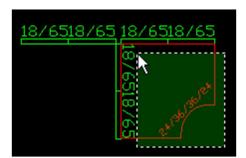
The object is now copied and rotated.

### **Move Rotate**

Move Rotate combines the Move and Rotate commands in a single step.

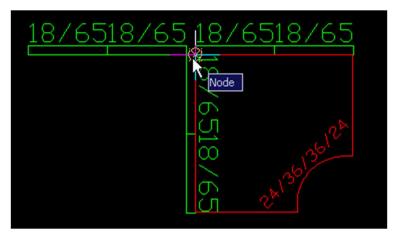
Before doing **Move Rotate**, make sure that **Osnap** mode is on, with the **Node** mode checked in **Object Snap Settings**. It is also recommended to turn on **Ortho** mode.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.

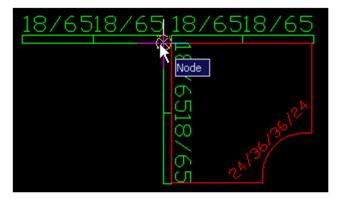


3. Press Enter to confirm your selection.

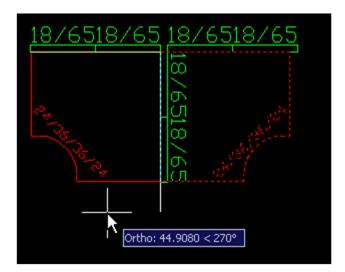
4. Specify the base point.



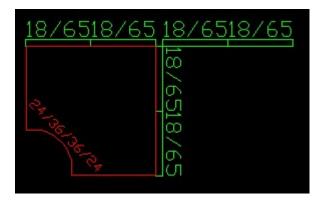
5. Specify the second point. This will the point where the object will be moved and rotated.



6. When the object appears, rotate it.



The object is now moved and rotated.

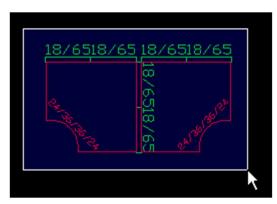


# **Offset Copy**

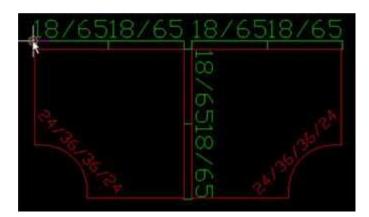
Offset Copy combines the Copy and Offset commands in a single step.

Before doing **Offset Copy**, make sure that **Osnap** mode is on, with the **Node** mode checked in **Object Snap Settings**. It is also recommended to turn on **Ortho** mode.

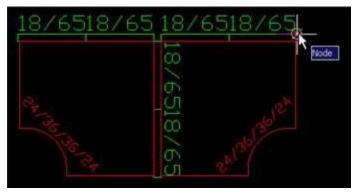
- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.



- 3. Press Enter to confirm your selection.
- 4. Specify the base point.



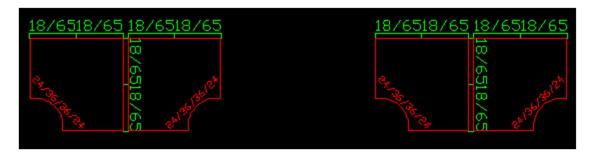
5. Specify the point to offset from. Note that this must be in line with the first point.



6. On the command line, enter the offset distance. Specify the distance in inches.

```
Select objects: Specify opposite corner: 8 found
Select objects:
Select base point.
Select point to OFFSET from:
Enter OFFSET (@X.Y): 960,0
```

The object is now copied and offset by the distance you specified.



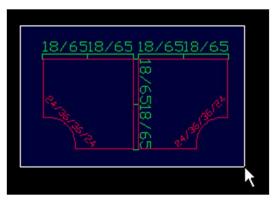
### **Offset Move**

**Offset Move** combines the Move and Offset commands in a single step.

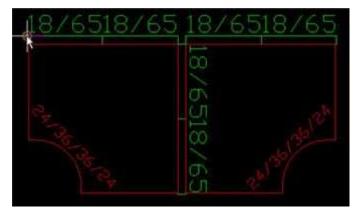
Before doing **Offset Move**, make sure that **Osnap** mode is on, with the **Node** mode checked in **Object Snap Settings**. It is also recommended to turn on **Ortho** mode.

1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.

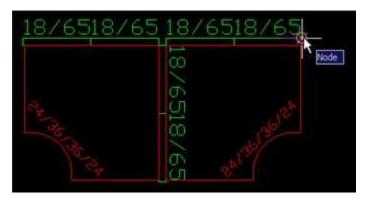
2. Select the object(s) on the drawing.



- 3. Press **Enter** to confirm your selection.
- 4. Specify the base point.



5. Specify the point to offset from. Note that this must be in line with the first point.



6. On the command line, enter the offset distance. Specify the distance in inches.

The object is now moved and offset by the distance you specified.

# Highlight parts in the drawing

2020 Cap Complete provides two commands to help you locate and count parts in a drawing:

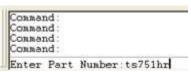
**Highlight by Part Number** 

Highlight by Select

# **Highlight by Part Number**

**Highlight by Part Number** locates and highlights all occurrences of a particular part number and reports the number of symbols found in the drawing.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Enter the part number on the command line.



The parts are highlighted on the drawing and the number of symbols found are displayed on the command line.

Note: Enter Regen on the command line to deselect.

# **Highlight by Select**

Highlight by Select marks all occurrences of a symbol when you select one of the symbols in the drawings.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select a symbol on the drawing.
- 3. Press Enter to confirm your selection.

The parts are highlighted on the drawing and the number of symbols found are displayed on the command line.

Note: Enter Regen on the command line to deselect.

# **Tags**

A **Tag** is a label on the drawing that is used by clients or installers to determine what is on the plan or what is to be installed.

2020 Cap Complete provides several useful tools for tagging Cap symbols:

Append Tag

**New Tag** 

**Change Tag Size** 

**Move Tag** 

**Rotate Tag** 

Show Part Number/Tag

## **Append Tag**

**Append Tag** adds text to the end of the selected object's tag. For example, you may want a certain object to be tagged differently from others in order to draw attention to it in the drawing.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.
- 3. Press Enter to confirm your selection.
- 4. Type in the text you want added to the tag.
- 5. Click **OK**.

The text is appended to the tag.

# **New Tag**

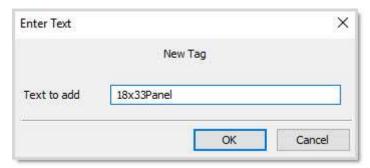
Use the **New Tag** command to change an object's tag. For instance, you may want to print out a drawing for a client or an installer, so you will use **New Tag** to give more meaningful labels to objects on the drawing.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.



3. Press **Enter** to confirm your selection.

4. Type in the new tag.



5. Click OK.



# **Change Tag Size**

In order to make tags more visible, use **Change Tag Size** to modify the text height.

- 1. Click on the Cap Edit toolbar. You may also use the 2020 Office ribbon.
- 2. Enter the text height of the tag on the command line.



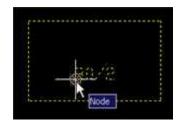
- 3. Select the object(s) on the drawing.
- 4. Press Enter to confirm your selection.

The text height of the selected object's tag is resized.

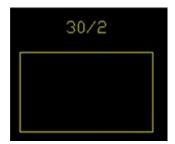
# **Move Tag**

Use **Move Tag** to change a tag's position. You can use this command instead of clicking on the tag's grips.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.
- 3. Press Enter to confirm your selection.
- 4. Select the base point of the tag.



5. Move the tag.



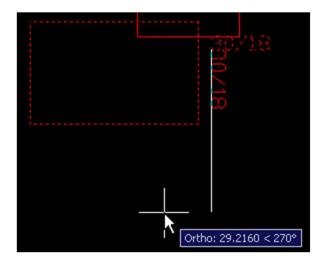
## **Rotate Tag**

Use Rotate Tag to rotate a selected object's tag.

- 1. Click on the Cap Edit toolbar. You may also use the 2020 Office ribbon.
- 2. Select the object(s) on the drawing.
- 3. Press Enter to confirm your selection.
- 4. Select the base point of the tag.



5. Rotate the tag.



# **Show Part Number/Tag**

**Show Part Number/Tag** switches the attribute display between **Tag** and **Part Number**.

- 1. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.
- 3. Press **Enter** to confirm your selection.

To switch back to Tag display, redo the **Show Part Number/Tag** command.

## Mirror items

To quickly mirror and move the last item placed on the drawing, use the 2020 Cap Complete Mirror commands:

Mirror Last Block x

Mirror Last Block y

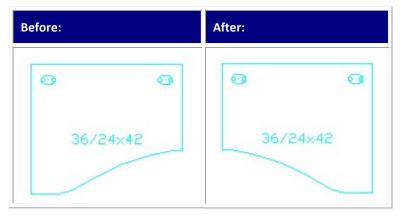
### Mirror Last Block x

Mirror Last Block x mirrors and moves the last part placed along a vertical line (||).

- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Specify the point of displacement.



Turn ORTHO on to limit cursor movement to the horizontal or vertical axis.

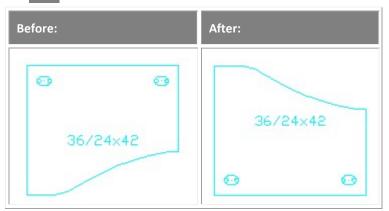


# Mirror Last Block y

Mirror Last Block y mirrors then moves the last part placed along a horizontal line (=).

- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Specify the point of displacement.

Note: Turn ORTHO on to limit cursor movement to the horizontal or vertical axis.



# Plan and 3D views

This section shows you how to use 2020 Cap Complete to view your drawings in 3D.

See:

Convert Plan to 3D

Convert 3D to Plan

Copy Plan to 3D

Change 3D Height

# **Convert Plan to 3D**

This command converts the symbols from plan view to 3D view.

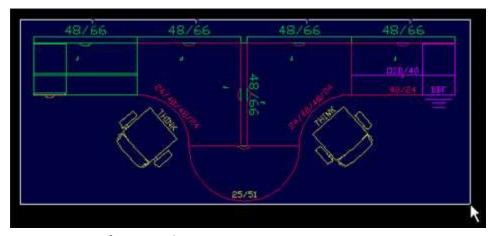
Before following the steps below, build the workstation using Plan View symbols.

1. Click on the <u>Cap Tools toolbar</u>.



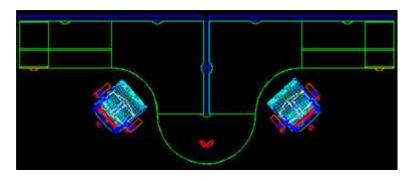
Tip: You may also use the 2020 Office ribbon to access the application functions.

2. Select the objects on the drawing.

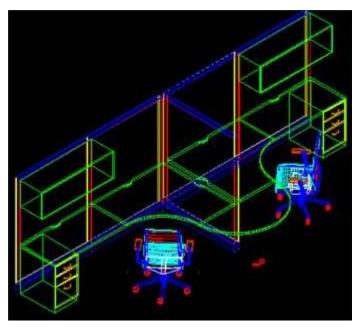


3. Press Enter to confirm your selection.

The objects you selected are converted to 3D, top view. Notice that the tags have disappeared.



Note: To change the view, from the **View** menu select **3D Views.** Select the view — for example, **SW Isometric**.



- 4. To change to hidden lines, type Hide on the command line.
  - Note: You cannot zoom in or out when Hidden lines is on.
- 5. Type Regen.

See Also

#### Convert 3D to Plan

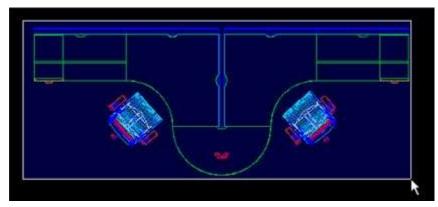
## **Convert 3D to Plan**

This command converts the symbols from 3D view to Plan view.

For information about converting plan to 3D, see Convert Plan to 3D.

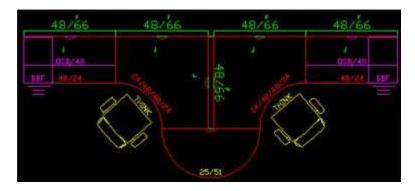
- 1. Type Plan and press Enter twice to return to top view.
- 2. Click on the Cap Tools toolbar. You may also use the 2020 Office ribbon.

#### 3. Select the objects on the drawing.



4. Press Enter to confirm your selection.

The objects you selected are converted to Plan view. Notice that the tags have reappeared.



See Also

### Convert Plan to 3D

# **Change 3D Height**

There are often times when an item needs to be placed at a different 'Z' height. For example, if you want to stack two overhead cabinets, place one at the default height, then place the second overhead and use change 3D height to move it up above the first.

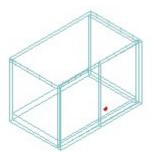
Other ways you could use this command would be to put work surfaces or connectors at a special height.

#### To place an overhead cabinet above another:

- 1. Put two overhead cabinets on the drawing so they overlap.
- 2. Convert from plan to 3D.

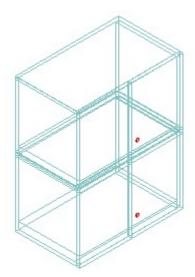
The plan is converted to 3D, top view.

3. From the **View** menu select **3D Views**, **SW Isometric**.



- 4. Click on the <u>Cap Edit toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 5. Select one of the overhead cabinets then press Enter to confirm your selection.
- 6. In the **Edit Default Height** dialog, enter the new default height in inches:
- 7. Click **OK**.

The overhead cabinet you selected is now placed at the height you specified:



### For other applications of this command, see:

Cap Frame Validation Tool

Corrections to make when converting to 3D

# User-defined tag values

Refer to the following topics to assign and manage user-defined tag values:

- Alias values
- Building, Floor, Department, and Person values
- Assign user-defined tag values
- Change the visibility of user-defined tag values
- Assign sequential user-defined tag values

### **Alias values**

Alias values are additional information that you can assign to a Cap part. For example, you may want to assign miscellaneous information to the **Alias 1** value of a Cap part.

#### See the following topics:

- Assign user-defined values
- Change the visibility of user-defined values
- Assign sequential user-defined tag values

# **Building, Floor, Department, and Person values**

Building, Floor, Department, and Person values are provided to assist in the management of large projects. These intuitive fields allow for the classification of items within a drawing, and they transfer with items' other information into 2020 Worksheet during a takeoff.

#### See the following topics:

- Assign user-defined values
- Change the visibility of user-defined values
- Assign sequential user-defined tag values

# Assign user-defined tag values

Use this command to assign values to **specific tags**. This information can be viewed <u>in Cap Info</u> and carries over to 2020 Worksheet.

Assign X Values Visibility Alias 1: On Ooff No Change Alias 1: Alias 2: On Ooff No Change Alias 2: Alias 3: Ooff No Change Alias 3: On Building: Ooff Building: On No Change Floor: On Ooff No Change Floor: Department: Ooff No Change Department: On Ooff No Change Person: Person: On -Copy Alias values from an item in the drawing Attributes Display Properties Objects Displayed attributes will be stacked on top of the Select Objects All Objects CAPTG attribute and copy its display properties. <no objects selected> Custom Text Size:

1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.

2. Check any of the user-defined tag fields and type in the information you would like to assign.

Custom Layer:

3. If you want the value to be visible in the drawing, under **Visibility**, click **On** beside the appropriate **user-defined tag column**.

Assign

Cancel

Note: If the Visibility status is set to "On", the user-defined tag value will be made into a displayed attribute within 2020 Cap Complete.

4. Under **Attributes Display Properties**, enter the custom text size and layer in which the user-defined tag values will be displayed.

Note: You will not be able to create a layer within this dialog. The layer that you wish to place the value on must already exist within the drawing to appear in the drop-down list.

If no selections are made under **Attributes Display Properties**, the chosen user-defined tag values will assume the same characteristics as the item's normal tag (layer, color, height, font, etc.).

5. Click to determine a specific area within a drawing where you would like assigned tags to apply.

This information will be visible through the **Cap Info** dialog box while in a drawing.

When you do a worksheet take off, by turning on the equivalent column within the worksheet, you will see the information you assigned carry over to 2020 Worksheet.

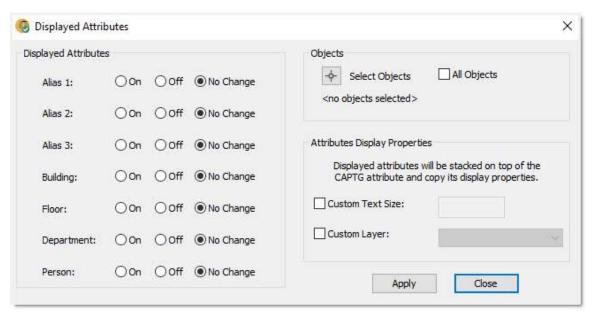
Note: You can assign a user-defined tag to a Cap Standard. Assign in 2020 Cap Complete is used for individual parts within the standard.

To change the visibility of Alias values that are already assigned, see <a href="Change the visibility of user-defined">Change the visibility of user-defined</a> tag values.

# Change the visibility of user-defined tag values

To change the visibility of existing user-defined tag values, use the **Set Displayed Tags** command.

- 1. Click on the Cap Tools toolbar. You may also use the 2020 Office ribbon.
- 2. Turn **On** each **user-defined tag** to display the value or **Off** to hide it.



- 3. Under **Attributes Display Properties**, check **Custom Text Size** and enter the text size to specify a text height for the Alias value.
- 4. Check **Custom Layer** then select the layer to place the **user-defined tag** on a specific layer within the drawing.

Note: You will not be able to create a layer within this dialog. The layer that you wish to place the Alias value on must already exist within the drawing to appear in the dropdown list.

If no selections are made under Attributes Display Properties, the chosen user-defined tag values will assume the same characteristics as the item's normal tag (layer, color, height, font, etc.).

- 5. Click and you will be returned to the drawing and prompted to select items in the drawing.
- 6. Select the items on the drawing then press Enter.

Notice that the visibility of the user-defined tag values of items you selected has been changed. The **Displayed Attributes** dialog will reappear for any further changes in **user-defined tag** visibility you wish to make.

7. Click Close.

# Assign sequential user-defined tag values

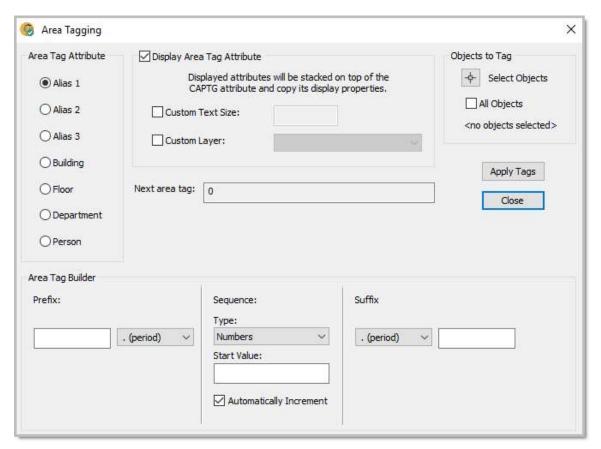
The Area Tag command allows you to automatically or manually put sequential letters or numbers to the user-defined tag values of items in the drawing. You can also add a prefix and suffix to the user-defined tag value.

- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Under Area Tag Attribute, select the user-defined tag value you want to create or modify.
- 3. Check Display Area Tag Attribute to make the user-defined tag value visible.
- 4. If necessary, check **Custom Text Size** and enter the text size to specify a custom text height for the **user-defined tag** value.
- 5. If necessary, check **Custom Layer**, then select the layer to place the **user-defined tag** on a specific layer within the drawing.

Note: You will not be able to create a layer within this dialog. The layer that you wish to place the **user-defined tag** value on must already exist within the drawing to appear in the drop-down list.

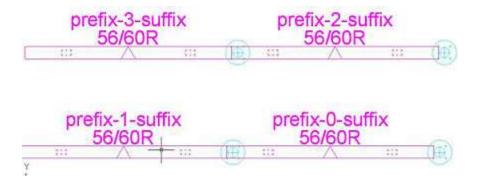
If no selections are made for **Custom Text Size** and **Custom Layer**, the chosen **user-defined tag** values will assume the same characteristics as the item's normal tag (layer, color, height, font, etc.).

- 6. Under **Area Tag Builder**, type the prefix, along with its separator (a period, comma, dash or underscore), the type of **Sequence** you wish to use (uppercase letter, lowercase letters, numbers or none), and the **Suffix**, along with its separator (a period, comma, dash or underscore).
- 7. In the center of the dialog, the **Next Area Tag** field displays what the next assigned value will be according to what you selected under **Area Tag Builder**.



- 8. After all of the choices have been made within this dialog, click **Select** and you will be returned to the drawing and prompted to select items in the drawing.
- 9. Select the items on the drawing, then press Enter.

The Alias values are displayed on the drawing:



The dialog will reappear for any further changes you wish to make.

10. Click the Close button to close the dialog.

Note: If you choose items one at a time, the function will sequentially number each item as it is selected. If you select multiple items by actually clicking on each item individually, the items will be assigned values from lowest to highest in the order of selection. If you select multiple items by drawing a window around multiple items, the application of the Alias values is dependent on the order of placement of items into a drawing.

# **Custom catalogs**

Use custom catalogs to store and reuse items that you create in 2020 Cap Complete and 2020 Worksheet in one file. Custom catalogs are project files that capture, manage, and reuse furniture specifications and typical workstations.

As with standard catalogs, drill down to the custom catalog. The difference is that **you** can create these catalogs and select the products to be included.

Among the benefits of custom catalogs are:

- You can share the catalog with other users by saving it on a network drive, giving people access to specials and Cap standards (typicals).
- You can add finishes to items in a Worksheet in custom catalog. When you place the symbols from the catalog they will already be optioned when you use them in your drawing.

Custom catalogs include three types of information.

