



## *The Ribbon is Your Friend. No, really.*

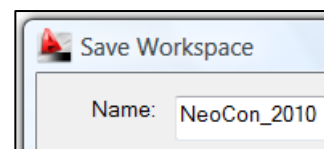
### **TOOL NO. 1: THE GOVERNING BODY OF WORKSPACES**

**Workspace** definition (per the Help menu): *Workspaces are sets of menus, toolbars, palettes, and ribbon control panels that are grouped and organized so that you can work in a custom, task-oriented drawing environment.*

**MEMO:** At the office, if you have already ‘arranged’ your Ribbon (or are still using Toolbars), I would recommend that you first create a workspace of your current arrangement so you can return to that condition when you’re finished ‘experimenting’.

#### **How to Create a Workspace**

- 1.. To save your current workspace by name, click the *Workspace Switching* icon on the right half of the status bar, then click *Save Current As*.
- 2.. Enter a name for the current workspace, then click *Save*.



Once you learn more about the Ribbon, you can come back and update your Workspace.

### **TOOL NO. 2: HOT SPOTS ON THE RIBBON**

#### **Ribbon Terms**

Heidi Hewitt, AutoCAD Technical Marketing Manager, has a wonderfully succinct phrase to define the Ribbon:

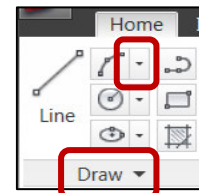
*“Each tab contains multiple panels, and each panel contains multiple tools.”*

#### **Tabs**

By default, there are eight tabs in the 2D Workspace of AutoCAD 2010 and AutoCAD 2011.

#### **Panels**

The panels are the large parts of the Ribbon. **Draw** panel of the *Home* tab shown here. Panel titles with black triangle beside the name can be expanded to display more tools.



#### **Tools**

The Tools are the commands on the panels. Tools with black triangles have more tools.

#### **Ideas for Personalizing the Ribbon**

You will want to personalize the Ribbon to get rid of the stuff that doesn’t apply to your daily activities, and optimize the buttons to be the most effective.

#### **The Minimize arrow**

In AutoCAD 2011, there are four settings to the Minimize arrow: The full Ribbon, *Minimize to Tabs*, *Minimize to Panel Titles*, and *Minimize to Panel Buttons*.

#### **The Shortcut Menus**

Right-click anywhere on the Ribbon for a shortcut menu with *Tabs* and *Panels*. The list of panels is based on the current Tab.

#### **How to Update Your Workspace with the Changes**

- 1.. After making the desired changes to your workspace, click *Workspace Switching*, then click *Save Current As*.
- 2.. In the drop-down list, choose the name of the workspace for the changes, then click *Save*.
- 3.. When you see the notice regarding replacing the workspace that already exists, click *Replace*.

## TOOL NO. 3: FIND ANY TEXT ANYWHERE

How many hours have you spent looking for room numbers, people, phone numbers, etc. in a drawing you're not familiar with?!

Solution: *Annotate* tab > *Text* tab > *Find Text* field

### How to Find Any Text on Any Drawing

1.. On the *Annotate* tab > *Text* panel, in the 'Find text' field, enter the text to find, then press [Enter].

AutoCAD automatically zooms to the first instance of the requested text and the *Find and Replace* dialog box appears (shown here for the word 'VACANT').

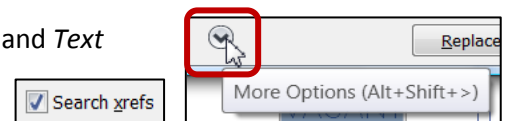
### Insights

The Find and Replace dialog box has some other useful features such as the *More Options* button and the *List Results* check box.

**MEMO:** If you have the *List Results* box checked, it doesn't kick in the 'Zoom To' feature.

### *More Options*

Click this peek-a-boo button (technical term) to display a list of *Search Options* and *Text Types*. By default, *Search Xrefs* is not checked, but I would recommend that you check this box.



## TOOL 4: QUICK DISTANCES AND AREAS

On the Home tab > Utilities panel is a more elegant command for Distance, as well as an Area feature that is more dynamic. Click Measure to display the assortment of measuring features in the Measuregeom command.

### Distance

Click *Distance* and the DYN feature is automatically toggled on. After picking the first point, type **M** to launch the *Multiple points* option. As you continue to click points, the command line displays a running total for the 'Distance'.