- Individual product
- Groups of products or <u>Cap standards</u> (typicals)
- Specials

You can use custom catalog information from 2020 Worksheet or from 2020 Cap Complete. For more details about creating and managing custom catalogs, see the Custom catalogs section in the 2020 Worksheet help.

To add an item to a custom catalog from 2020 Cap Complete, see Add a symbol to a custom catalog.

# Add a symbol to a custom catalog

If you want to add a symbol that you use frequently to a <u>Custom Catalog</u> you can do so from the Explorer pane or from the drawing.

### Example - add a chair to a custom catalog

- 1. Place a chair in your drawing.
- 2. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 3. Select the chair.
- 4. In the Add to Custom Catalog dialog, select a Custom Catalog (ending with .cc4).

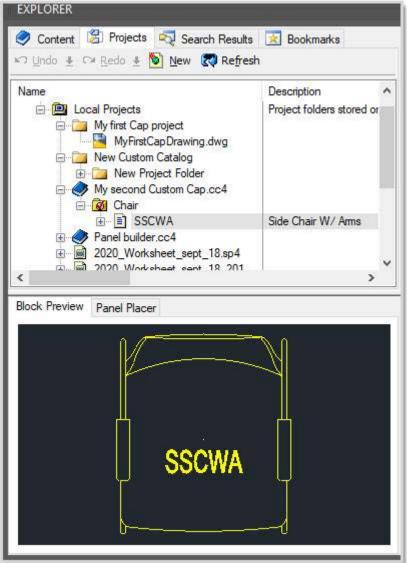
If you want to create a new Custom Catalog, right-click on **Local Projects** or a folder under **Local Projects** and select **New**, **Custom Catalog**.

5. Click Add Part.

If you selected a standard instead of a part, click **Add Standard**.

6. In the **Explorer** bar's **Projects** tab, click Refresh to see the part listed under the **Custom Catalog**.





You can add specials (2D or 3D) to the Custom Catalog as well. You are prompted to add the Cap Part to the Catalog during the creation and you can add it using the Add to Custom Catalog command.

## **Custom items**

Many times you will have custom products that are not available in a manufacturer's catalog. In order for the software to count these, you must turn them into Smart Parts.

- 1. Modify an existing symbol (Undo a Cap Part) or draw a new symbol.
- 2. Create a new Cap Part.

If you draw a new symbol, you must draw it on the correct layer. For example, you should draw a worksurface on the **A-FURN-P-WKSF** layer.

#### See:

Create a new Cap Part

Edit a Cap Part

Undo a Cap Part

### View item information

After adding finishes to an item you may need to check them or you may wish to confirm that you placed the right part in the drawing. An easy tool to use for this is **Cap Info**.

1. Click on the 2020 Office toolbar.

You may also use the 2020 Office ribbon or 2020 Office menu.

2. Select the symbol or symbols you want information on. A dialog box will give you the information about that furniture.



This is simply an information box - you cannot edit anything here.

3. You can customize the view of the Cap Info dialog box by clicking the **Customize** button. The **Customize Columns** dialog box will appear.

You can turn a column on or off by checking or clearing its check box. Click **OK** when done. For new column settings to take effect, you must close the **Cap Info** dialog box and open it again.

## **Create a new Cap Part**

Before creating a part, you must draw a new symbol or modify an existing symbol (see Undo Cap Part).

The Make New Part Wizard guides you through all the steps involved in creating a part.

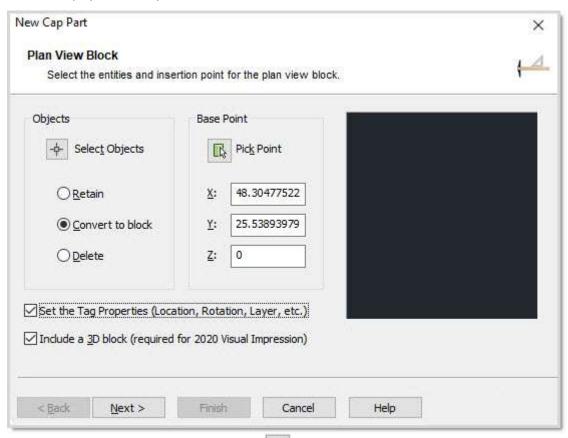
To start the wizard, click on the Cap Part toolbar and then refer to the following topics:

- Select objects and the insertion point
- Specify tag properties
- Enter part information
- Save the part in a custom catalog

You may also use the 2020 Office ribbon.

## Select objects and the insertion point

After clicking the Make Part icon in the <u>Cap Part</u> or <u>2020 Office toolbar</u>, the Plan View Block pane of the Make Part wizard is displayed. You may also use the <u>2020 Office ribbon</u>.



1. To select the objects for the part, click —. This sends you to the drawing.

- 2. Select the objects to include in the Cap Part. Make sure you use a crossing or a window to select everything including the nodes.
- 3. Press Enter to confirm your selection.

You will be taken back to the Plan View Block pane of the Make Part wizard where you will see a preview of the selected parts.

4. Click any of the following options:

**Retain**: Retains the selected objects as distinct objects in the drawing after you create the block. **Convert to block**: This is the default selection. It converts the selected objects to a Cap Part. **Delete**: Deletes the selected objects from the drawing after you create the block.

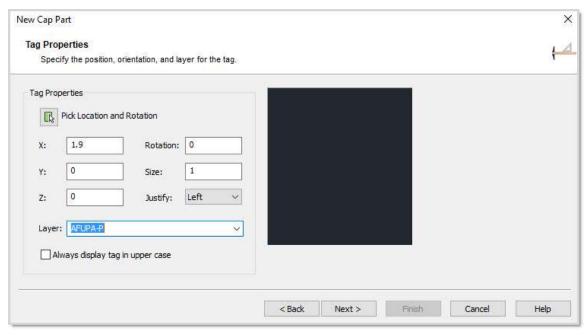
5. Select the insertion point (Base Point) for the part by clicking the **Pick Point** icon and then click the desired Insertion Point on the drawing.

You will be taken back to the Plan View Block pane and the selected coordinates will appear.

- 6. To set the tag properties, make sure to check **Set the Tag Properties**. Otherwise, the wizard will keep the current settings.
- 7. To include a 3D block for the part and be able to visualize it in 2020 Visual Impression, make sure to check **Include a 3D block**.
- 8. If you are creating a part for an existing block, this option is not available.
- 9. Click Next.
- 10. Go to Specify the tag properties or to Enter part information.

## **Specify the Tag Properties**

- 1. On the **Tag Properties** pane of the Make Part Wizard, click the **Pick Location and Rotation** icon select where you want the part's tag to appear. This sends you back to the drawing. You can also enter the **X, Y, Z...** coordinates manually.
- In the drawing, click on the desired Text Location point and press ENTER.
   Once you are back to the Tag Properties pane, the selected location coordinates will appear.



3. Modify any of the following:

**Rotation** to manually change the text angle. 0 is horizontal, 90 is vertical.

**Size** to modify the text height. Panels typically have a height of 4"; interior components have a height of 2.5".

Justify to choose a Left, Right or Center justification for the text.

Select the Layer you wish the tag to be on.

You can also check the box **Always display tag in upper case**.

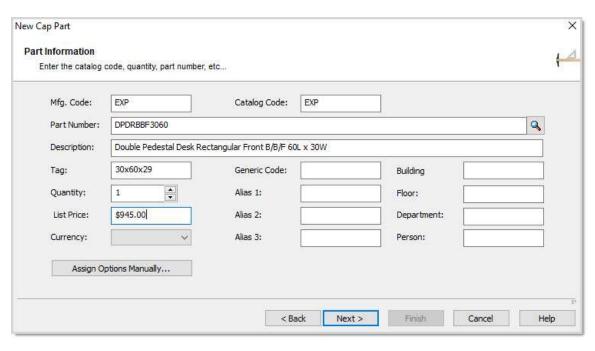
- 4. Click Next.
- 5. Select the objects for the block if the **3D Block** pane appears, plus check or uncheck **Show layers using separate colors** for the preview.

Go to Enter part information if you chose not to define a 3D block for the objects.

### **Enter part information**

1. On the **Part Information** pane of the Make Part wizard, enter the part information.

Note: If you are modifying an existing symbol, you must keep the identical **Mfg Code**, **Catalog Code** and **Part Number** if you want to keep 2D and 3D graphics.



If you know the **Catalog Code** and the **Part Number** of a similar item you can type them in and click to fill in the **Part Description** and **List Price**.

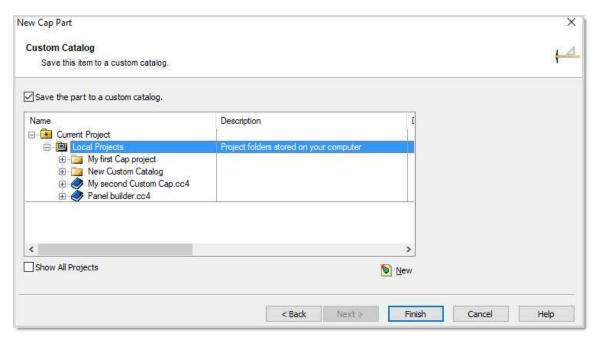


- 2. To add options (finishes) and attributes (tagging, pricing) for this part, click **Assign Options Manually** and then refer to Options and Attributes topics in the Worksheet help.
- 3. Click **Next** to continue and go to <u>Save the part in a custom catalog</u>.

## Save part in a custom catalog

For information about custom catalogs, see the Custom Catalogs section in the 2020 Worksheet help.

1. On the **Custom Catalog** pane of the Make Part Wizard, check **Save the part to a custom catalog**. If this option is unchecked, the Cap Part will be saved in this drawing only.



- 2. Select the appropriate **Custom Catalog** to store the new Cap Part. Click the New icon to create a new project or a new custom catalog.
- 3. Click **Back** to review the information or **Finish** to complete.

Now this custom Cap Part will get counted when you create a worksheet. You can do this for any custom item including plants, computers, artwork, etc.

See also: Edit a Cap Part

## **Edit a Cap Part**

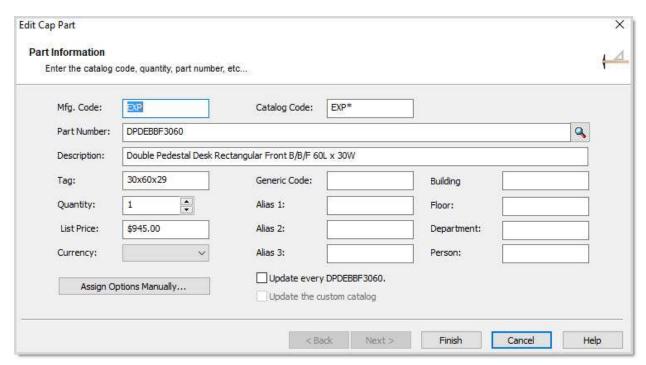
Use this command to modify the part information of a custom part.

Note: If you need to modify the symbol, the insertion point or the tag location, you will need to undo the part then create it.

- 1. Click on the Cap Part toolbar. You may also use the 2020 Office ribbon.
- 2. Select the part on the drawing.
- 3. Press Enter or right-click to confirm your selection.
- 4. On the Edit Cap Part dialog box, modify the part information.

### Notes:

- If you created the part by modifying an existing symbol, you must keep the identical **Mfg Code**, **Catalog Code** and **Part Number** if you want to keep 2D and 3D graphics.
- If you know the **Catalog Code** and the **Part Number** of a similar item you can type them in and click the **Search** button to fill in the **Part Description** and **List Price**.



5. Click Finish.

## **Undo a Cap Part**

- 1. Insert a symbol from the Explorer pane that is similar to the one you want to create.
- 2. Click on the <u>Cap Part toolbar</u>. You may also use the <u>2020 Office ribbon</u>.

When you undo a Cap Part, it will strip all attributes, but not the nodes from the object.

- 3. Select the part on the drawing.
- 4. Press Enter to confirm your selection.
- 5. Modify the symbol by using the Stretch command or erasing unwanted lines.

Now, with the symbol drawn or modified, you must make it smart. See Create a new Cap Part.

# Product specification with 2020 Options

# Specify options for one product

You can add finishes (options) to your furniture in the drawing either as you place the symbol or after you put it in the drawing. To do this you will use 2020 Options, the same specification tool used in 2020 Worksheet.

Note: Adding options to the drawing is not necessary in most instances. If you have a certain product that has different finishes than other furniture with the same part number, it will help to finish the drawing, then create a worksheet. However, adding the options to the drawing is much more time consuming than doing it in 2020 Worksheet.

### To specify options before placing the symbol:

- 1. From the Explorer pane's Content tab, drill down to the product you want to specify.
- 2. Instead of dragging it into the drawing, left-click on the individual product.

The 2020 Options dialog box opens.

### To specify options in the drawing:

- 1. Click on the 2020 Office toolbar. You may also use the 2020 Office ribbon or 2020 Office menu.
- 2. Select the object in the drawing.

The 2020 Options dialog box opens.

Note: You can also select an item, right-click on it and select **Specify** from the menu.

See the following topics in the **2020 Options** help for instructions on specifying options:

- Customize the 2020 Options dialog
- Select options
- Skip options
- Change options
- Apply default options automatically
- Preview options
- Preview structural options

Note: For a quick way to remove options from parts on the drawing, use the <u>Strip Options</u> command on the <u>Cap</u> <u>Tools toolbar</u>.

# **Strip Options**

You can remove the options from one or many parts very quickly using **Strip Options**.

- 1. Click on the <u>Cap Tools toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the object(s) on the drawing.
- 3. Press **Enter** or right-click to confirm your selection.

The options are removed from the selected Cap parts. To verify, select the part then click **Cap Info** on the 2020 Office toolbar.

You may also use the <u>2020 Office ribbon</u> or 2020 Office menu.

# Visual Impression for 3D specification

Using 2020 Visual Impression in addition to 2020 Cap Complete, 2020 Giza, and 2020 Worksheet benefits everyone in the sales cycle. It keeps the designers in control of product configuration and design while allowing those who are interfacing with the customer the ability to make required tweaks needed to close the sale. Customers are now able to see what they are getting rather than interpret it from floor plans, brochures, and product catalogs.

2020 Visual Impression simplifies both the learning curve and the time needed to create high quality presentations making visualization feasible for every project.

All users of 2020 Visual Impression can create high quality presentations using the assets built into the process of visualizing the scene. These assets are collected in one place for the user to save, copy or drag-and-drop into their favorite presentation software, such as Microsoft PowerPoint.

In addition to specifying finishes in 2020 Worksheet, 2020 Visual Impression allows the user to visually specify items and see the finishes apply to the item as they are being specified. Users can experiment with color schemes by applying finishes to products and changing them until the desired results are achieved. The resulting specifications can be saved back to the worksheet or drawing file.

Using 2020 Visual Impression, finishes can be changed and manipulated to meet the customer's preferences. Product or configuration changes can be annotated and sent back to design for required drawing revisions. This smooths the communication path between those who are creating the drawings and those presenting to the customers and making revisions for the final order.

#### See:

- Define a scene for 2020 Visual Impression
- Visualize a scene in 2020 Visual Impression
- Manage scenes

# Define a scene for 2020 Visual Impression

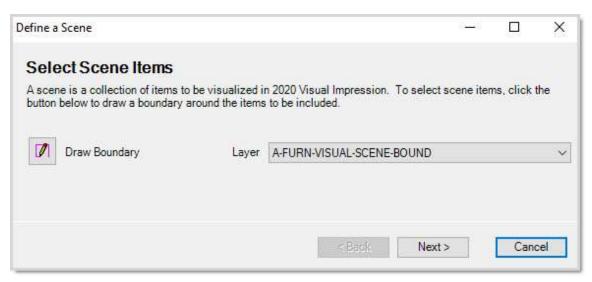
2020 Visual Impression can treat the entire drawing as a scene, but performs best when your drawing is organized into scenes around different points of interest that you want to call attention to. Performance can vary by machine and by the complexity of the items you include in your scene.

2020 Visual Impression saves your room configuration back to 2020 Cap Complete. If a scene is not defined and the room information is applied back to the entire drawing, future product additions to the drawing may appear outside of the original room dimensions. If scenes are defined in the drawing and you make additions that move outside of the room dimensions, the scene can be deleted; allowing you to redefine your scene from scratch. If you anticipate additions to your drawing, it is best to define scenes before you go onto 2020 Visual Impression. Scene components also may be resized and/or moved to allow for more furniture items that might appear outside of the saved room's dimensions.

To define a scene for 2020 Visual Impression:

1. Click the **Define Scene** icon in the <u>2020 Office toolbar</u>.

You may also use the 2020 Office ribbon.



- 2. Click the **Draw Boundary** button to go back to the design, define the boundary around the items you want to be part of the scene, then press Enter.
- Back to the Define a Scene dialog box, select a Layer for that scene and then click Next.
   Enter a Name and a Description for the scene and click Finish.
   A scene boundary tag is displayed in Floor Plan view.

#### See also:

- Visualize a scene in 2020 Visual Impression
- Manage scenes
- Update against a visual worksheet

# Visualize a scene in 2020 Visual Impression

For best 3D results in 2020 Visual Impression, you should <u>define a scene</u> first.

To visualize a scene in 2020 Visual Impression:

- 1. Click the **Visualize Scene** icon in the <u>2020 Office toolbar</u>. You may also use the <u>2020 Office ribbon</u>. Or, from the **2020 Office** menu, select **2020 Visual Impression**, then **Visualize Scenes**.
- 2. When 2020 Visual Impression opens and displays the Select Scene pane, choose a scene. Click BACK to return to your drawing in 2020 Cap Complete.



3. Specify your products in 3D using all the presentativisuaon tools.

Refer to the 2020 Visual Impression Quick Tour Help file to learn about 3D specification.

To learn about training, contact Office.Support@2020spaces.com.

### See also:

- Define a scene for 2020 Visual Impression
- Manage scenes

# **Manage Scenes**

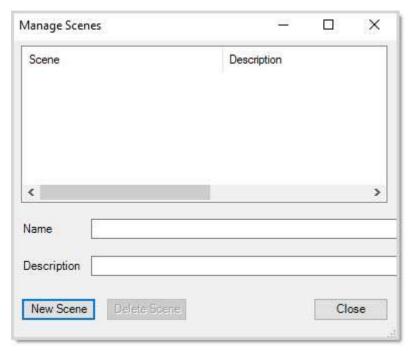
You can add or delete a scene for 2020 Visual Impression. This helps you organize, name and keep all scenes as you manage your drawing.

1. From the 2020 Office menu, choose 2020 Visual Impression, Manage Scenes.



Tip: You may also use the 2020 Office ribbon to access the application functions.

2. Click New Scene or select a scene and click Delete Scene (no confirmation asked).



3. Click Close when done.

## Show Non-Plan Item List

If you want some items to be priced, but you do not want them to appear on the drawing, use the 2020 Cap Complete - **Non-Plan Item List** (NPIL). For example, you may *not* want to show electrical items such as outlets, because they clutter your design, so you will add them to the non-plan item list.

To display the Non-Plan Item List, click on the Cap Tools toolbar.



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.

The **Non-Plan Item List** pane appears.



### See:

Add a part to the Non-Plan Item List

Add NPIL table to drawing

Edit a non-plan item

Specify a NPI part

Send a NPI Part to the drawing

Refresh the Non-Plan Item List

Delete an NPI part

Delete all non plan items

Note: When you <u>update a drawing with its associated worksheet</u>, items that were added in the worksheet are placed in the Non-Plan Item List.

# Add a part to the Non-Plan Item List

- 1. Click on the <u>NPIL toolbar</u>.
- 2. In the drawing, select the products that you want to add to the Non-Plan Item List.

Notice that the products disappear from the drawing and the part information is displayed in the NPIL.

3. Specify the insertion point and the rotation angle for the Non-Plan Item List legend on the drawing.

### Non Plan Item List

Part No.	Mfg	Qty	Description
EXHB	DMO	1	Work Chair Fabric Back Fixed Arms
DPDABF3672	DMO	1	Double Ped Desk Arc Front B/B/F-F/F 72L 36W
EXMB	DMO	1	Work Chair Fabric Back Adj. Arms

Note: If you do not see the Non-Plan Item List table, you will need to check the preference Add non-plan item list table automatically to the drawing in Advanced Preferences. You can also add the table by clicking.

# Add NPIL table to drawing

If there is at least one part in the Non-Plan Item List, the NPIL table is displayed on the drawing. If it is not displayed, do the following:

- 1. Click on the NPIL toolbar.
- 2. Specify the insertion point and the rotation angle for the Non-Plan Item List legend on the drawing.

Note: To always display the NPIL table on the drawing if there is at least one part in the NPIL, you will need to check the preference **Add non-plan item list table automatically to the drawing** in <u>Advanced Preferences</u>.

### Non Plan Item List

Part No.	Mfg	Qty	Description
EXHB	DMO	1	Work Chair Fabric Back Fixed Arms
DPDABF3672	DMO	1	Double Ped Desk Arc Front B/B/F-F/F 72L 36W
EXMB	DMO	1	Work Chair Fabric Back Adj. Arms

## Edit a non-plan item

1. Click on the item line in the Non Plan Item List.



- 2. Click
- 3. Modify the part information.

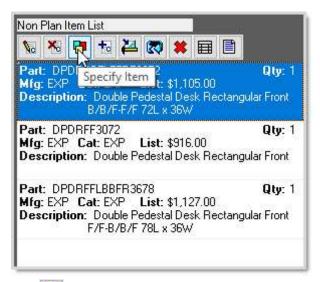
**Important**: You must keep the identical **Mfg Code**, **Catalog Code** and **Part Number** if you want to keep 2D and 3D graphics. For instance, you may want to send the part back to the drawing later on.

Note: If you know the **Catalog Code** and the **Part Number** of a similar item you can type them in and click to fill in the **Part Description** and **List Price**.

4. Click Finish.

## Specify a NPI part

1. Click on the item line in the Non Plan Item List.



- Click on the NPIL toolbar.
- Specify the item in the 2020 Options dialog box and then click OK.

See the following topics in the **2020 Options** help for instructions on specifying options:

- Customize the 2020 Options dialog
- Select options
- Skip options
- Change options
- Apply default options automatically
- Preview options
- Preview structural options

# Send a NPI Part to the drawing

- 1. Click on the item line in the Non Plan Item List.
- Click from the 2020 Office ribbon.
- 3. Specify the insertion point and the rotation angle of the part on the drawing.

Notice that the part is no longer in the NPIL. The NPIL legend on the drawing is also updated.

## Refresh the Non-Plan Item List

If the Non-Plan Item List and the NPIL table on the drawing do not seem to have the same information, click to synchronize the information.



# **Delete a NPI part**

Note: There is no confirmation message when you click **Remove Item** so make sure you really want to delete the selected part.

- 1. Click on the item line in the Non Plan Item List.
- 2. Click on the NPIL toolbar.

The part is no longer in the NPIL. If the NPIL table is on the drawing it is also updated.

# Delete all non plan items

- 1. Click on the NPIL toolbar.
- 2. Click **Yes** when you see the confirmation message.

If you displayed the NPIL table on the drawing, it is also removed.

## Worksheets

One of the most useful features of 2020 Cap Complete is the ability to generate a bill of materials or worksheet from a drawing. A worksheet is also known as a "take off".

2020 Cap Complete furniture symbols are "smart" in that they have special attributes that can be translated into a worksheet. Those attributes are Mfg Code, Catalog Code, Part Number, Default Height, Quantity, Generic Code and Tag.

See the following topics for information about 2020 Worksheet-related commands:

Create a take-off window

Create a visual worksheet



**Update with associated worksheet** 

Update against a visual woksheet

Create an ASCII file

Create a CapSIF file

Compare a drawing to a worksheet

**Import ZXF File** 

Create space report

**Update against catalog** 

Show non-plan item list

Draw a schedule

## Create a take-off window

A take-off window is a polygonal region that you define on the drawing. When you create a worksheet or a draw schedule, you can choose to include only items that are within this region.

1. Click on the 2020 Office toolbar.



2. Follow the instructions on the command prompt to specify the vertices of the take-off window polygon.

When done, the program converts the window into a block with a tag labeled "Take-Off Window".

Note: Every time you run the command, the program erases the current take-off window. There may only be one take-off window in the drawing.

See Also:

Create a worksheet

Draw a schedule from the drawing

### Create a worksheet

You can create two types of worksheets: visual and associated.

A visual worksheet can be used in 2020 Visual Impression to visualize defined scenes and to select finishes.

This is the default type for all worksheets created from a drawing.

You can use this type of worksheet to update the specification data of items in the drawing it was created from.

An <u>associated worksheet</u> allows items to be specified and new items added, but existing items cannot be replaced or deleted.

This worksheet can be used in 2020 Visual Impression to visualize defined scenes and to select finishes.

You can use this type of worksheet in 2020 Cap Complete and in 2020 Worksheet to sync item specification between the drawing and the worksheet.

#### See also

- Update against a visual woksheet
- Update with associated worksheet

### Create a visual worksheet

You should create a visual worksheet if you plan on using in <u>2020 Visual Impression</u> to visualize defined scenes and to select finishes.

This is the default type for all worksheets created from a drawing.

You can use this type of worksheet to update the specification data of items in the drawing it was created from.

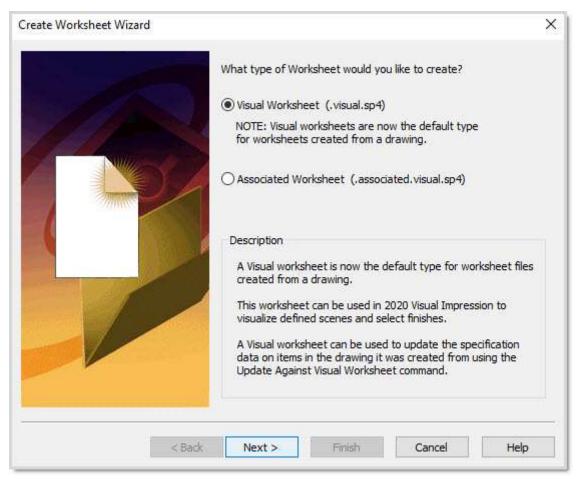
To create a visual worksheet:

1. Click on the 2020 Office toolbar.



Tip: You may also use the 2020 Office ribbon to access the application functions.

This launches the Create Worksheet Wizard with Visual worksheet already selected. Click Next.



3. On the second Create Worksheet Wizard dialog box, you will select the objects and information to include in the worksheet.

If you created a <u>take-off window</u> on the drawing, **Objects within the Take-Off Window** is selected by default so that only items within the take-off window are included.

If you want to pull all items from the drawing, select **All Objects**.

To select items, click the **Selected Objects** icon. This returns you to the drawing.

In the drawing, select the items you want to include in the worksheet.

Press Enter to confirm your selection and return to the Wizard.

If you incorporated 3D blocks into your drawing that you do not want to show up in the final worksheet, check **Ignore 3D Objects**.

By default, the following options are all selected so that they are pulled into the worksheet:

<u>Cap Bounds (Outline Levels)</u>: These are products grouped by certain designations such as departments, sections, or floors.

Cap Standards: A single group of items that make up a typical unit, such as a workstation.

**Cap Parts**: Any product from the Mfg Catalog, custom parts created using the **Cap Part**, **New** command or symbols brought from a **Custom Catalog**.

Accelerate Entities: - Furniture placed using the Accelerate program.

Non-Plan Item List (NPIL) - List containing items that are not shown in the drawing.

- 4. Click Next.
- 5. In the next Create Worksheet Wizard dialog box, beside **Location**, click to select the folder to store this worksheet in.

Enter a File Name and click Save.

Enter an optional Title to appear in Worksheet Properties as the worksheet title.

Leave Update Against Catalog checked.

Check the **Update Value(s)** you want updated when creating the worksheet.

Select a **Price Zone** for the list price update.

Check whether you want to use the Custom catalog to update custom parts and custom standards.

Click **Back** to review information or click **Next** to create the worksheet.

- The last Create Worksheet Wizard dialog box appears.
   You can choose to open the worksheet in 2020 Worksheet or in 2020 Visual Impression.
   Select Do not open the file to open the worksheet later.
- 7. Click Finish.

See also Create an associated worksheet

### Create an associated worksheet

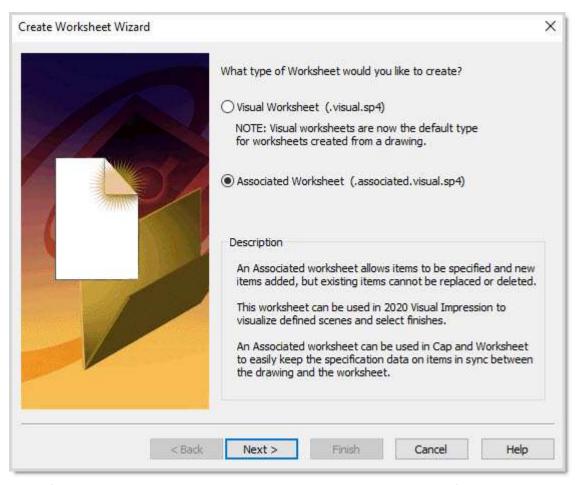
An associated worksheet allows items to be specified and new items added, but existing items cannot be replaced or deleted.

This worksheet can be used in 2020 Visual Impression to visualize defined scenes and to select finishes.

You can use this type of worksheet in 2020 Cap and in 2020 Worksheet to sync item specification between the drawing and the worksheet.

To create a visual worksheet:

1. Click on the 2020 Office toolbar. You may also use the 2020 Office ribbon This launches the Create Worksheet Wizard. Select Associated Worksheet. Click Next.



2. On the first Create Worksheet Wizard dialog box, you will select the objects and information to include in the worksheet.

If you created a <u>take-off window</u> on the drawing, **Objects within the Take-Off Window** is selected by default so that only items within the take-off window are included.

If you want to pull all items from the drawing, select **All Objects**.

To select items, click the **Selected Objects** icon. This returns you to the drawing.

In the drawing, select the items you want to include in the worksheet. Press Enter to confirm your selection and return to the Wizard.

If you incorporated 3D blocks into your drawing that you do not want to show up in the final worksheet, check **Ignore 3D Objects**.

By default, the following options are all selected so that they are pulled into the worksheet:

<u>Cap Bounds (Outline Levels)</u>: These are products grouped by certain designations such as departments, sections, or floors.

Cap Standards: A single group of items that make up a typical unit, such as a workstation.

**Cap Parts**: Any product from the Mfg Catalog, custom parts created using the **Cap Part**, **New** command, or symbols brought from a **Custom Catalog**.

Accelerate Entities: - Furniture placed using the Accelerate program.

Non-Plan Item List (NPIL) - List containing items that are not shown in the drawing.

- Click Next.
- 4. In the next Create Worksheet Wizard dialog box, beside **Location**, click to select the folder to store this worksheet in.

Enter a File Name and click Save.

Enter an optional Title to appear in Worksheet Properties as the worksheet title.

Leave Update Against Catalog checked.

Check the **Update Value(s)** you want updated when creating the worksheet.

Select a **Price Zone** for the list price update.

Check whether you want to use the Custom catalog to update custom parts and custom standards.

Click **Back** to review information or click **Next** to create the worksheet.

- The last Create Worksheet Wizard dialog box appears.
   You can choose to open the worksheet in 2020 Worksheet or in 2020 Visual Impression.
   Select Do not open the file to open the worksheet later.
- Click Finish.

### See also Create a visual worksheet

Note: You can open the associated worksheet at any time by clicking on the 2020 Office toolbar. 2020 Office saves the current drawing and updates the associated worksheet first before opening it.

If you make changes to the drawing or the worksheet later on, make sure they are both up-to-date by selecting the Update with associated worksheet command.

## **Update with associated worksheet**

If you <u>created an associated worksheet</u> for the drawing, you can:

- update the drawing if you made changes to the worksheet
- update the worksheet if you made changes to the drawing
- 1. Click on the 2020 Office toolbar.
  You may also use the 2020 Office ribbon.
- 2. Select whether you want to update the associated worksheet based on the current drawing, or update the current drawing based on the associated worksheet. 2020 Cap Complete determines which file is newer and automatically selects the appropriate action.



- 3. If you selected **Update Drawing** and you want to open the associated worksheet after updating it, check **Open the associated worksheet when finished**.
- 4. Click Start.
- 5. If the associated worksheet is open with unsaved changes, you will see a warning message before the command proceeds with an update worksheet or update drawing. Read the warning carefully before clicking **Yes** or **No**.
- 6. If there were items added to the worksheet before you updated the drawing, you will see a message asking you if you want to add a non-plan item list table to the drawing. Click **Yes** if you want to place the table. Display the non-plan item list in order to send non-plan items to the drawing.

If items were deleted in the worksheet before you updated the drawing, these items will also be removed from the drawing.

Note: Standards created in Worksheet are considered as non-planned. When you update the drawing against the associated worksheet, the Standard will be listed in the Non-plan item list.

If you <u>created the associated worksheet</u> based on a <u>take-off window</u> in the drawing, this region will be taken into account during the update. For example, if you added a part to the drawing that is not within the take-off window, then updated the worksheet, that part will not be added to the worksheet.

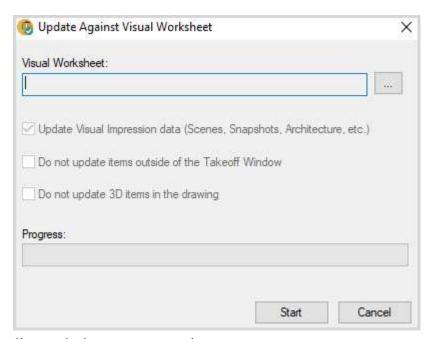
### **Update against a visual worksheet**

If you <u>created a visual worksheet</u> for the drawing, you can update the drawing with any finish changes made in 2020 Worksheet or <u>2020 Visual Impression</u>. Those changes will then appear in subsequent visualizations. **Update against Visual Worksheet** does not transfer any product additions, deletions, or changes made in the Worksheet.

It allows users to use Worksheet with 2020 Visual Impression to make changes without impacting the integrity of the original drawing.

All worksheets "know" what drawings they originated from. Worksheets created through a "Save As" of the original worksheet retain the drawing relationship, allowing you to update a drawing from other versions of the original worksheet. This is helpful when different scenarios of options are presented to the customer for feedback. In creating versions of the original worksheet and specifying each scenarios with different finishes, any of the versions can be used to update the drawing.

- 1. Click **Update Against Visual Worksheet** on the <u>2020 Office toolbar</u>. You may also use the <u>2020 Office ribbon</u> or 2020 Office menu.
- 2. Under Visual Worksheet, select the worksheet you want to update against.



- 3. Choose whether you want to update:
  - scenes, snapshots, or other from the worksheet to the current drawing.
  - items not included in the current Takeoff.
  - 3D items in the current drawing.
- 4. Click Start.

#### See also:

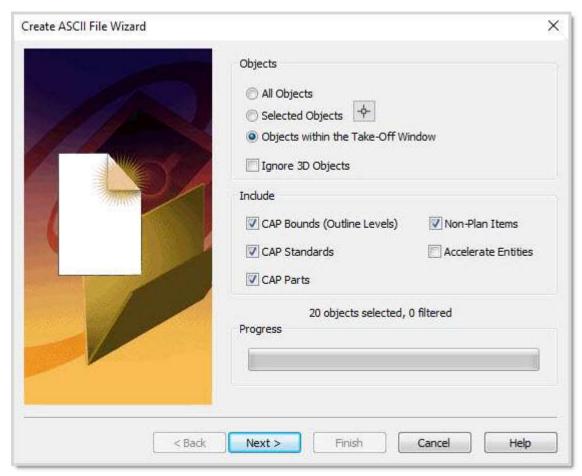
- Update against associated worksheet
- 2020 Visual Impression for 3D specification

### Create an ASCII file

This command creates a parts list and saves it in a .txt file.

1. From the **2020 Office** menu, select **2020 Worksheet**, and then **Create ASCII File**. You may also use the <u>2020 Office ribbon</u>.

This launches the Create ASCII File Wizard.



2. By default, all **Take Off** options are selected. This means that all the following information is pushed to the ASCII file:

<u>Cap Bounds (Outline Levels)</u>: These are products grouped by certain designations such as departments, sections, or floors.

<u>Cap Standards</u>: A single group of items that make up a typical unit, such as a workstation. This is often called a "Typical." Instead of selecting individual products and specifying each one of them, you can create a Typical, save it as a Cap Standard, then insert that Cap Standard into a drawing or worksheet.

**Cap Parts**: Any product from the Mfg Catalog, custom parts created using the **Cap Part, New** command or symbols brought from a **Custom Catalog**.

Non-Plan Item List (NPIL) - List containing items that are not shown in the drawing.

Accelerate Entities: - Furniture placed using the Accelerate program.

- 3. You may check **All Objects** to pull all items from the drawing. To select items, click . This returns you to the drawing.
  - In the drawing, select the items you want to include in the ASCII file. Press Enter to confirm your selection and return to the Wizard.
- 4. Click Next to continue.

The **ASCII Information** dialog box is displayed.

5. Beside Location, click to select the folder to store this ASCII file.

Enter a File Name.

Enter an optional Title.

6. Click Back to review information or click Next.

The Processing screen opens, with a message saying "Please wait".

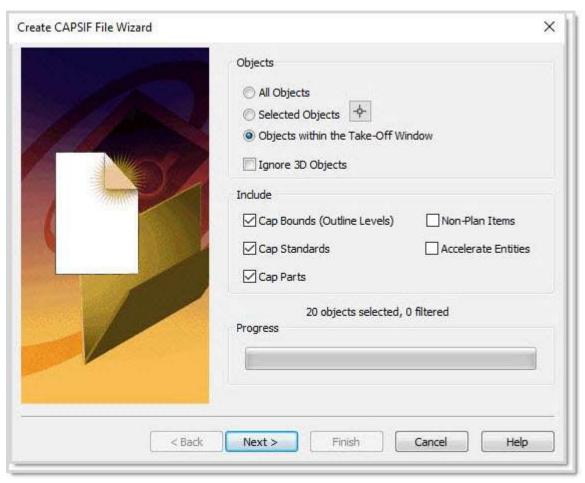
7. Once the message changes to "Complete!", click **Finish** and the ASCII file you just created will open automatically.

If you don't wish to open the ASCII file, clear the **Open ASCII file** check box before clicking **Finish**.

## Create a CapSIF file

- 1. Open an existing drawing.
- 2. From the **2020 Office** menu, select **2020 Worksheet**, then **Create CapSIF File**. You may also use the <u>2020 Office ribbon</u>.

This launches the Create CapSIF File Wizard.



3. By default, all **Take Off** options are selected. This means that all the following information is pushed to the CapSIF file:

<u>Cap Bounds (Outline Levels)</u>: These are products grouped by certain designations such as departments, sections, or floors.

<u>Cap Standards</u>: A single group of items that make up a typical unit, such as a workstation. This is often called a "Typical." Instead of selecting individual products and specifying each one of them, you can create a Typical, save it as a Cap Standard, then insert that Cap Standard into a drawing or worksheet.

**Cap Parts**: Any product from the Mfg Catalog, custom parts created using the **Cap Part, New** command or symbols brought from a **Custom Catalog**.

Non-Plan Item List (NPIL) - List containing items that are not shown in the drawing.

**Accelerate Entities**: - Furniture placed using the Accelerate program.

4. You may check **All Objects** to pull all items from the drawing. To select items, click to the drawing.

In the drawing, select the items you want to include in the CapSIF file. Press Enter to confirm your selection and return to the Wizard.

5. Click Next to continue.

The **CapSIF Information** dialog box is displayed.

6. Beside Location, click to select the folder to store this CapSIF file.

Enter a File Name.

Enter an optional Title.

7. Click **Back** to review information or click **Next**.

The **Processing screen** opens, with a message saying "Please wait".

8. Once the message changes to "Complete!", click **Finish** and the CapSIF file you just created will open automatically.

If you don't wish to open the CapSIF file, clear the Open CapSIF file checkbox before clicking Finish.

## Compare a drawing to a worksheet

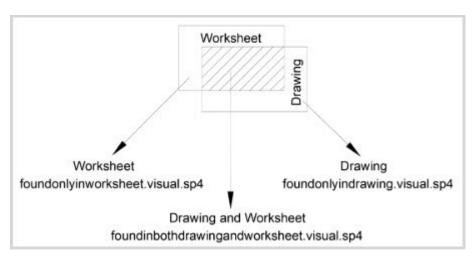
The **Compare** feature cross-references existing components (parts and pieces) in the drawing against the worksheet that was created from that drawing. This allows you to ensure that the drawing and worksheet are alike. **Compare** indicates if there are any discrepancies between these two pieces of information. The resulting compare will produce 3 new worksheets. It can also create a report that can be printed or saved as a document.

In this section, you will learn how to compare the drawing with the corresponding worksheet. Below is a listing of worksheets created, as well as an illustration of the comparison process.

- Parts found only in Drawing (foundonlyindrawing.sp4)
- Parts found only in Worksheet (foundonlyinworksheet.sp4)
- Parts found both in Drawing and Worksheet (foundinbothdrawingandworksheet.sp4)

Before you begin the Compare:

- Open your existing drawing that contains 2020 Cap Complete symbols.
- Know the location of the worksheet file associated with that drawing.
- Note: The worksheet file being compared must be closed while using Compare.



For a step-by-step exercise, see **Example - compare a drawing to a worksheet**.

## Example - compare a drawing to a worksheet

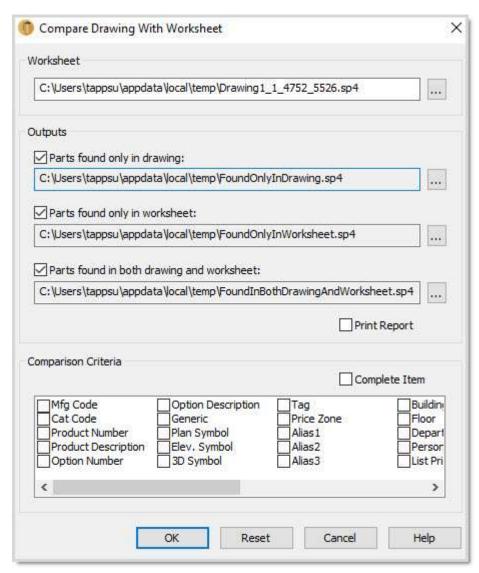
1. From the 2020 Office menu, select 2020 Worksheet, Compare.



Tip: You may also use the <u>2020 Office ribbon</u> to access the application functions.

The Compare Drawing with Worksheet dialog box appears.

2. Under **Worksheet**, select the a worksheet file by clicking if you want to change the current file.



3. Under **Outputs**, leave the boxes checked so that the worksheet files **FoundOnlyInDrawing**, **FoundOnlyInWorksheet** and **FoundInBothDrawingAndWorksheet** are created.

To change the location and/or name of each worksheet, click the appropriate button.

- 4. Check Print Report if you want to print a summary sheet of the three output worksheets.
- 5. Under Comparison Criteria, check the boxes for Mfg Code, Catalog Code, Product Number, Product Description, Option Number and Option Description.
- 6. Click OK.

Once the **Compare** is done, the next step is to review the 3 output files that were created during the **Compare**.

Open any of the output files and review the information. You will be able to conclude if anything in the drawing is not found in the worksheet, if there is any product in the worksheet that is not in the drawing and lastly, which parts are found in both the drawing and the worksheet. You could then revise either the drawing or the worksheet as necessary.

# Standards (Typicals)

A Cap Standard, also known as a Typical, is a tool to select multiple furniture parts and group them so you can store, edit, and re-use the parts within a Standard as one block, or as individual parts if needed.

There are many reasons to use Cap Standards:

- Increased Efficiency: Using Cap Standards in 2020 Cap Complete adds efficiency because the single name of the Standard represents an entire group of furniture (a Worksheet file).
- Increased Accuracy: Copying and inserting a single block that represents multiple components will prevent errors of omission or duplication.
- Installation Drawings: Plotting drawings without component tags makes a more legible installation drawing (a single name represents numerous parts).
- Globally Replaceable: Another important benefit is that Cap Standards are globally replaceable.

Other considerations when creating Cap Standards:

- Panels should not be included in the Cap Standards because the standards may be attached back-to-back. Including panels could result in double the panel count.
- Each standard has a base point by which you drag the standard just before it is inserted in a drawing. When picking the insertion point, select a node on the innermost corner of the station (opposite the "door"), often in the back of a corner worksurface.
- Create the **A-STDTAGS** layer to put the tags on. Do this because a standard tag appears when you insert the standards, and you will be able to turn the tag off if it is on a separate layer.

#### See the following topics:

Create a Cap Standard

Redefine a Cap Standard

Replace a Cap Standard

Edit a Standard's information

**Custom Workstation** 

Large Project/Take Offs

# **Create a Cap Standard**

Follow these initial steps to create a new Cap Standard:

- 1. From the **Explorer pane**, **Content** tab, select any furniture line and create a typical workstation. Include worksurfaces, pedestals, and overhead storage you would specify in a typical workstation.
- 2. Create the **A-STDTAGS** layer. This layer will be used for tags, giving you more control of what you see when you plot.
- 3. To start the wizard, click the **Make Standard** icon on the <u>Cap Standard</u> tool bar and then refer to the following topics:

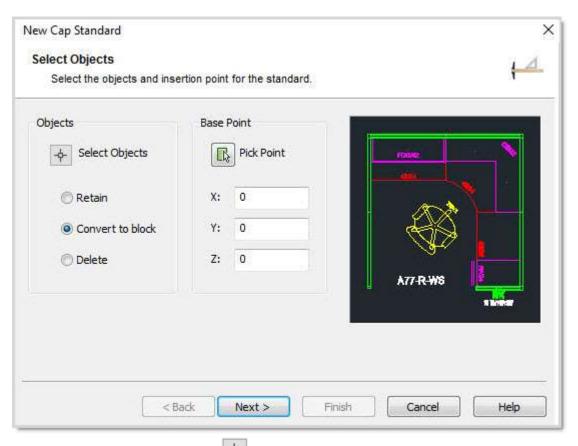
Select objects and the insertion point for the standard
Specify tag properties for the standard
Enter standard information
Save the standard in a custom catalog



Tip: You may also use the **2020 Office ribbon** to access the application functions.

## Select objects and the insertion point for the standard

After clicking the Make Standard icon in the <u>Cap Standard</u> or <u>2020 Office toolbar</u>, the <u>Select Objects</u> pane of the New Cap Standard wizard is displayed.
 The New Cap Standard wizard guides you to all the steps for creating a standard (typical).



- 2. To select the objects for the part, click . This sends you to the drawing.
- 3. Select the objects to include in the Cap Standard. Make sure you use a crossing or a window to select everything including the nodes.
- 4. Press Enter to confirm your selection.

You will be brought back to Select Objects pane of the Make Standard wizard where you will see a preview of the selected parts.

5. Click any of the following options:

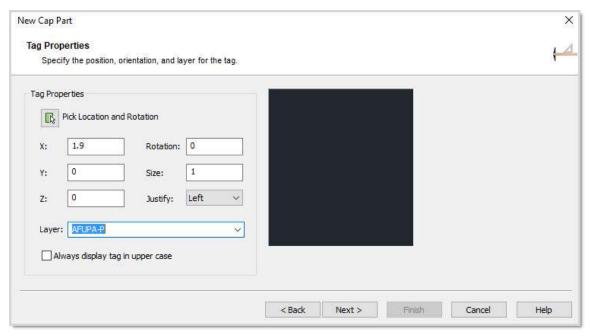
**Retain**: Retains the selected objects as distinct objects in the drawing after you create the block. **Convert to block**: This is the default selection. It converts the selected objects to a Cap Part. **Delete**: Deletes the selected objects from the drawing after you create the block.

6. Go to Specify the tag properties.

## Specify tag properties for the standard

- 1. On the Tag Properties pane of the Make Standard Wizard, click the Pick Location and Rotation icon to select where you want the Standard's tag to appear. This sends you back to the drawing. You can also enter the X, Y, Z... coordinates manually.
- 2. In the drawing, click at the desired Text Location point and press ENTER.

  Once you are back to the Tag Properties pane, the selected location coordinates appear.



3. Modify any of the following:

**Rotation** to manually change the text angle. 0 is horizontal, 90 is vertical.

**Size** to modify the text height. Panels typically have a height of 4"; interior components have a height of 2.5".

Justify to choose a Left, Right or Center justification for the text.

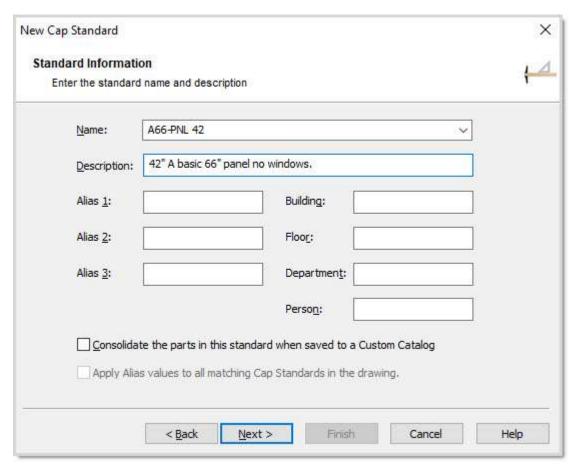
Select the Layer you wish the tag to be on.

You can also check the box Always display tag in upper case.

4. Click **Next** and go to **Enter standard information**.

### **Enter standard information**

1. On the **Standard Information** pane of the Make Standard wizard, enter the required information.



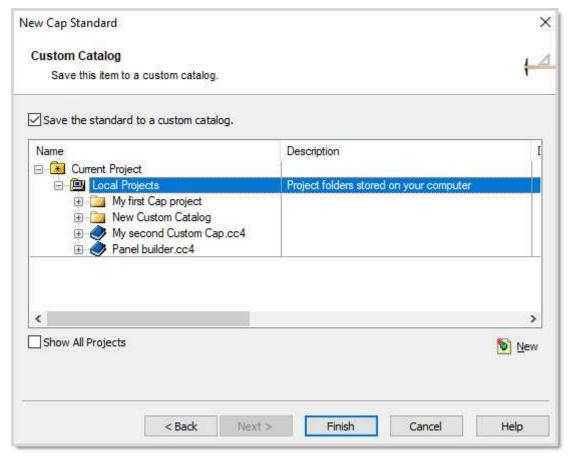
- 2. If you want to assign an Alias at this time to all the components of the Standard you can.
- 3. Check Consolidate the parts in this standard... so that identical items are combined into one line item.
- 4. Check **Apply Alias values...** to copy the alias tags to all identical standard items.
- 5. Click **Next** to continue and go to <u>Save the standard in a custom catalog</u>.

Note: For more information about consolidating parts, see Consolidate identical items in the 2020 Worksheet help.

### Save the standard in a custom catalog

For information about custom catalogs, see the Custom Catalogs section in the 2020 Worksheet help.

1. On the **Custom Catalog** pane of the Make Standard Wizard, check **Save the part to a custom catalog**. If this option is unchecked, the Cap Standard will be saved in this drawing only.



- 2. Select the appropriate Custom Catalog to store the new Cap Standard. Click the New icon to create a new project or a new custom catalog.
- 3. Click **Back** to review the information or **Finish** to complete.

Now, this new standard will get counted when you create a worksheet. You can do this for any custom item including plants, computers, artwork, etc.

See also Edit a Standard's information

# **Redefine a Cap Standard**

Many times in dealing with clients you will need to make revisions to furniture plans. By using Cap Standards, you can globally replace a Cap Standard within a drawing, saving time in the revision process.

There are two ways to redefine a Standard:

- Redefine using the same name.
- Redefine using a new name, and then use **Block Replace** to switch some of the original Standards with the new one. See <u>Replace a Cap Standard</u> for details.

To change an existing Cap Standard within a drawing, follow the steps below. Do not use the 2020 Cap Complete Explode command.

- 1. Click on the Cap Standard toolbar. You may also use the 2020 Office ribbon.
- 2. Select the Cap Standard you need to revise in your drawing. Press Enter to confirm your selection.
- 3. Change the workstation as needed.

- 4. Go through the steps of creating a new Cap Standard.
- 5. Notice that the tag disappears, and if you hover over the parts in the workstation, they can now be selected individually.
- 6. Name the new Standard with the same name as the existing Standard. Use the down arrow to the right of the name to pick the same name.
  - Note: Make sure when you create this new Standard that you give it the same insertion point that the previous Standard had. That way when you redefine the block it will remain at the same insertion point.
- 7. When you are at the point where you save the standard to a Custom Catalog, pick the Catalog that has the standard in it. Do not select the standard itself.
- 8. Click Finish.

You will get two confirmation dialog boxes. One to replace the standard in the Custom Catalog, the other to replace the standard in the drawing.

9. Click Yes for both.

Notice in your drawing that all of the Cap Standards with the same name have been revised.

## Replace a Cap Standard

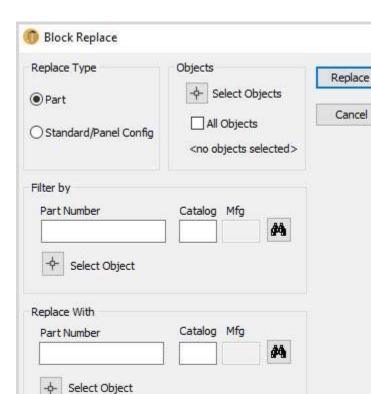
Another method for redefining a workstation is to create a new name such as TYP-A REV for the revised workstation. Then, if you need to go back to the original later you can.

- 1. Place a Standard on the drawing in the 0 rotation.
- 2. Click the **Undo Standard** icon on the <u>Cap Standard toolbar</u>. You may also use the 2020 Office ribbon.
- 3. Select the Cap Standard you need to revise within your drawing. Press Enter to confirm your selection.

Notice that the tag disappears, and if you hover over the parts in the workstation they can now be selected individually.

- 4. Change the workstation.
- 5. Create a new Standard with the Name TYP-A REV.
- 6. Once you create the new standard, click the **Block Replace** icon in the **2020 Office** toolbar.
- 7. In the Block Replace dialog box, under Replace Type, select Standard.
- 8. Under **Objects**, click the **Select Objects** icon to go back to the drawing and select a standard, or check **All Objects**.
- 9. To narrow down, under **Filter by**, you can type a part name, search one with the Part Find tool or select filter objects on the drawing.
- 10. Under **Replace With** select the new standard as described in the previous step and Check **Copy Alias Tag Values** to pull these in as well.

X



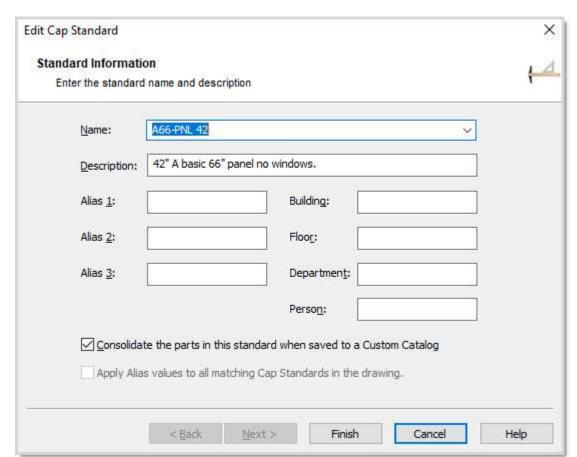
Note: For more information about the **Block Replace** command see <u>Search and replace</u>.

## **Edit a Standard's information**

Copy Assigned Tag Values

To edit a Standard's name, description or Alias values:

- 1. Click on the Cap Standard toolbar. You may also use the 2020 Office ribbon.
- 2. Select the Standard on the drawing.
- 3. Press Enter to confirm your selection and Click Finish.



4. In the Edit Cap Standard dialog box, change the Name, Description or Alias fields.

You can Consolidate the parts in this standard and Apply Alias values... to copy the alias tags to all identical standard items.

For more details about consolidating, see the topic Consolidate identical item in the 2020 Worksheet help.

#### **Custom workstation**

If a non-standard workstation is required, you can use an existing Cap Standard as a base, or you can place new components from the library directly on the plan.

- 1. Place a Cap Standard in the area where you need it.
- 2. Click on the <u>Cap Standard toolbar</u>. You may also use the 2020 Office ribbon.
- 3. Select the Cap Standard you need to use for the custom workstation. Press Enter or right-click to confirm your selection.

Notice that the tag disappears. If you hover over the parts in the workstation they can now be selected individually.

4. Erase the components that need to be changed and insert new components to complete the workstation.

The furniture in this workstation will be counted along with the panels and other miscellaneous furniture. It will not be considered a Cap Standard any more.

## Large Project/Take Offs

Using Cap Standards makes placing furniture in your drawing much easier and more accurate. Once your layout is complete, you will want to make a final count from the drawing. There are three ways to count a drawing using Cap Standards and Cap Parts:

- Simple Take Off disables the standards and boundaries to create a total list of products using Worksheet.
- Standards Take Off includes Cap Standards in the Worksheet.
- <u>Bounds Take Off</u> divide the layout into areas or departments called Cap Bounds. This is often useful if the client needs to order the furniture in phases or wants to charge a department for the furniture expense.

### Simple Take off

The simple take off method creates a worksheet of the entire project.

1. Click on the 2020 Office toolbar. You may also use the 2020 Office ribbon.

This launches the Create Worksheet Wizard.

2. Clear the checkmark beside Cap Bounds and Cap Standards.

This does not mean that the worksheet will not count the Cap Standards, it will simply count the components that make up the standards as Cap parts.

3. Follow the rest of the steps as described in Create a worksheet.

#### **Standards Take Off**

1. Click on the 2020 Office toolbar. You may also use the 2020 Office ribbon.

This launches the Create Worksheet Wizard.

- 2. Check Cap Standards so that standards are listed as parts in the worksheet.
- 3. Follow the rest of the steps as described in Create a worksheet.

Note: Cap Standards are represented in a worksheet as pink lines. See Standards in the 2020 Worksheet help for details.

## **Bounds**

## **Cap Bounds**

A Cap Bound is used to define an area to be counted. For example, a Cap Bound could represent a building floor or a department.

See:

Make a Bound

**Bounds Take Off** 

Edit Bound title and text placement

Remove a Cap Bound

Create a space report

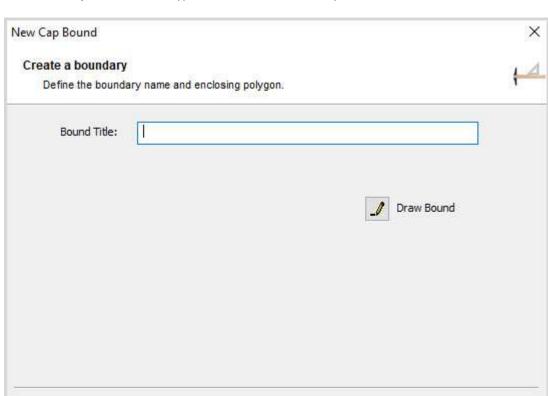


Tip: You may also use the 2020 Office ribbon to access the application functions.

## Make a Bound

In the example below, we will create Bounds on a unique layer so they can be turned off separately.

- 1. Change to the A-BOUNDS layer. Create it if it is not already present.
- 2. Click on the <u>Cap Bound toolbar</u>. You may also use the <u>2020 Office ribbon</u>.



3. In the **New Cap Bound** wizard, type **Bound Title** for the area you wish to define.

4. Click the Draw Bound icon . This will take you back to your drawing.

< Back

5. Select a start point then draw the lines around the area. The Bound does not have to be rectangular. Take care to include all the panels and standards you want to include in the area. If part of a symbol is outside the boundary it may not be counted with that area.

Finish.

Cancel

Help

6. Once you have completed it, press Enter to close the bound to go back to the wizard.

Next >

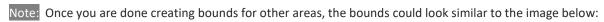
- 7. Click Next. The Tag Properties pane comes up.
  - Click the Pick Location/Rotation icon to place the tag in the drawing. Place it somewhere in the boundary area.
  - You can also type in location coordinates, rotation, text size and text justification.
- 8. Select the Layer A-BOUNDS.
- 9. Check Always display tag in upper case if you prefer this text attribute.
- 10. Click Finish.

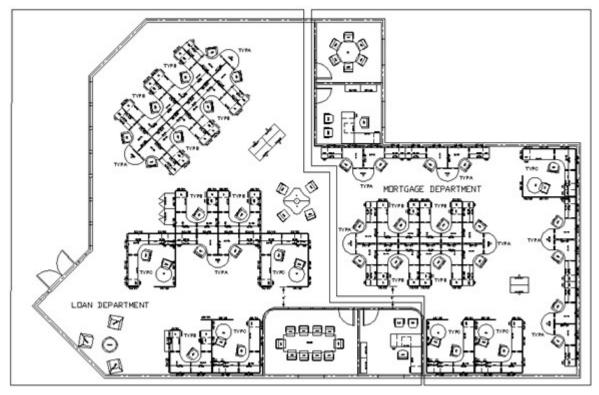
For information on creating a worksheet using the boundaries you created, see **Bounds Take Off.** 

#### See also:

- Edit Bound title and text placement
- Remove a Cap bound

To redefine a Cap Bound, you must remove it first then create a new one.





### **Bounds Take Off**

After creating Cap Bounds, you can create the worksheet.

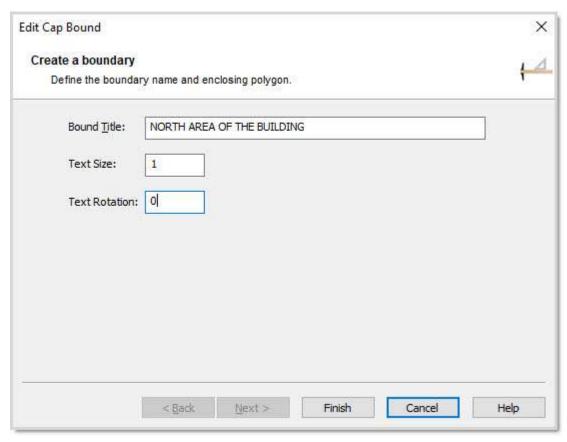
- 1. Click the **Create Worksheet** icon on the <u>2020 Office toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
  - This launches the Create Worksheet Wizard.
- 2. Follow the steps described in <u>Create a worksheet</u> and make sure that the **Cap Bounds** and **Cap Standards** are selected in the second pane of the Create Worksheet Wizard.

Note: Cap bounds are represented in worksheet as outline levels (green lines). See Outline levels in the 2020 Worksheet help for details.

# **Edit Bound title and text placement**

- 1. Click the **Edit Bound** icon on the <u>Cap Bound toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the Cap Bound on the drawing and press Enter to confirm your selection.

3. Change the **Bound Title**, **Text Size** and **Text Rotation**.



4. Click Finish.

## Remove a Cap Bound

- 1. Click the **Undo Bound** icon on the <u>Cap Bound toolbar</u>. You may also use the <u>2020 Office ribbon</u>.
- 2. Select the Cap Bound on the drawing.
- 3. Press Enter to confirm your selection.

# Create a space report

This command creates a report showing the number of square feet defined by a Cap Bound. For example, if you defined a bound for each department, you may want to know the area occupied by each department.

- 1. Make sure the current drawing has a Cap bound defined.
- 2. From the **2020 Office** menu, select **2020 Worksheet**, and then **Create Space Report**. You may also use the 2020 Office ribbon.

This launches the Create Space Report wizard.

Click to select the folder to store this Space Report in.

Enter a File Name, and then click Save.

- 3. Enter an optional **Title**.
- 4. Click **Back** to review information or click **Next**.
- 5. Once the report is created, click **Finish** and the Space Report you just created will open automatically in text format.

If you don't wish to open the Space Report clear the **Open Space Report file** check box before clicking **Finish**.

# Command reference

The table below displays the topics to read to get help on a specific command in the **2020 Office** menu. Note that some command groups are available as **toolbars**, therefore you are referred to the corresponding toolbar topic.

Command	Help topic
Automation Center	See the help file on Manufacturer-specific information.
Insert Symbol	Place a product using Insert Symbol
Drawing Setup	Drawing Setup Wizard
Update Against Catalog	Update against a catalog
Cap Tag	These commands are no longer used. See the <u>Tags</u> section for information about creating or modifying tags.
Cap Part	Cap Part toolbar
Cap Standard	Cap Standard toolbar
Cap Bound	Cap Bound toolbar
Cap Info	View item information
2020 Options	Specify options
2020 Search	2020 Search
Explorer	Display or hide the Explorer pane
Cap Panel Builder	Panel Builder
2020 Worksheet	<u>Worksheets</u>
Edit	Cap Edit toolbar
Tools	<u>Cap Tools toolbar</u>
Objects	Create a presentation document using Plan view and 3D
Convert	See the help file on Manufacturer-specific information.
Preferences	<u>Preferences</u>
Help	Using Help

### **Draw Schedules**

A draw schedule is a list of parts, which includes the Item, Tag, Mfg, Qty, Part No., Part Description, Price and Extended Price information.

You can insert a draw schedule in your drawing by selecting a worksheet or by selecting symbols in your drawing.

Once you have learned how to create draw schedules, you can use them along with the plan view and 3D view to <u>create a presentation document</u>.

# Create a draw schedule from the drawing

This draw schedule is a table entity, so you will able use any table editing command, such as resizing columns and rows, moving the table, and manually editing text in the table.

The draw schedule is not linked to the drawing. If you make changes to the drawing, you will need to regenerate the schedule.

The Draw Schedule Wizard guides you to each step involved in creating a draw schedule.

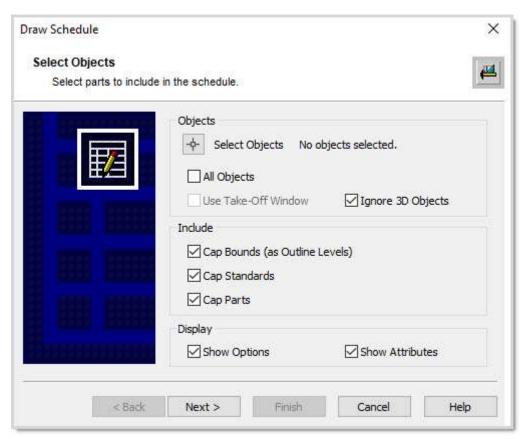
#### See:

- Select objects for the schedule
- Select a tile and a location
- Choose text properties
- Add or remove columns

### Select objects for the schedule

To start the Draw Schedule Wizard and create a schedule from the drawing:

1. Click the **Draw Schedule** icon on 2020 Office toolbar. You may also use the 2020 Office ribbon.



2. On the Select Objects pane of the Draw Schedule Wizard, make your selection by using either of the following options (you can combine the last 3):

Clicking the **Select Objects** icon

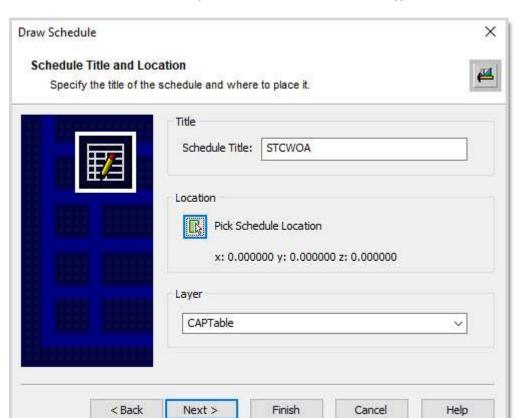
Selecting All Objects to pull all items from the drawing,

Use a Take-Off Window.

Ignore 3D objects from your selection.

- 3. Under Include, you can have the draw schedule list by outline level, by standard level or by parts. To view examples of each one, see Examples - draw schedules.
- 4. Under **Display**, choose whether you want to show options and/or attributes in the draw schedule.
- Click Next.
- 6. Go to Select a tile and a location.

### Select a Title and a location

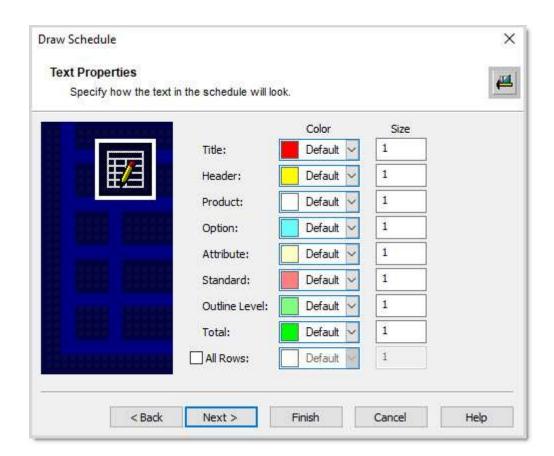


1. In the Schedule Title and Location pane of the Draw Schedule wizard, type in the Schedule Title.

- 2. Click The Pick Location icon and select a point on the drawing. You will be brought back to the dialog box.
- 3. Choose the Layer.
- 4. Click Next.
- 5. Go to Choose text properties.

## **Choose text properties**

1. If you want the draw schedule components' text to be one color and size, check **All Rows** then set the color and size.



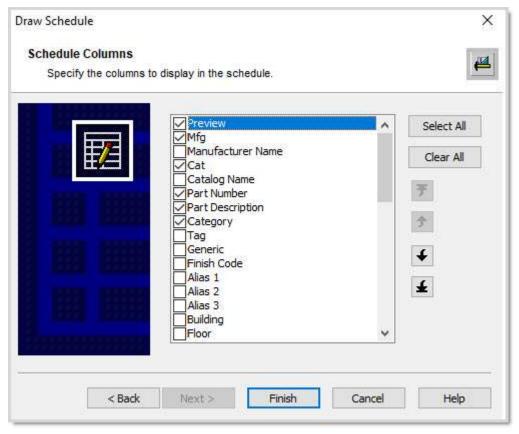
Otherwise, select the text color and size for text each component. We recommend that you change the text **Size** to **5**.

2. Click **Next** and go to <u>Add or remove columns</u>.

### Add or remove columns

1. In the **Schedule Columns** pane of the Draw Schedule wizard, select the columns you want displayed in the draw schedule.

You can change the column order by dragging and dropping the column names or by using arrow buttons.



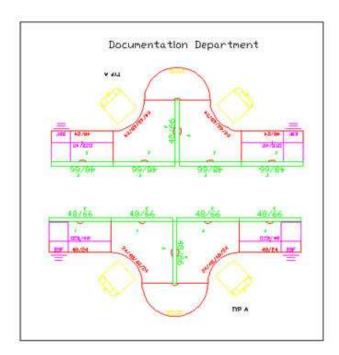
#### 2. Click Finish.

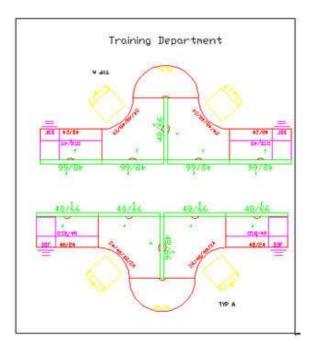
Your draw schedule now appears within your drawing.

Note: The selections you made on each screen of the Draw Schedule Wizard will be saved so that they are automatically selected the next time you run Draw schedule.

## **Examples - draw schedules**

In this example, there are two Cap bounds in the drawing. Within each bound there are two instances of a standard called TYP A.





Draw schedule with outlines:

	Draw Schedule								
#	Preview	Mfg	Cat	Part Number	Part Description	Category	Qty	List	Ext List
1	S-1			Documentation Department		5.5			17212.00
2				Training Department					17212.00
	81		3 3		Grand Total		80	8 8	34424.00

Draw schedule with standards:

Draw Schedule									
#	Preview	Mfg	Cat	Part Number	Part Description	Category	Qty	List	Ext List
1	w.D.			TYP A	Typical A workstation		4	8606.00	34424.00
	8 9		e.		Grand Total				34424.00

Draw schedule with parts (options and attributes not shown):

					Draw Schedule				
#	Preview	Mfg	Cat	Part Number	Part Description	Category	Qty	List	Ext List
1		STC	SCN	46512010	CHAIR-THINK,NO ARM,3D KNIT, SEWN SEAT,HEAD REST,ASSEM	SEATING	8	927,00	7416.00
2		STC	TSA	TS7048BL	OVERHEAD STORAGE BIN-48W	STORAGE	8	476.00	3808,00
3	7	STC	TSA	TS72448CC	WORKSURFACE-CURVED CORNER, 24X48	WORKSURFACE	8	455.00	3640,00
4		STC	TSA	TS72448S	WORKSURFACE-STRAIGHT,24X48	WORKSURFACE	8	216,00	1728.00
5	Q	STC	TSA	TS751HR	WORKSURFACE-HALF ROUND,SPNR, 25 1/2X51	WORKSURFACE	4	646.00	2584.00
6		STC	TSA	TS76648TF	PANEL-FULL TACKABLE ACOUSTICAL,66X48	PANEL	20	564.00	11280.00
7	Q.	STC	TSA	TU720BBFL	PEDESTAL-2 BOX/1 FILE DWR, 23-1/2D	FILING	8	496.00	3968.00
					Grand Total				34424.00

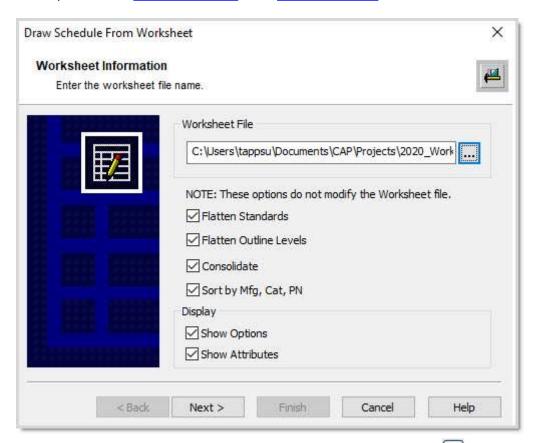
#### Create a draw schedule from a worksheet

After you have <u>created a worksheet</u> and specified options in the worksheet, you can bring it into your drawing as a draw schedule. The resulting draw schedule will be a table entity, so you will able to use any table editing command such as resizing columns and rows, moving the table, and manually editing any text in the table.

The draw schedule is not linked to the worksheet. If you make changes to the worksheet, you will need to regenerate the draw schedule.

1. From the 2020 Office menu, select 2020 Worksheet, then Draw Schedule from Worksheet.

You may also use the 2020 Office toolbar or the 2020 Office ribbon.



- 2. In the **Worksheet Information** dialog box, type in the worksheet name or click to find the worksheet.
- 3. Select whether you want to flatten <u>standards</u>, flatten <u>outline levels</u>, consolidate items, and/or sort by manufacturer, category and part number.
- 4. Select whether you want to show options and/or attributes.
- Click Next.
- 6. See the following topics to finish creating the draw schedule:

Select a tile and a location
Choose text properties
Add or remove columns

Note: The selections you make on each pane of the Draw Schedule Wizard is saved so that they are automatically selected the next time you run the wizard.

### Create a presentation document using Plan view and 3D

In this exercise, you will create a presentation document that includes a workstation in Plan view and in 3D. In the same drawing you will also use **Cap Objects** to dress up the 3D station. At the end you will add a list of products, called a draw schedule.

Before proceeding, build a workstation using Plan View symbols.

#### Copy the plan to 3D:

- 1. From the 2020 Office menu, select Tools, Copy Plan to 3D. You may also use the 2020 Office ribbon.
- 2. Select all the symbols for the plan view workstation.
- 3. Select a base point on the plan view workstation.
- 4. Select a second point off to the right. A 3D workstation appears. Notice that it has no tags.

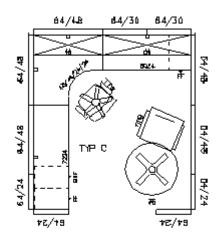
#### -Create the worksheet file:

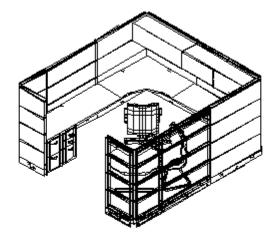
- 1. From the 2020 Office menu, select 2020 Worksheet, Create Worksheet File.
- 2. Select the plan view workstation. Click **Next**.
- 3. Give the worksheet a name and a title. Click Next.
- 4. Clear the check box beside **Open Worksheet File** check box. Click **Finish**.

#### Create the draw schedule:

- 1. From the 2020 Office menu, select 2020 Worksheet, Draw Schedule From Worksheet.
- 2. Select the worksheet you just made and click **Next**.
- 3. Do not check Include Options or Include Attributes.
- 4. Select a point under the standard for the location of the draw schedule.
- 5. Enter a **Text Size** of 4 ".
- 6. Click Finish.

Put all three parts together using the Layout function. Your layout should look similar to the image below.





Hem #	Tag	Мfg	Qty	Part No.	Part Description	Price	Extended
1	<b>45</b> /48/24,	BIN.	1	D1 L4848555	Worksurfixes, Cury Corner %° 4 0x40x24x24, W/grommet	438700	435.00
Z	B024	KDV	1	D1 R8024G	Worksurfoxe, Rectangular 80Wx2. 4D. w/grommet	248 00	246 00
3	7224	KDW	1	B1 R7 224G	Worksurfess, Reetsneuter 72W)2. 4D. w/grommet	276 00	276 00
4	64/24	KDW	4	BP2T6424K	Tried Panel, Both Grabe, SmTax 64-1/16Hb24W, W/kneckouts	864400	<i>2</i> 256 00
6	64/30	KDW	2	BP2T6430K	Tiled Panel, Both Sides, SmTax 64-1/15H-3DW, w/knockouts	BS 00	11 <del>96</del> 00
Ð	84/48	KDV	6	BP2T8446K	Tiled Ponel, Both Sides, 9mTex 64-1/15Hx48W, w/knockouts	710 400	3660 00
7	<b>+</b> ₽	KDW	1	DS1048L	tOverhead Cabinet w/Lock 47-7/ BWx14-1/6Dx16H	207 (00	297 00
48	8 <b>5</b>	KDM	1	D91¢e0L	töverhead Cabinet v/Lock 51-7/ BWx14-1/80x15H	438 00	438 00
ta	BBF	KEW	1	D91PFL244	#Freestanding Pedestal, 6/8/12 15#x24D, w/Lock	450 đ <b>đ</b>	450 00
16	म	KDW	2	D21PFL24B	#Freestanding Pedestal, 12/12 I BWX24DL V/Lock	430 00	864 00
11	36	МS	1	TR3640N	Round Table Four-Star Base 36 D. Fixed High w/Costers	5 <del>9</del> 070 <b>9</b>	<del>5</del> 90,00
12	BULL	KS S	1	7A3-3-A50- H	Buildag Exec Armichair. Vid Grey , Advanced, H Gas	1171.00	1171.00
13	BULL	KS S	1	7 <del>/48</del> —1—5L	*Buldog Side Armohair, Park G rey	520,00	520.00
						TOTAL	1 <b>228</b> 7 00

### Panel Builder

Cap Panel Builder is designed to construct and manage configurations of stack panel products.

To access Panel Builder:

1. Click the Cap Panel Builder icon on the 2020 Office toolbar. You may also use the 2020 Office ribbon.

The Cap Panel Builder module opens.

2. For help on Panel Builder, see the Panel Builder help file, accessible from the Panel Builder help menu.

### **Best practices**

Here are some best practices when working with Panel Builder:

- As much as possible, maintain one custom catalog per drawing.
- Keep the custom catalog and the drawing in the same folder.
- When sharing within an office, keep the drawing and custom catalog in the same folder on the network, mapped the same on each user machine.
- Do not use panel builder configurations inside Cap Standards. Panel Builder configurations contained within a Cap standard will not appear in a take-off to 2020 Worksheet.
- Do not use the Mirror, Explode or WBlock commands on Panel Builder configurations. Doing so will
  corrupt these configurations.
- Use the Panel Builder Save As command to copy configurations between drawings. Do not use WBlock or cut and paste.
- To maintain future flexibility when editing, give Panel Builder configurations short unique names. Do not include the height of the frame in the name.
- Use the Configuration Manager to rebuild configurations when sharing with a remote office or notebook computer.
- If you have multiple drawings sharing the same custom catalog, don't rebuild the custom catalog from
  one of the drawings. If you do so, each drawing will need to be rebuilt into its own unique custom
  catalog.
- Use Static Elevations for large drawings with many occurrences of the same configurations. Reserve Dynamic elevations for complicated configurations where an entire run of panels needs a single elevation.

# 2020 Cap Complete Mfg specific Contents

Welcome to the Help on 2020 Cap Complete Manufacturer-Specific Information. Click on any of the links below for details on manufacturer-specific commands in **2020 Cap Complete**:

- Herman Miller
- Kimball
- Knoll
- Steelcase
- Auto-hardware
- Teknion

### **Herman Miller**

See the following sections for information about 2020 Cap commands specific to Herman Miller:

**Convert CADpack drawings** 

**Import Vary Easy symbols** 

**Import Z-Axis** 

### **Convert CADpack drawings**

- 1. To use the Convert Herman Miller CAD Pack feature, the "CAD Pack to Cap Conversion" command must be run within CAD Pack.
- 2. From 2020 Cap Complete, open the CAD Pack drawing that needs to be converted.
- 3. From the **2020 Office** menu, select **Convert**, **Herman Miller CADpack**.
- 4. 2020 Cap Complete will prompt for a selection of objects. Select the items using a window or type "All" to select the entire drawing.

Once the selection process is complete, the conversion will be done.

## **Import Vary Easy symbols**

To use the Vary Easy import feature:

- 1. From the 2020 Office menu, select Import, Vary Easy Symbol.
- 2. In the **Open** dialog, locate the .dwg file to be imported then click **Open**.
- 3. Place the part on the drawing.

### **Import Z-Axis**

To use the Z-Axis import feature:

- 1. From the 2020 Office menu, select Import, Z-axis.
- 2. In the **Open** dialog, locate the .ZXF file to be imported then click **Open**.

### **Kimball**

See the following sections for information about 2020 Office (previously 2020 Cap) commands specific to Kimball:

**Auto-Brackets** 

Kimball Xsite

**Automation Center for Kimball** 

#### **Auto-Brackets**

This tool works in a similar fashion to Cap Auto Hardware. The tool analyzes a selection set containing worksurfaces and structure runs, and inserts all required worksurface and overhead mounting bracketry into the drawing.

Note: Auto-Brackets for Xsite **DOES NOT** check for the presence of Xsite Traxx at the required locations. Be sure to check your Elevation designs to ensure that horizontal tile seams and hence their accompanying Xsite Traxx are available for proper worksurface support.

#### See:

Use the Auto worksurfaces and overhead bracket generator

Rules for Kimball bracket placement

**Auto-Brackets exceptions** 

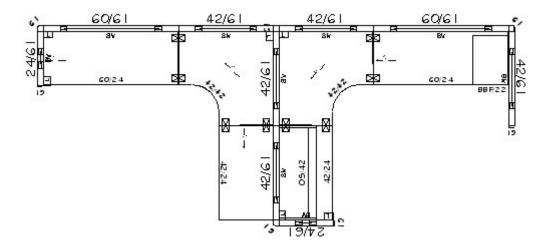
# Use the Auto worksurfaces and overhead bracket generator

Before you use the Auto-Brackets tool, make sure that you have properly snapped together worksurfaces, overheads, and panels or structure runs. Also make sure that you have properly snapped Cap Standard workstations into their associated panel runs.

- 1. Click Auto Brackety on the Automation palette with a Kimball line current.
- 2. 2020 Cap Complete will prompt, on the command line, **Select Objects:**

Select all of the workstation(s) and their associated panels with a window or crossing window.

The tool will analyze all items in the selection set and place the required brackets.



# **Rules for Kimball bracket placement**

The Auto-Bracket tool will:

- Place worksurface brackets, cantilevers, flat brackets, and support legs (when required).
- Place overhead mounting brackets and ganging brackets where needed.
- Insert a standard column leg for all worksurfaces which require a leg.
- Consider any manually placed bracketry as an "override" to the automatic placement logic.
- Identify pedestals and support panels. It will not place proposed bracketry in locations that coincide with a pedestal or support panel.
- Cross-check any manually placed bracketry against the required bracketry and mark them if not located correctly according to the automatic placement logic. It will place marks on a special layer. Subsequent runs of the bracket generation tool will not replace manually placed bracketry.
- For Cap Standard parts, extract the worksurface, overhead, pedestal, and support panel data from the nested block along with the location of any brackets contained within the Cap Standard. It will then use the information as described above to identify required bracket locations. If new brackets are required, the tool will place them outside of the Cap Standard.
- Replace brackets placed during a previous run of Auto Brackets.

## **Auto-Brackets exceptions**

- Freestanding worksurface applications are not supported.
- Automatically placed components will be placed at 0" Elevation (the worksurface and bracketry 3D symbology is drawn at a prescribed height above the 0"-Z insertion point).
- The drop bracket required to connect adjoining worksurfaces of differing heights will not be placed. (since users do not prescribe worksurface heights, any height-differential is not recognizable).
- End Support, Mid Support, and Modesty panels will not be automatically placed (the style number requires user intervention regarding desired height and width; i.e. Design-decisions).
- Mirrored worksurfaces and overheads are not supported, due to the "handedness" requirements of bracketry and many worksurface or overhead part numbers.
- Validation analysis for Xsite Traxx is not performed. Auto-Brackets assumes Xsite Structure Runs have the required Xsite Traxx in place.

### Kimball Xsite

Kimball Office's Xsite is a wall system product line has many unique characteristics, which require customized 2020 Cap capabilities. For example, Xsite is not a typical "frame and tile" wall system. It is an assembly of parts that provide high levels of flexibility, where a wall's length and tile design dictate the structural frame components.

The lack of defined "frames" or "panels" represents a departure from more common space planning and design automation tools. Therefore 2020 Cap provides tools and methodologies for planning and specifying Xsite projects.

#### See:

- Automation palette
- Automation Preferences
- Create structure runs
- Adjust Traxx Lengths
- Assign existing elevation
- Select tile options
- Xsite tile schedule
- Plan view structure
- Worksheet takeoff (BOM) rules
- AutoConnector Preference Settings
- Special considerations for elevations and structure runs

# Kimball-specific functions in the Automation palette

Icon	Name	Description
	Structure Run Tool	<u>Creates the structure runs</u> in plan view.
	Assign Elevation	Creates and allows the user to <u>Assign Elevations</u> to structure run(s).
TL	Tile Tool	Places Elevation Tile symbols on the elevations in the drawing.
	Elevation Properties	Allows user to <u>change properties of an Elevation</u> .
	Structure Edit	Allows users to modify properties of a structure run.
8	Break Elevation Link	Allows users to <u>break the link</u> between an Elevation and a Structure run.
	Copy Elevation Side	Copies all of the tiles from the selected Elevation side to the other side, i.e. Front to Back, or Back to Front, not from Elevation to Elevation.
	Tile Schedule	Creates a block entity in the drawing, <u>listing all of the tiles</u> in the drawing and includes a list of identifiers for spanners.



Creates a <u>layout of the vertical structures</u> used in each selected structure run on the plan view drawing, including dimensions and structure identifiers.

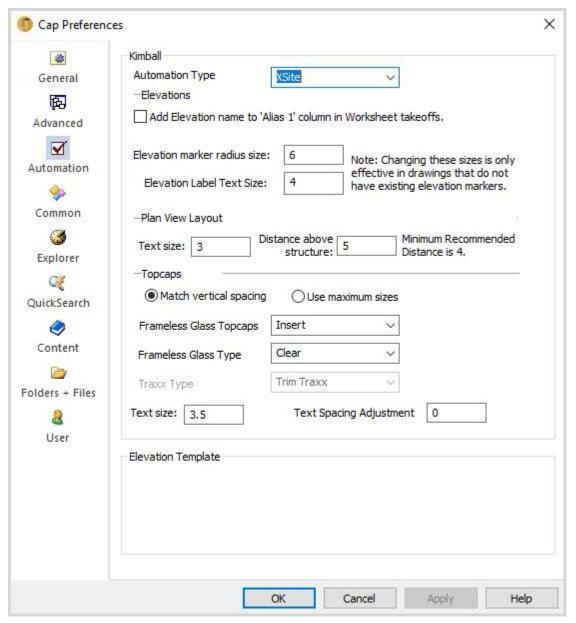
### **Automation Preferences**

You can set preferences to adjust the behavior of Xsite tools.

1. From the **2020 Office** menu select **Preferences**.

Click the **Preferences** icon on the <u>2020 Office ribbon</u>.

2. Click Automation.



3. Change any of the following settings:

**Add Elevation name in 'Alias 1' column**, when checked, will place the Elevation name in the Alias 1 column for every Xsite Part associated with the Elevation. This will allow identical parts to be listed separately for each Elevation they are associated with.

Note: When generating an order list for Xsite this should be unchecked to allow consolidation of like part numbers.

The **Elevation marker** radius size will control the size of the link arrow symbol used in new drawings. This should only be changed before any elevations have been created in a drawing file, otherwise the markers will be placed in incorrect locations and the size will not change.

Note: If you need to change the size of the arrow after creating an elevation, use the scale command to change the size of an elevation marker in an existing drawing.

**Plan View Layout -** enter the plan view layout's text size and distance above structure. See <u>Plan view</u> structure.

The **Topcap** controls can be used to select the desired default size when elevations are created. This default can be changed after the elevation is created — see <u>Modify an elevation</u>.

4. Click OK.

### Create structure runs

To create an Xsite structure run, these are the basic steps to follow:

- 1. <u>Draw structure runs</u> (Structure Run Tool).
- 2. If necessary, edit structure runs.
- 3. <u>Create an elevation of a structure run</u> (Assign Elevation Tool).
- 4. <u>Modify an elevation</u>'s structural components or behavior (Elevation Properties Tool).
- 5. Place tiles on an elevation (Tile Tool).

#### See also:

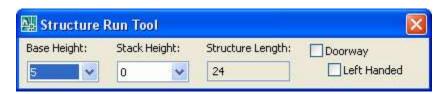
- Xsite tile rules
- Construct like tiles on both sides of an elevation
- Modify vertical structure spacing

#### **Draw structure runs**

In the steps below, you will determine the base height and stack height. You will set the C and I spacing in a later step.

1. Click on the <u>Automation palette</u>.

The Structure Run Tool dialog box will open.



Note: You can drag this box to any convenient location. It disappears after you draw a structure run. Restarting the tool will display the dialog again in the last location it was used.

- 2. Set the Base Height and Stack Height using the list boxes provided.
- 3. Pick a structure run starting point.
- 4. Drag the cursor to control the length and direction of the structure run. The actual length is displayed in the **Structure Length** box of the **Structure Run tool** dialog box in 3" increments. The minimum length of an Xsite Structure Run is 24". The Structure Run tool will not allow a Structure Run less then 24" to be drawn.
  - Note: You can also use Polar keyboard input, such as "@48<0" or after selecting a starting point and rotation for the structure run, the length of the Structure Run can be entered at the 2020 Cap Complete command line.
- 5. Select the end point of the Structure Run. This will draw the structure, tag the structure, and provide a UFO for ease of snapping the next Structure Run into location. The tag for Xsite structures is shown below:

This example describes a 48" long Structure, made up of a four-high base component, without a stacking component.



The following example describes a 48" long Structure, made up of a four-high base component, and a single stacking component.



Create Structure Runs with differing heights or configurations by using the Structure Run Tool multiple times and linking the runs together. They will be treated as a single Structure Run by the Assign Elevation tool in the next step.

This example shows two Structures, one 36" long with a 5-high base and another 36" long with a 4-high base and a 2-high stacker.



# Edit an existing structure run

You can edit a structure run's base height and/or stacking segments once it is already in the drawing.

- 1. Click on the <u>Automation palette</u>.
- 2. Select the structure to edit and press Enter. The **Structure Run Tool** dialog will open.
- 3. Make the necessary changes to the structure using the drop down menus.
- 4. Click OK.

### Create elevations for a structure run

By creating elevations, you will able to add tiles in elevation view as well as view the C and I structures. The structure run for an elevation consists of any number of continuous structures between Xsite turns that connect structure runs.

1. Click on the <u>Automation palette</u>.

The Assign Structure dialog will open.

2. Enter an elevation name in the Create New Elevation box.

Since this is the first elevation created in this drawing, the "Assign to Existing Elevation" box is empty. If present, you can pick and assign existing elevations to a structure run.

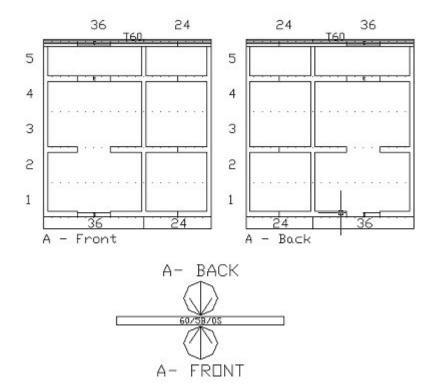
3. Click and select the desired structure run(s) on the 2020 Cap Complete drawing screen.

If selecting multiple runs, the configurations must be the same base height, stack height and length.

4. Adjust the structure spacing using the list box. This will set the default spacing for the C and I structures in the elevation to be created.

You can only adjust this setting before the elevation is created. Otherwise, you can use grips on the elevation to change the spacing to different widths.

- 5. Click the Create button.
- 6. You will be prompted to specify where to place the front elevation. Place it, set the rotation, and proceed to place the Back elevation.



You can scale the elevation symbols as desired, using the 2020 Cap Complete SCALE command.

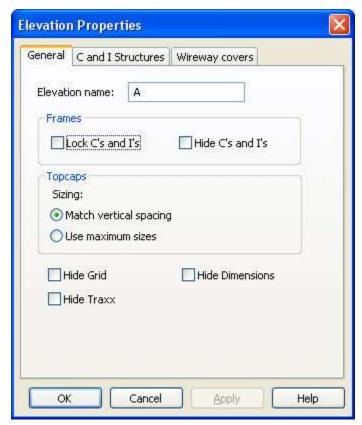
Note: To maintain integrity of structure runs and their linked elevations, certain commands require special considerations (reactors). 2020 Cap and Xsite tools **MUST** be loaded to enable these reactors. Editing structure

runs or elevations without 2020 Cap and Xsite tools loaded can result in improper or damaged elevations. See <u>Xsite</u> tile rules in this section.

# **Modify an elevation**

You can modify the elevation name, topcap sizing, C and I structures, and wireway covers.

- 1. Click on the <u>Automation palette</u>.
- 2. Select an elevation to modify on the drawing.



3. Modify any of the following information in the **Elevation Properties – General Tab:** 

#### Elevation name

**Lock C's and I's** - prevents tile placement from automatically moving vertical structure components to fit tile configurations.

**Hide C's and I's** - removes those components from view.

Topcap sizing

**Hide Grid** and **Hide Dimensions** - removes those components from view.

**Hide Traxx** - removes the Xsite Traxx from the elevation but leaves the dimensions visible.

Use **Hide Dimensions** to remove Traxx dimensions from the elevation.

See Change C and I structures.

### **Change C and I structures**

1. In the **Elevation Properties** dialog, click the **C and I Structures** tab.

- 2. The C and I structure that is being modified is displayed as a dashed line on the drawing. You can add or subtract mid-structure supports by placing or clearing the check boxes.
- 3. Click **Apply** to view these changes.
- 4. Click **Next** to display the next structure and its information.
- 5. Continue clicking **Next** until you are done with all structures.

#### **Modify wire covers**

- 1. In the **Elevation Properties** dialog, click the **Wireway covers** tab.
- 2. The Wireway cover that is being modified is displayed as a dashed line on the drawing. You can change the cover type to non-punched, punched, or punched with data knockouts.
- 3. Click **Apply** to view these changes.
- 4. Click **Next** to display the next structure and its information.

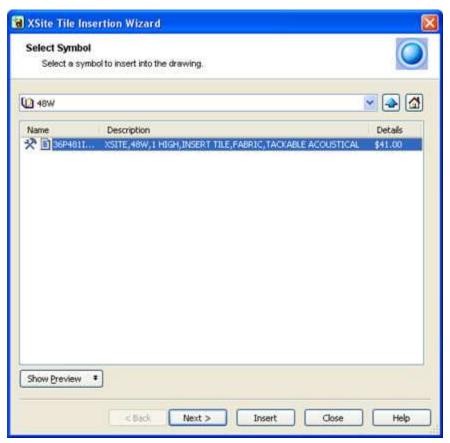
Note: By default all elevations are created with non-punched wireway covers. You can change wireway covers individually in the Elevation Properties.

### Add tiles to Xsite

You will add tiles to the elevations rather than the plan view. When a you create a worksheet take-off, you only need to select the structure's plan view, as there is a link between the elevation and the structure.

1. Click on the <u>Automation palette</u>.

2. In the XSite Tile Insertion Wizard, navigate down to the product level.



3. Hover (do not click) over the desired tile, then click **Insert** to insert the selected tile.

Clicking on a tile will bring up the **Tile Options** dialog.

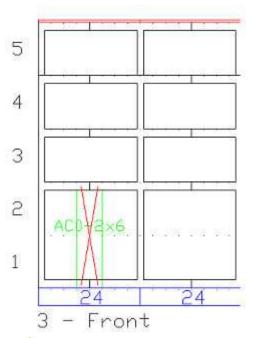
4. Snap the tile into place by selecting an insertion point and a rotation angle.

Note: For easier placement of elevation tiles, turn the 2020 Cap Complete **OSNAP** on. Make sure that only the **Node** snap mode is checked. Snap points are provided in appropriate locations on the Elevation grid to allow precise tile placement.

When placing tiles or furniture, toggling-off the UFO Toggle will disable the warning message: "Item selected is not a frame or door". Some tiles, such as glass, require the same tile to be placed on the other side of the elevation. This will be done automatically by the elevation.

### **Xsite tile rules**

The tool will check tiles for correct fit after you place them into an elevation. It will mark incorrectly placed tiles with a large red X, as shown below:



- In the above example we had a 48" wide structure run. We tried to place a 2 high 6" wide on the elevation, which is not allowed.
- To move or erase a tile, select the tile or the tile text (not the red X marking).
- Each time you place a tile, either from the **Tile** tool, or by copying an existing elevation tile, the tool performs a validation check.
- Unless you have checked **Lock C's & I's** in <u>Automation Preferences</u>, the tool may move vertical structures automatically in order to allow valid placement of a tile.
- You can copy tiles from one elevation to another, individually or in groups.
- Two-sided tiles, such as glass, automatically fill both sides of the elevation.
- The tool checks overlapped tiles and marks them if invalid.

Note: Tiles which **overhang** an elevation grid are not part of an elevation; therefore the tool DOES NOT check them for validity.

- You must identify and manually remove overhanging tiles.
- In a takeoff, the tool counts **only** elevation tiles associated with an elevation. If you want to place individual tiles in a drawing, but do not want them associated with an elevation, you must insert them as plan view symbols from 2020 Cap Explorer.
- To easily determine if any parts are **not** associated with an elevation, select the elevation and move it. **Non**-associated tiles will not move with the elevation and its associated tiles.

#### Construct like tiles on both sides of an elevation

In some cases, both sides of an elevation may require the same, or nearly the same tile patterning configurations. The copyside command is available to quickly and easily tile one side of an elevation just like the other side.

- 1. Tile one side of the elevation.
- 2. Click on the <u>Automation palette</u>.

3. Select the tiled side of the elevation. Click on the elevation or its name, not on a tile.

Both sides of the elevation will then contain the same tiles. You can further modify either side as desired.

Note: Depending on the complexity of the tile design, some tiles that are copied may be invalid because the structure elements are not able to adjust automatically to meet the required rules for tile placement and support.

## Modify vertical structure spacing

### Modify vertical structure spacing

When you create elevations with more than 24" between vertical structures, you can move structures to create varying sized spacing between the vertical structures.

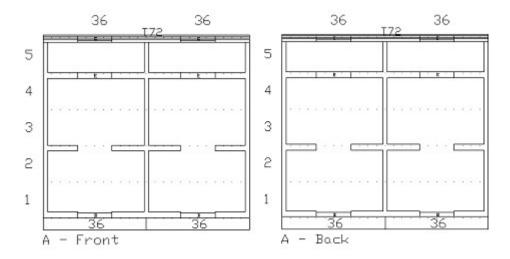
There are two methods to manage this vertical spacing movement.

- Auto-mode
- Grip-drag mode

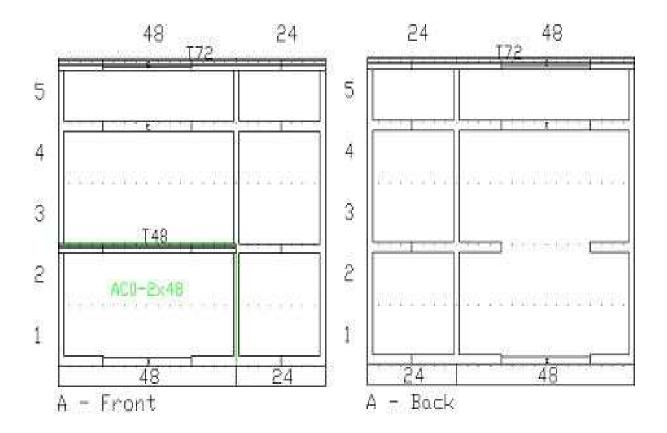
#### Auto-mode

The first method, Auto-mode, occurs automatically while placing tiles. The elevation will move vertical structural components to "fit" the tile being placed.

The example shown below is an elevation with 36" spacing between vertical structures.



Placing a 48" wide tile results in the vertical structures moving to accommodate the tile placement, as shown below:



See <u>Grip-drag mode</u> for the other way of moving vertical structures.

Note: Enabling Lock C's and I's on the General tab of the Elevation Properties Tool can turn off this behavior.

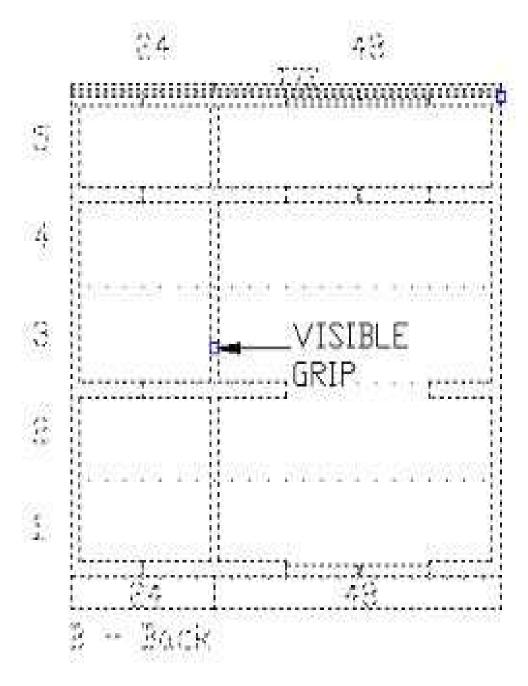
### **Grip-drag mode**

Besides <u>Auto-mode</u>, the other method to adjust the spacing between vertical structure components is the manual "grip and drag" mode. You can manually adjust the spacing using the grips located on the C and I structures.

In the example below we have 24" and 48" spacing.

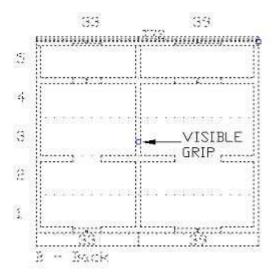
1. Select an elevation.

A visible grip, normally displayed as a small blue rectangle, will appear. This is shown below on the vertical "I" structure of the selected elevation.



- 2. Click and hold the mouse button on the blue grip.
- 3. Drag the structure to the new position and release the mouse button. The structure will lock into the closest legal position.

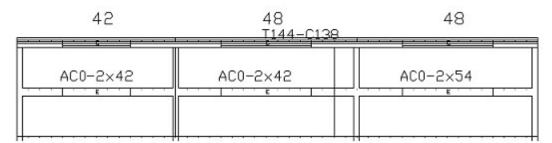
In this example the I structure was moved to the right 9".



Note: After moving a vertical structure, the new spacing dimensions will be visible on the wireway cover. You can de-select the elevation by pressing the Esc key or starting another command.

# **Adjust Traxx Lengths**

As you place tiles on an elevation, the application will automatically create and draw Traxx symbols on the elevation. Once you have placed all of the tiles on an elevation, you can choose to adjust the lengths of Traxx. This can be done to avoid the need to cut Traxx to fit the current tile layout, or to complement the tile pattern that you have chosen. The only restriction on Traxx lengths, is that they must begin and end within 6" of a vertical structure. This is similar to the restriction placed on tiles.

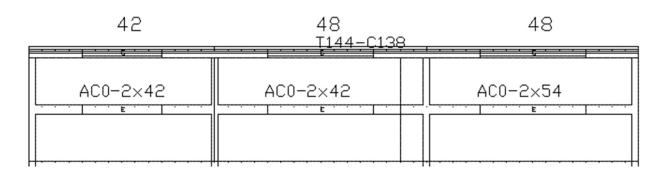


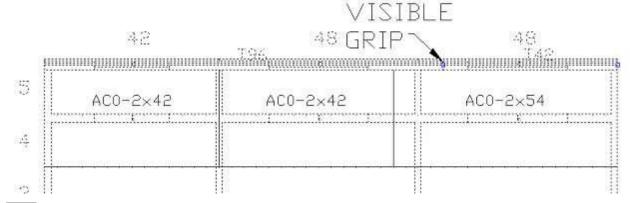
In the example above, three tiles have been inserted on an elevation which has caused the elevation to generate a section of Traxx for them. Along with the Traxx symbol is a tag indicating the length of the Traxx and the dimension to which it should be cut. The tag for this example is "T144-C138". This is read as a section of Traxx 144" long (T144), cut to a length of 138" (C138).

Adjusting the length of Traxx is very similar to adjusting the placement of the I-Structure members.

- 1. Select the elevation. This will display the grips on the Traxx.
- 2. Drag the grip to any allowable location.

In the example below a 144" Traxx was automatically placed. By selecting on the grip and dragging it to the left two new sections of Traxx were created — a 96" and a 42".





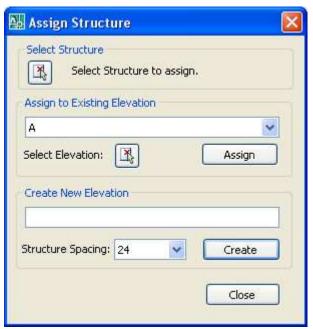
Note: Nodes are provided to snap the grip point to as you move it. If the selected location is invalid, the validation routine in the elevation will move the grip point to the next valid location. This could be the original starting location in some instances.

# Assign existing elevation

Once you have created an elevation, you can assign it to multiple structure runs.

- 1. Click
- 2. Under **Select Structure**, click and select the structure to assign. You can select more than one structure.

3. Under the **Assign to Existing Elevation**, select the existing configuration you want to use.



4. Click **Assign**. The elevation markers will automatically be placed on the structure run.

Note: When you assign an existing elevation to a structure run, the tool will check the run and elevation to ensure that they possess the exact same geometry. It provides a warning if the elevation and the structure run do not match.

## Break elevation link

To break the link between an elevation and a structure run:

- 1. Click
- 2. Select the structure run.

Notice that the elevation markers have now disappeared from the structure run.

# **Select tile options**

# Select tile options

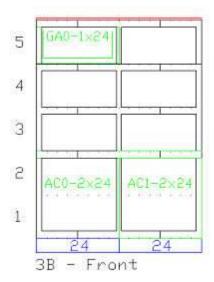
You can option tiles before or after placing them on an elevation. The Tile Tag Manager allows optioned tiles to be tagged differently, similar to the standard Captile system. The tags are shown on the tiles, in the Xsite Tile Schedule as well as the Worksheet takeoff file (Bill of Materials).

- 1. Click
- 2. In the Select Symbol screen of the XSite Tile Insertion Wizard, click on the tile to be optioned.
- 3. In the **Option the Symbol** screen, select the desired options for the tile. Note that you can resize this window.

For step-by-step instructions on optioning, see Select options in the 2020 Options help.

#### 4. Click Insert.

A unique tile tag will be automatically assigned in sequential order. The example below shows an unoptioned tile on the left, with a tag of "AC0-2x24". The optioned tile, on the right, shows a tag of "AC1-2x24".



Once a tile has been optioned, its tag is added to the **Finish Code** list box so that it can be reused. See Reuse an optioned tile.

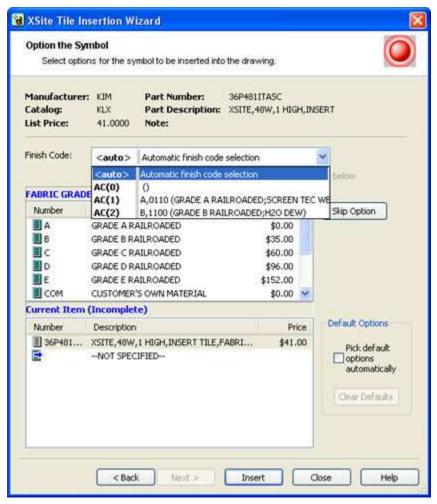
See also: Reuse an optioned tile

Note: The same process can be used on tiles already inserted onto an elevation, by selecting **2020 Options** from the <u>2020 Office</u> menu then selecting the tile to apply options to.

## Reuse an optioned tile

Once you have optioned a tile, you can view its tag in the **Finish Code** list box. You can select any previously optioned tile of a matching tile type from the list.

- 1. Click .
- 2. In the **Select Symbol** screen of the **XSite Tile Insertion Wizard**, click on the tile to be optioned.
- 3. In the **Option the Symbol** screen, from the drop down menu next to **Finish Code** choose the appropriate pre-assigned finish code.



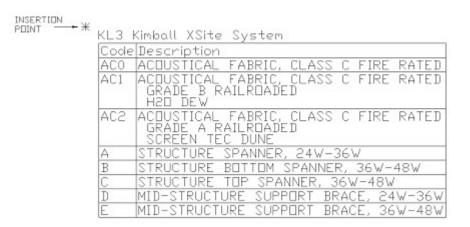
4. Click Insert.

## Xsite tile schedule

The Xsite tile schedule will automatically place a schedule, similar to a legend, in your drawing. The schedule lists the code, type of tile, finish and a legend of codes for the spanners.

- 1. Click
- 2. Enter the text height at the Command prompt.

3. Select the insertion point and rotation of the schedule (top left corner of the schedule).



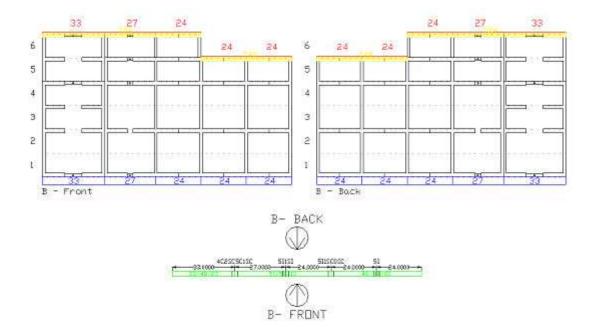
Note: To update a tile schedule, simply click again, enter the text height at the Command: prompt, and the existing schedule will be updated.

### Plan view structure

The Plan View Structure tool creates a layout map of the vertical structure members for the selected structure runs. You can then view and print this layout for installation documentation. The Plan View Structure (PVS) tool will place a square to indicate locations of vertical structure members. At the same time, the PVS will place dimensions for the center to center distances between structure members.

Also, this tool includes structure labels. These labels indicate the height and type of each structure member. This PVS tool does not include the turns placed by Auto Connectors. This tool blocks together the PVS for each structure run. The PVS is on its own layer to allow hiding, moving and color changes as desired.

1. Click ##.



#### 2. Select the structures and press Enter.

#### Examples of structure labels:

- 4C2SC5C1SC This structure member is a 4-high base C with 2-high stack C and 5-high base C with 1-high stacking C.
- 511SI This structure member is a 5-high base I with a 1-high stacking I.
- 511SCOSC This structure member is a 5-high base I with a left facing 1-high stacking C and no right facing C structures.
- 51 This structure member is a simple 5-high base I with no stacking structures at all.

# Worksheet takeoff (BOM) rules

Selecting the structure run or an elevation symbol adds the elevation items to the take off (structural parts, wireway covers, top caps, tiles, Traxx).

Anything else for the takeoff **must** be in the worksheet takeoff selection set (electrical, directional connectors finished ends, hi/lo trim,etc.)

# **AutoConnector Preference Settings**

Setting AutoConnector preferences is similar to setting preferences for any other automated line. To set Auto-Hardware Preferences for KLX, access it from the <u>Automation Center for Kimball</u>.

# Special considerations for elevations and structure runs

#### Copy / Paste:

DO NOT copy/paste an elevation into a drawing which already contains an elevation of the SAME NAME.

If you copy and paste a structure run and its elevation symbols into a drawing that doesn't have the elevation in it, you will get a break link message.

Copying and pasting both front and back elevations, and their structure run and both elevation symbols together is recommended.

Copy/Paste DOES NOT carry Tile Tag Management information into the new drawing. It is best to Copy/Paste elevations that do not contain optioned tiles.

#### Insert:

DO NOT Insert an elevation into a drawing that already contains an elevation of the SAME NAME.

Insert DOES NOT carry Tile Tag Management information into the new drawing. It is best to Insert elevations that do not contain optioned tiles.

#### Move:

You can move elevation symbols independently.

#### Erase:

Must have all structure segments of the run and both elevation symbols in the erase selection set to complete the erase. If you do not erase all components together, a warning message appears.

#### 3D Elevations:

3D elevations are not dynamic, meaning if you convert an elevation to 3D, and then modify the elevation, the 3D image will not show the new modification until you recreate it.

#### **Custom Catalog Items:**

You can make elevations and structure runs into Cap Standards and then Custom Catalog entities.

Elevation and structure run Cap Standards in a drawing are NOT FUNCTIONAL in Cap Structure Builder until you have undone them, using the Cap Standard Undo command.

#### **Automation Center for Kimball**

### **Automation Center for Kimball**

1. Click on the 2020 Office toolbar.



Tip: You may also use the 2020 Office ribbon to access the application functions.

- 2. Notice the tabs for different manufacturers on the side (available only if these manufacturer catalogs were installed). Click the Kimball tab.
- 3. Click the dropdown arrow to select the appropriate **Kimball** catalog.

See the topics below for information on commands available for each Kimball catalog:

- Automation Center Xsite KLX
- **Automation Center Interworks EQ**

#### **Automation Center - Xsite KLX**

See the table below to find the corresponding help topic for each icon or command:

Icon	Name	Help topic
------	------	------------

	Create Structure Run	Create structure runs
(3)	Auto Hardware	<u>Auto-hardware</u>
	Create/Assign Elevation	Create elevations for a structure run
TL	Insert Elevation Tiles	Add tiles to Xsite
	Elevation Properties	Modify an elevation
	Edit the Structure Run	Edit an existing structure run
8	Break Elevation Link	Break elevation link
	Copy Elevation Side	Construct like tiles on both sides of an elevation
	Create/Update Tile Schedule	Xsite tile schedule
111	Create/Update Plan View Layout	Plan view structure
<b>3</b>	Auto Hardware User Preferences	<u>Auto-hardware</u>
A Not Backety	Auto Bracketry	<u>Auto-Brackets</u>
£0	Convert Plan to 3D	See <u>Convert Plan to 3D</u> .
0,5	Convert 3D to Plan	See Convert 3D to Plan.

# **Automation Center - Interworks EQ**

See the table below to find the corresponding help topic for each icon or command:

Icon	Name	Help topic
(3)	Auto Hardware	<u>Auto-hardware</u>
<b>3</b>	Auto Hardware User Preferences	<u>Auto-hardware</u>
CT	Cap Tile	See the Captile section in the 2020 Office help.
	Generate Tile Schedule	See Create a tile schedule in your drawing in the 2020 Cap Complete help.

2	Update to Elevation System	See Correct missing or damaged tile configurations in the 2020 Cap Complete help.
25	Refresh Tile Configurations	See Switch between elevation and tag mode in the 2020 Cap Complete help.
💃 Nuto Backetry	Bracket Gen	Auto-Brackets
	Convert KL6 to KLE	Convert KL6 to KLE

## Knoll

See the following sections for information about 2020 Cap Complete commands specific to Knoll:

**Knoll Currents** 

**Elevation Template** 

2020 Office applications

#### **Knoll Currents**

The Currents product line is Knoll's next generation of office furniture. It recognizes that organizations rely increasingly on computers and other technologies, but they need to change and reconfigure their work environment more rapidly then ever before. Currents is designed to address these needs.

Currents service walls connect to form spines that define the center of a cluster of workstations. They provide ready access at any point to power, data, and communications. Service walls also integrate easily with Knoll Morrison, Equity, and Reff systems. Vertical panels and furniture may be attached to the Currents service walls anywhere along their length.

Service walls are composed of studwall-like structural frames and removable covers or tiles. Covers attach to the studs at any 12-inch increment. The covers may be painted, upholstered or tackable upholstered, slatwall, or cable tray.

Given all these options, keeping track of the covers and their placement is a major task. <u>Elevation Template</u> solves this problem by placing and tracking the covers for any configuration you create.

Use the **Automation palette** to access commands for placing Currents service walls.

#### See:

- Place service walls
- Place ends on service walls
- Place add-up panels
- Add items along the length of the service wall
- What is a service wall run?

# **Automation palette**

To activate the Automation palette, right-click on any 2020 Office toolbar, then select Automation palette.

Icon	Name	Description
()=	Finish Service Wall End	Place ends on service walls
þe	Mark Wall Start Components	Mark or unmark a wall start post
<u>*U</u>	Push Frame Away From Service Wall	Push frame away from service wall
	Clear Currents Run	Remove a wall configuration from a drawing

## Place service walls

Begin by placing the service wall frames or panels as you normally would, keeping the following in mind:

- Currents wall frames and panels use **Unidentified Furniture Objects (UFO)** to assist with placement and connection. After placing wall frames, use AutoConnectors to remove the UFOs and place the connectors.
- 2020 Cap provides a <u>Finish Service Wall</u> button that applies the correct ends to the service wall. Ends include T connectors for panels, stabilizer end cabinets, flat ends, and more.
- Service walls may also include add-up panels on top of the panel frames for privacy and light control.
- Service walls are designed for the attachment of a variety of components anywhere along their length.
- 2020 Cap divides service walls into runs for the purpose of applying wall covers. A run is any straight section of a service wall.

#### Place ends on service walls

Currents service walls require the additional step of placing wall ends. There are a variety of end types and complex rules for placing the proper ends. The Finish Service Wall feature, also known as Finished End Assembly Placer (FEAP), knows these rules and assists you by offering only the wall ends that are applicable.

Before doing the example below, place at least one 48" high standard crown service wall frame from the Knoll Currents catalog.

#### Example - place ends on service walls:

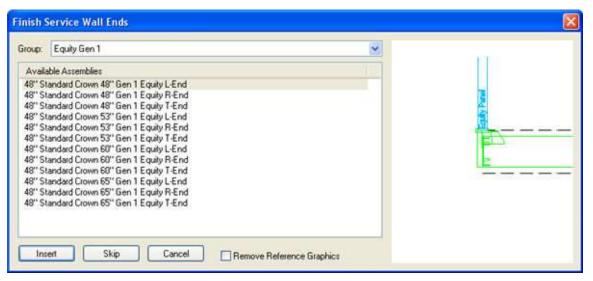
- 1. Click the Finish Service Wall icon on the Automation palette toolbar.
- 2. Click on any service wall frame or component.

Note: If you have not been working in a Library prior to clicking the Finish Service Wall button, the command line may display an error message. Select the **Currents** Library to resolve this problem.

The **Service Wall Finisher** dialog box displays. It lists the options for the first end. It also highlights the first service wall end in the drawing. This end will be zoomed into on the drawing and a dotted red bounding square will be placed around it.

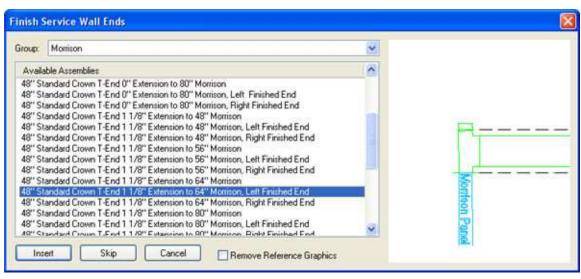


The **Service Wall Finisher** dialog box has a drop down box at the top called **Group**. This drop down allows you to select the group (or type) of end you want to place. The group selected determines what is listed in the window below, called the **Available Assemblies** window. In the example below, the window lists all the **Generation 1 Equity** ends. The window to the right shows a preview of the assembly selected in the **Available Assemblies** window.



- 3. Click on the **Group** drop down and select **Morrison**.
- 4. Under **Available Assemblies**, scroll down and click on the '48" Standard Crown T-End 1 1/8" Extension to 64" Morrison, Left Finished End'.

Notice that the preview window has a blue reference graphic entitled **Morrison Panel**. This reference graphic is present to give you a visual indication of where the Morrison panel should be placed once this end is inserted into the drawing. The reference graphic is like a UFO and does not show up in take-offs. If you do not want the reference graphic included when you insert this assembly into your drawing you can check the **Remove Reference Graphics** box at the bottom of the dialog. Since the reference graphics will be helpful when placing the Morrison panels, we will not remove them.



5. Click Insert to place the selected end component and move on to the next end component.

Or, click Skip to move on to the next end without making changes, allowing you to apply the end later.

6. Repeat steps 3 to 5 for each service wall end.

Warning: If you make a mistake placing the finished ends assembly, be sure to erase all the parts of the assembly before running **Finish Service Wall** again. If you fail to do this, since the command places new parts each time it is run, unneeded parts will be placed.

## Place add-up panels

Currents service walls also include add-up panels. You may place the add-up panels on top of the service walls at any time. Add-up panels are ignored in terms of tiles.

A feature incorporated into **Auto Hardware** enabled furniture lines is Auto Stacking. When you place a stacking frame on top of a base frame it reads the height of the base frame. It then changes the default height of the stacker to that height. This makes tiling and 3D conversions much easier. If you double stack, the second frame will read the frames below it and adjust its height accordingly. Then it will adjust the tag to be above the first stacker.

Here are a few things to remember with using the Auto Stacking feature.

- Place panels from the bottom stacking up.
- Copying stackers onto frames does not change the default height or tag location.
- Auto Stack only works upon insertion from the catalog.
- If you place a base frame on a stacker it will change the default height of the base frame, probably not what you want.
- The insertion point and rotation of the stacker must be the same as the base frame it is being placed on.

# Push frame away from service wall

If you placed a finish wall too close to a service wall, use this command to push it away.

1. Click on the Automation Palette toolbar.

#### 2. Select the frame.

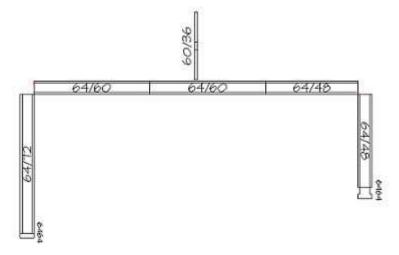
The frame will be pushed away from the service wall.

# Add items along the length of the service wall

Currents integrates easily with Knoll Morrison, Equity, and Reff systems as well as other Currents components. Vertical panels and furniture may be attached to the Currents service wall anywhere along its length.

In 2020 Cap Complete, connection nodes are available every 12 inches along the length of the service wall. These serve as convenient attachment points. After attaching a panel to a wall, you may move the panel to any point along the wall using the 2020 Cap Complete **Move** command.

In the example below is a Currents run with Equity attached to it.

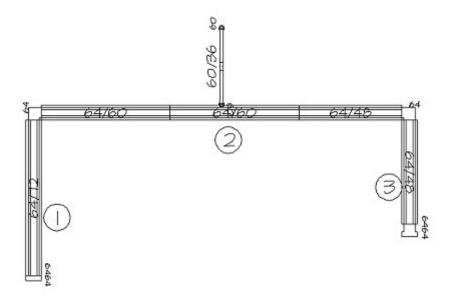


## What is a service wall run?

Service walls are divided into runs for the purpose of applying wall covers. A service wall may be very complex. Dividing the wall into runs simplifies the cover application process.

A run is any straight section of a service wall. A run may be a stand-alone wall or any straight section of multiple inline walls separated by a corner or intersection. A single service wall may consist of several runs.

The following Currents example consists of three separate runs:



## **Elevation Template**

The Elevation Template tool is located within the Automation Center.

As part of the Elevation template tool Knoll has created two new catalogs: **KE1: Knoll AutoStrada (Elevation Only)** and **KE2: Knoll Currents (Elevation Only)**. These catalogs are designed specifically for use with the Elevation Template and are named appropriately.

While these catalogs are visible in Explorer they should never be used to place products from there. These special catalogs contain only the parts that can be placed on an elevation template. KE1 is a subset of the KAS catalog and contains all the parts that have elevation symbols that can be placed into an elevation template. KE2 has the same relationship with the KCU catalog. These catalogs were created so that users would not have to search through their parent catalog for parts that could be placed by the ET tool.

- 1. Click on the 2020 Office toolbar.
- 2. Notice the tabs for different manufacturers on the side (available only if these manufacturer catalogs were installed). Click the **Knoll** tab.
- 3. Click the dropdown arrow to select the appropriate **Knoll** catalog.

The buttons are laid out in workflow order. Read the following topics in the order that they appear to learn how to use the Elevation Template:

- Create or apply an elevation template
- Apply coverings
- Push template to opposite
- Copy Plan to 3D
- Bind covers
- Validate elevations
- Break link
- Settings

# Create or apply an elevation template

Before doing the exercise below, place **three** service walls from the Knoll Currents catalog on your drawing.

- 1. Make sure you have selected the appropriate catalog in the dropdown box.
- 2. Click

This will bring up the **Elevation Template** dialog.



Note: If you selected a frame before the command is run, that "pre-selected" frame and its associated run would automatically be selected when this window appears. There would be no need to click on the **Select Structure** button.

- 3. Click and click on any of the service spine walls in the run. The command will find all of the service wall frames in the run and report how many "structures" it selected.
  - Note: Once you make your selection, the dialog indicates the number of frames found in a "run". A "run" is some number of frames connected together inline. Frames that branch off at an L or T connection are a separate run and require their own elevation template.

If one or more elevation templates with the same frames in the same order already exist in the drawing, those templates are listed in the **Assign to Existing Elevation** box of the dialog.

- To create a new configuration, type the name under Create New Elevation. For this exercise type Training-1.
- 5. Press Create.
- 6. The front elevation template will be attached to your cursor for placement. Select the insertion point and rotation angle on the drawing.
- 7. The back elevation template will be attached to your cursor for placement. Select the insertion point and rotation angle on the drawing.
- 8. The next step in the workflow is to start placing covers on the elevation templates. See Apply coverings.

Note: The service wall frames placed in plan view have been converted into a Cap Standard. All selected frames are now in a single block. This is one of the fundamental paradigms of the Elevation Template, it converts a series

of frames into a run and then treats that run as a single big frame. This is required to support the ability of covers to span between frames. If covers did not span between frames, there would be no need for this tool and Panel Builder would be used instead.

Warning: The Cap standards created by the Elevation Template tool should not be exploded or otherwise manipulated. The contents of the standard are designed to be maintained by the Elevation Template (ET) tool. If you manually manipulate the standards created by ET you will break them and you will get unexpected parts on your take-off. Note that only the frames are part of the standard — the connectors generated by AC and the ends placed by FEAP are not part of it. When you copy/move/erase a run, make sure to include these ancillary parts.

## **Apply coverings**

In the exercise below, you will place coverings on the elevation templates you created in the topic <u>Create or apply</u> an elevation template.

Do only the **front** side of the elevation template.

- 1. Make sure you have selected the appropriate catalog in the drop-down box.
- 2. Click ...

This will bring up the Elevation Template Tile Insertion Wizard.

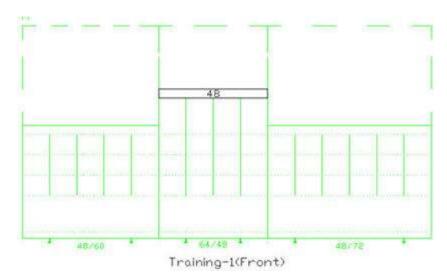
- 3. Navigate your way into the catalog to select the appropriate cover. For this exercise, select a crown cover.
  - Note: For details about the Select Symbol dialog, see Place a product using Insert Symbol in the 2020 Cap Complete help.
- 4. Hover your mouse over a part in the top level to highlight and select it.

Do not click on the part, as this will bring up the **2020 Options** dialog.

5. Click on the **Insert** button.

This will place the selected item on you cursor for placement.

6. Once on your cursor, the part acts just as if it were being brought in from the Explorer bar. Since it is an elevation view of the part the only place you would ever want to snap it to is onto an elevation template. Snap this cover as shown below.



Note: Notice when snapping there are nodes in all the places where you can place covers. The elevation template does not represent the physical structure of the frame; it is a visual representation of where

covers can go. The section at the top of the frame is the right size for crown cover to be placed. All the other lines on the template represent locations where covers can go. The dotted line section above the frames is a visual indication of how high above the frame a stacked panel can go.

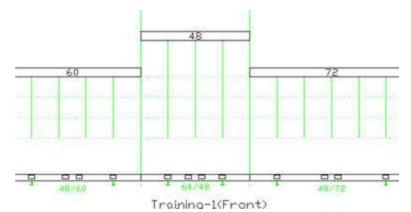
7. Place the other crown covers.

Note: If you place the wrong cover or snap a cover into the wrong place, simply use 2020 Cap Complete move or erase to fix the problem.

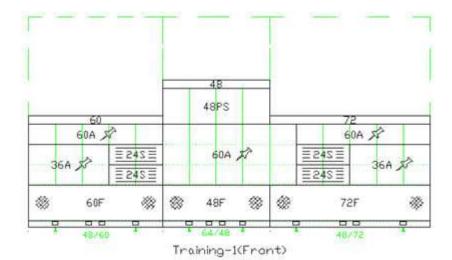
This ability to manipulate covers with 2020 Cap Complete commands is one of the most powerful features of ET. It means that you can copy covers, not only within a template, but between templates, even if those template are in different drawings.

Currents and AutoStrada covers are compatible. You can place AutoStrada covers on Currents Service Walls and vice versa.

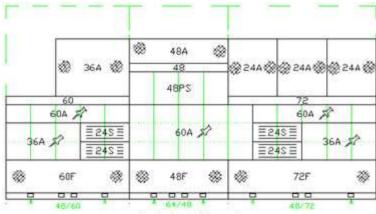
- 8. Once you place the crown covers, navigate up two levels, then into "Raceway covers" > "four outlets, each side".
- 9. Place four outlet raceway covers on each frame. Notice that the raceways snap to the bottom of the elevation template but are placed in the correct location.



10. Place other covers on the template, such as slatwall covers and tackable upholstered wall covers.



11. Select stacking panels by navigating to the add-up panels section of the catalog, then place the covers.



Training-I(Front)

Note: UFOs are shown because these panels are supported by AC for legacy purposes. In a future release they will no longer appear. For now, simply erase the UFOs.

12. See Push template to opposite for the next step.

# Push template to opposite

Once you have completed the front elevation template, you can simply use the **Push Template to Opposite** button to do the other side.

Before doing the exercise below make sure you have completed the previous step, Apply coverings.

1. Click

This will bring up the **Push Covers** dialog.

You can either push only the double-sided covers or all of the covers. For this exercise, click on **Double** Sided Only.

At a minimum, the double-sided covers should always be pushed. These are parts where a single part number brings in a pair of covers. Examples are parts like the add-up panels (while a single part is visible on both sides of the template), crown, raceway and structural base covers. Since our layout does not require that we copy all the covers, we will only push the doubled-sided covers.

- 3. At the command prompt 2020 Cap Complete will display **Select the side to push from:**. Select the elevation template that has the covers (the front). The command prompt will detail how many covers were pushed.
  - Note: If you select the empty elevation template, this command will push those empty covers to the other side, erasing all of your work. If this happens, undo will get you back to the original state.
- 4. After the command has been run, the double sided cover will be pushed from the front template to the back template.

Notice that covers are correctly pushed to their correct mirrored locations on the opposite template.

- 5. Use Apply coverings to complete the back template. Place some marker boards.
- 6. Save your drawing.

Note: Both the front and back elevation templates are now completed. Yet, if we were to make a takeoff of this drawing now, none of our covers will be counted. **This is because parts drawn in elevation do not show up on take-offs**. 2D and 3D parts are counted, but parts in elevation are not. This is done because

this one elevation template we have created could be pointing at multiple occurrences in the drawing. If there were 500 identical workstations in this drawing, this one elevation template could be pointing at all 500. If you want parts to be part of the take-off, you must attach the parts in the elevation template to their associated Cap standards in the drawing by using the Bind covers command.

7. Before running Bind Covers, see Copy Plan to 3D to look at what happens if you do not run Bind Covers.

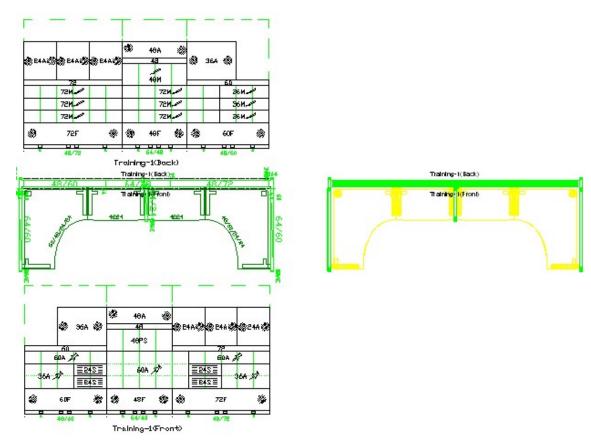
# Copy Plan to 3D MFG

Before you run Bind covers let's take a look at an example of what happens if you do not run the command.

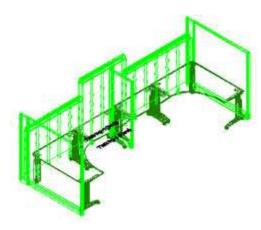
1. Click on the button on the <u>Cap Tools</u> toolbar. You may also use the <u>2020 Office ribbon</u>.

The command will prompt you to select objects.

- 2. Select all the plan view (2D) parts you have built. Draw the selection window from right to left to make sure to include all the parts.
- 3. Press Enter to accept the selection.
- 4. This will bring up a prompt asking for the **Base point or displacement:**. Select a point in the middle of the selected parts by clicking on it.
- 5. This will bring up the command prompt request for the **Second point of displacement**: Pick a point off to the right side and place the 3D as shown below.



6. From the 2020 Cap Complete View menu, select 3D Views, SW Isometric.



Notice that there are no covers on the 3D representation. This is because the Bind Covers command has not been run. Until Bind is run, the covers we placed on the elevation templates will not be placed on the 2D or 3D representations.

See Bind covers.

### **Bind covers**

Before doing the exercise below make sure you have completed the previous step, <u>Push template to opposite</u>. Also, try to do <u>Copy Plan to 3D</u> so that you can visualize what happens if you do not run Bind Covers.

1. Click

2020 Cap Complete will prompt you to Select Objects.

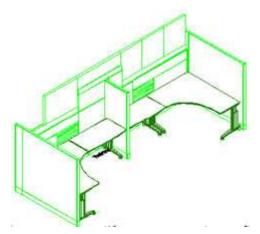
- 2. Type all and press Enter.
- 3. 2020 Cap Complete will report how many parts were found. Press Enter again to accept the selection.

  Note: In order for a bind to be performed on an elevation template, either the front or the back template must be selected, or the Cap Standard that the elevation template is linked to, or both. In order to bind all the elevation template in a drawing, you need to type "all" for the selection set.

Notice that the covers are now displayed on the 3D representation.



Behind the scenes, the Bind Covers command has copied all the parts in the elevation template to all of the 2D and 3D Cap standards linked to the elevation template. All the parts on the 2D and 3D Cap Standards will show up on a take-off.



5. See Validate elevations for the next step.

Note: All the point parts placed by Bind onto the 2D Cap standard are located at their correct locations so that when that standard is copied to 3D after a bind has been run all the covers were correctly placed. If you make a change to the elevation template and bind it again, those changes will be reflected in the Cap standard. If there were 500 copies of this Cap Standard, making a change and running bind would change all 500.

Bind is a very important feature in ensuring that all the parts placed onto a service wall are configured to that elevation design and counted for Bill of Material purposes.

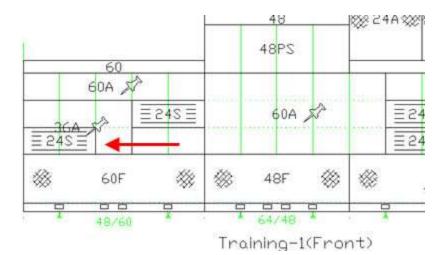
### Validate elevations

Run the Validation command to check for any errors in the elevation template. Validation does not correct any errors, rather it marks errors so that you can correct them. If the item marked with a validation error is a valid part, it will be bound to the template and therefore show up on the BOM when the takeoff is run.

See Errors checked by Validate elevations for a list of errors checked by this command.

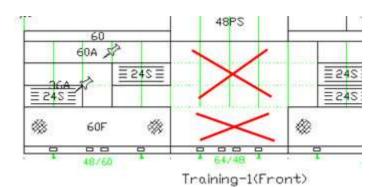
To see validation in action:

- 1. If you copied the plan to 3D, change your view back to plan view by typing plan at the command prompt.
- 2. Press Enter to accept the current model.
- 3. Zoom in on the front elevation template and move one of the slatwall frames (or another type) as shown below.



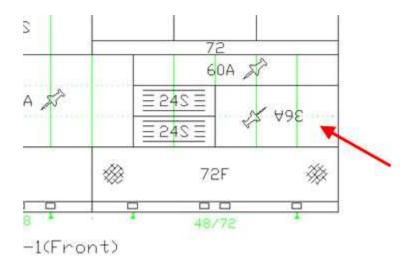
This will result in an empty space and in an overlap condition.

4. Erase one of the structural base covers and a tackable cover as shown below.



This results in a double-sided cover mismatch and another empty section.

5. Rotate a cover 180° as shown below.



This will result in a rotation error.

# 6. Click on **Validation Elevations** ✓.

This will bring up a command prompt asking you to "Select elevations to validate.". The selection set for validation is the same as for bind, that is, you can select a 2D or 3D Cap standard or either the front or back elevation template to validate a given template.

- 7. To validate the entire drawing type all and press Enter.
- 8. Press Enter again to accept the selection set. Red error X's will appear on your drawing.
- 9. Move your mouse over each red X. The nature of the error will appear on the hyperlink field.
- 10. In order to fix errors, make the changes required to fix the error.
- 11. Run Bind and Validate until all the errors are gone. There is no need to erase the error Xs, they are erased automatically when Validation is run after the error has been fixed.
- 12. For the next step, you will copy covers between templates. See <u>Break link</u>.

Note: Notice that there is no visual indication of whether bind and or validation has been run. This is a tradeoff in functionality. Elevation Template was designed to be robust and support the use of 2020 Cap Complete commands like move and copy. If validation marked covers as "bound and validated" we would have to prevent those covers from being moved or copied, since moving a marked cover to another location would give the illusion that it had been bound and validated when it had not.

If you intentionally create a double-sided cover mismatch, for example, wood structural covers on the aisle side and painted on the interior, validation will mark this as an error (double sided mismatch). Since all the covers placed on a template are included in the take-off (regardless of whether they have been marked with and error) you can simply ignore that error and delete the error X.

# **Errors checked by Validate elevations**

The Validate Elevations command checks for the following errors:

- Check for overlapping tiles: if one cover completely or partially overlaps another, validation will mark the overlapping tiles.
- Check for mismatched double sided tiles: if a double sided cover placed on one side of an elevation template does not have a matching double sided cover on the other side, validation will mark it as an error.
- Check if elevations match standards: if parts on the elevation template do not match the parts on the associated 2D and 3D Cap Standards an error is generated. This is an indication that bind must be run.
- Check if tile rotation matches elevation rotation: elevation templates and the covers placed on them must have the same rotation. If they do not, they will be marked as incorrect.
- Check for empty spaces on elevation: since we are placing rectangles onto a rectangular template, it is easy to surround an area with covers and leave a section uncovered. Validation will mark all uncovered areas on the template.
- Check for orphaned standards: if a template associated with a Cap Standard is somehow deleted, that standard is an orphan. This is an error and will be marked. If an elevation template is inadvertently copied (so that there are two of the same) this validation will erase the extra parent.
- Check for missing automation: all the parts in the special elevation catalogs (KE1 and KE2) should have entries in the automation database. If they do not, an error is generated.

Note: To change the errors checked by Validate Elevations, see Settings.

#### **Break link**

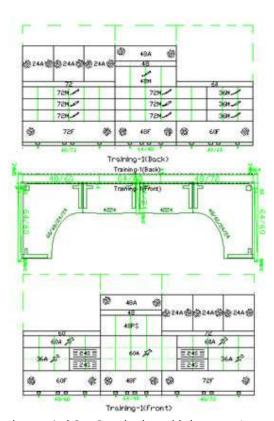
In the exercise below you will create a new template called Training-2, then copy the covers from the existing template Training-1.

1. Copy the 2D Training-1 Cap Standard to the left of the existing configuration as shown in this image.

Training-1(Back)

48/40

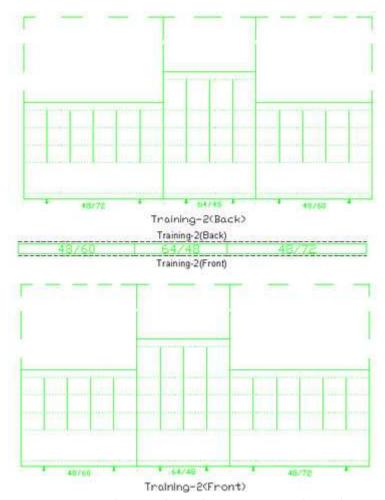
Training-1(Feet)



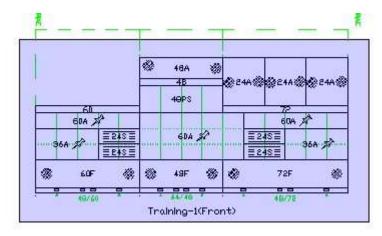
- 2. If you were to do a worksheet takeoff now, all the parts in that copied Cap Standard would show up. In order to prevent that, you need to break the link between the Cap Standard and its associated Elevation Template. Click . This will bring up a "Select objects:" command prompt.
- 3. Select the 2D Training-1 Cap Standard you just copied and press Enter to accept the selection set. The command runs and removes the Cap Standard and breaks the link. The three frames left are simply three frames, just as if they had been brought in from the Explorer bar.
- 4. Run <u>Create or apply an elevation template</u> on those new frames now. This will bring up the **Elevation Template** dialog listing Training-1 as an available elevation to assign.

This is because when structures are selected the tool looks through the entire drawing and shows all the elevation templates that match the frames selected and offers them as possible choices. Any matching template can be assigned to a new run. Of course, if a new configuration is desired, it can be created.

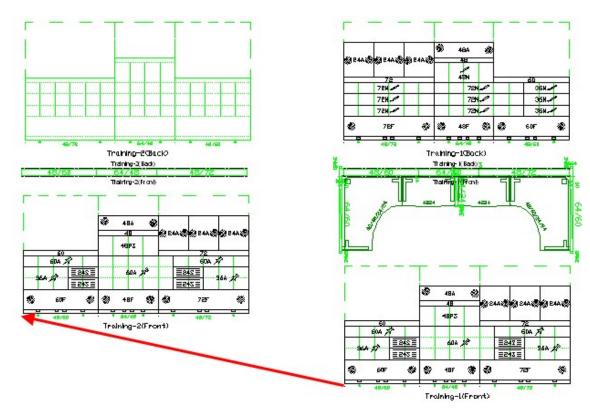
5. Give the new configuration the name Training-2, press Create and apply the front and back templates as shown here.



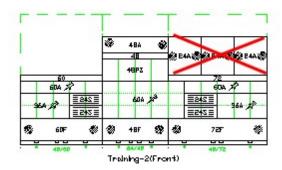
6. Copy all the covers from the front of Training-1 to the front of Training-2. Be careful to use a selection set that copies the covers but not the elevation template.



7. Make sure to pick displacement points on a node of the templates so that the covers are placed correctly.



8. Erase all the stacking panels on the front template of Training-2.

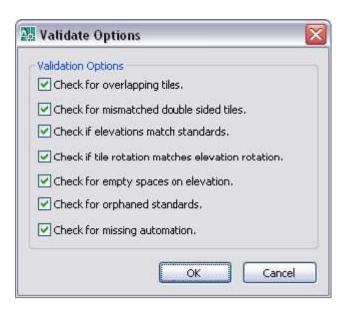


- 9. Click and push all the covers to the other side.
- 10. Run Bind covers and validate the new configuration.
- 11. See <u>Settings</u> for the next step.

# **Settings**

To verify or change the errors checked by the <u>Validation</u> command:

Click . This will bring up the **Validate Options** dialog.



This dialog contains all of the errors that validation checks for. Usually there is no reason to clear any of these validation checks. However, if you do not want to utilize a validate checking routine, you can disable it here.

#### **Auto-hardware**

Auto-Hardware analyzes panels within a selection set and adds the required trim and junctions. You must properly snap panels together for Auto-Hardware to work. Auto-Hardware detects manually placed connectors and marks them in the drawing, and does not place any of its own connectors at those locations. For example, you must place utility poles, since Auto-Hardware does not place another junction at that location.

1. Click on the Automation palette.

This activates the tool and prompts on the command line to select objects.

- 2. Use a window or crossing selection to select everything to be analyzed.
  - Note: You must select everything that is connected together in one selection set, so that all parts that impact each other are considered. Failure to do so results in incorrect trim and junction placements.
- 3. When the selection set is complete, press Enter.

If this is the first time Auto-Hardware has been run for the drawing session, the **Auto-Hardware User Preferences** dialog opens.

Note: To access the Auto-Hardware User Preferences dialog 'on demand', click on the Automation tool palette.

This dialog consists of two tabs: **Notes** contains important information regarding the Auto-Hardware function, and **General** contains choices for Junction and Trim Top Cap Material, Panel Top Cap Material as well as type of Change of Height Trim to apply.

4. Once all necessary selections have been made, clicking **Done** dismisses the dialog and allows Auto-Hardware to start processing. A progress bar on the screen displays until the routine has finished, at which point the bar disappears and the drawing is displayed with the new connectors in place.

If any connectors have been placed manually prior to running Auto-Hardware, the routine finds those

junctions and marks their locations with 10" yellow circles.

All connectors, whether manually placed or inserted by Auto-Hardware, appear in the Worksheet takeoff as standard connector line items.

### **Steelcase**

## **Steelcase Style Number Conversion Wizard**

In January 2004, many Steelcase products changed style numbers, catalog codes, or both. In some cases this realignment also resulted in changes to parts option code sequences. The Steelcase Style Number Conversion Wizard converts drawings or worksheets with order information prepared using the OLD style catalogs and style numbers to their NEW catalog equivalents.

# **Converter capabilities**

These Style Number Converters should not be considered as a "magic button" that miraculously converts Worksheets and drawings without human intervention. Unfortunately, it is not possible to completely translate all style numbers to the new format without human intervention. In places where the data is unclear, the user is asked to pick among valid choices.

The converters are based on a database supplied by Steelcase that maps old style numbers to their new style number equivalents. In some cases, old style numbers map directly to new style numbers and/or catalog codes. In other cases, a style number may be moved from a catalog code to several different catalog codes. When the converters encounter an item where it is ambiguous as to which catalog code to use as the new replacement, you are prompted to choose between valid possible replacements.

Because of possible changes to the option trails, option data entered on the old style items may be lost. The converters provide the user the ability to navigate and select the new option trails during the conversion process. These choices are made easier by displaying any data (including descriptions and options) that the old item contained. In essence, the process can be much like re-optioning product line items.

#### See:

- Conversion results
- Convert a 2020 Cap drawing

## Convert a 2020 Cap drawing

Warning: We highly recommended that you make a backup copy of drawings (and tileconfig.xml if present) before starting the conversion process.

- 1. Load the drawing to be converted.
- 2. From the 2020 Office menu select Convert, Steelcase Style Number Conversion Wizard.

The Style Number Conversion Utility dialog appears.

3. Click **Select Objects** to choose areas of the drawing for conversion. This would allow different choices for converted items in different areas of the drawing.

Or, check **All Objects** to convert the entire drawing. All like items will be converted to the same new style number and/or catalog code.

Note: Drawings containing CapTile configurations must be converted as a whole. In such drawings, the dialog changes slightly.

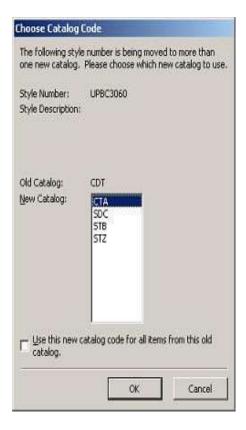
#### 4. Click **OK** to start the conversion.

The conversion process continues until an item requiring user intervention is encountered. Depending on the type of conversion required, different dialogs may appear.

When a Catalog code requires a user selection, the dialog box below appears.

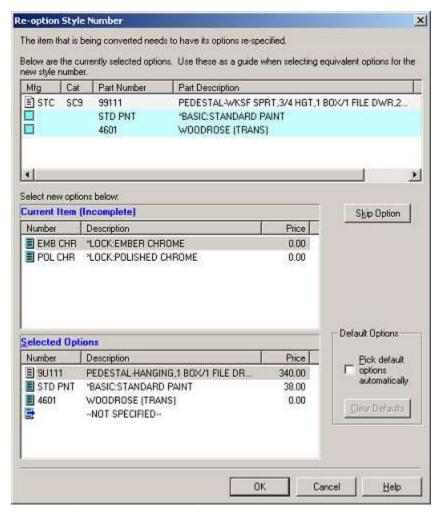
Select the desired new catalog code for the converted item.

Check the box at the bottom to speed up the conversion process. The selected new catalog code will be used for any upcoming conversion item coming from the same old catalog.



The example below shows an item that had options where the option trail has changed in the new style number. Note that original options will be retained wherever possible, up to the point that re-optioning is required.

The top window displays the worksheet item and its retained options. The middle window displays and allows selection of the next required option selection. The lower window displays the newly converted part and its selected options. You may choose to select options or not.



- 5. Click **OK** to finish the conversion of this item and proceed on to the next item to be converted.
- 6. When all items in the original drawing have been processed, you will see a message stating that the conversion is complete. Click **OK**.

A list of converted Steelcase parts is available in the 2020 Cap Complete text window. You can copy and save this list for future reference.

### **Auto-hardware**

Auto-Hardware analyzes panels within a selection set and adds the required trim and junctions. You must properly snap panels together for Auto-Hardware to work. Auto-Hardware detects manually placed connectors and marks them in the drawing, and does not place any of its own connectors at those locations. For example, you must place utility poles, since Auto-Hardware does not place another junction at that location.

1. Click on the Automation palette.

This activates the tool and prompts on the command line to select objects.

2. Use a window or crossing selection to select everything to be analyzed.

Note: You must select everything that is connected together in one selection set, so that all parts that impact each other are considered. Failure to do so results in incorrect trim and junction placements.

3. When the selection set is complete, press Enter.

If this is the first time Auto-Hardware has been run for the drawing session, the **Auto-Hardware User Preferences** dialog opens.

Note: To access the Auto-Hardware User Preferences dialog 'on demand', click on the Automation tool palette.

This dialog consists of two tabs: **Notes** contains important information regarding the Auto-Hardware function, and **General** contains choices for Junction and Trim Top Cap Material, Panel Top Cap Material as well as type of Change of Height Trim to apply.

4. Once all necessary selections have been made, clicking **Done** dismisses the dialog and allows Auto-Hardware to start processing. A progress bar on the screen displays until the routine has finished, at which point the bar disappears and the drawing is displayed with the new connectors in place.

If any connectors have been placed manually prior to running Auto-Hardware, the routine finds those junctions and marks their locations with 10" yellow circles.

All connectors, whether manually placed or inserted by Auto-Hardware, appear in the Worksheet takeoff as standard connector line items.

### **Teknion**

Because Teknion may not provide any tags in their data for the **Show Part Number/Tag function**, 2020 Cap automatically assigns tags to Teknion symbols. These tags contain the Part Number added to symbols when they are inserted. Symbols that came from the manufacturer with tags will insert with the tags the manufacturer provides.

The Teknion Panel Builder Configurations include positional information (LOC) as well as the height (HT). The ORD is the ordinal or the position of the frame, for example, if you had a stack-on, it would be ORD 2. NS is the number of slots. In the following example we have a base (1) then (2) elements =3. This is the information that is present in the Teknion SIF file so they know how to build the frame.