### Area

Use *Area* to pick points around the perimeter of the space and a dynamic solid hatch is displayed as you pick each point.

### How to Use the Area Feature from Measure

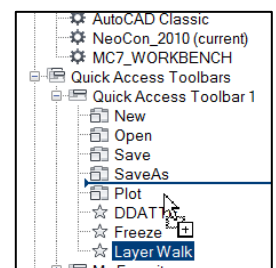
- 1.. Click *Area* [*Home* tab > *Utilities* panel > *Measure* dropdown]. The Dynamic Input feature will automatically be toggled on and you will be prompted to specify the first point.
- 2.. After picking the last point, right-click to display the Area and Perimeter information of the space enclosed by the pick points (shown here).
- 3.. Hit Esc or type **X** to end the command. (The colored area is just temporary.)

## TOOL 5: CUSTOMIZE THE QUICK ACCESS TOOLBAR

When using the Ribbon, you'll be giving up your toolbars. But if you have a few favorites, the Quick Access Toolbar is the way to go.

### How to Add Commands to the Quick Access Toolbar

- 1.. Find a favorite tool on the Ribbon – Layer Lock (expanded Layers panel), Layer Freeze, Measure, etc.
- 2.. Right-click on that tool, then click *Add to Quick Access Toolbar*. That's it!



## How to Arrange the Quick Access Toolbar Tools

- 1.. Save your current workspace, then type **CUI** to open the Customize User Interface.
- 2.. Expand the *Quick Access Toolbars* node, then expand *Quick Access Toolbar 1* to display the content for your Quick Access Toolbar.
- 3.. Pick and drag the tools to the desired location, then click OK to close the CUI and save your changes.

**MEMO:** The Quick Access Toolbar, by default, is independent of your workspace. This means as you change workspaces, the Quick Access Toolbar remains constant. There is coverage on assigning a Quick Access Toolbar to a workspace in the Customizing chapter of *The AutoCAD Workbench*.

## **TOOL 6: ATTACH AND DRAW ON A .PDF UNDERLAY**

Beginning in AutoCAD 2010, you can accurately scale a .PDF to be 1:1. If the PDF was created from an AutoCAD drawing, you can also turn off the layers.

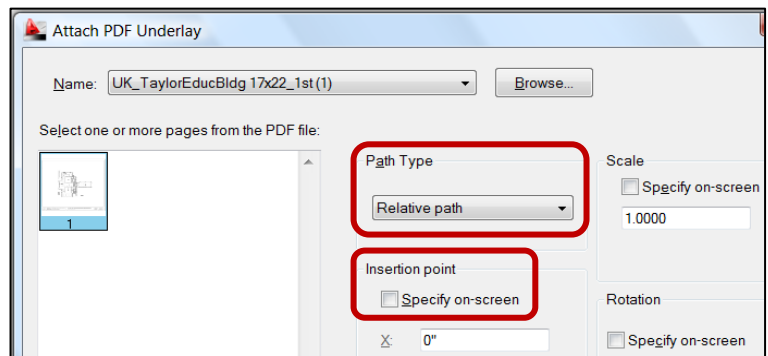
The PDF Underlay [*Insert* tab > *Reference* panel > *Attach*] is attached the same way you would attach an Xref.

### **Be Nice.**

When using the *Relative Path* setting for the Path Type, you must have a valid drawing name before you attach the .PDF underlay. By attaching the .PDF using *Relative Path*, AutoCAD will look in the host's path to find the .PDF when the host is opened.

## How to Attach and Scale the .PDF Underlay

- 1.. Begin a new drawing, then save it.
- 2.. Click *Attach* [*Insert* tab > *Reference* panel] to open the Select Reference File dialog box.
- 3.. At the bottom, change the Files of Type to *PDF Files (\*.pdf)*.
- 4.. Navigate to the .PDF you want, then click *Open* to open the Attach PDF Underlay dialog box.
- 5.. Per the above memo, set the Path Type to *Relative Path*. The next time you attach a .PDF, *Relative Path* will be the default.
- 6.. To attach the .PDF at 0,0,0, clear the check box for the 'Insertion Point' for *Specify On-Screen*.
- 7.. Click *OK*, then *Zoom* > *Extents* if needed.



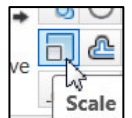
**MEMO:** You can also use the External References window to attach a .PDF Underlay by selecting *Attach PDF* from the dropdown list. Since a .PDF is considered an externally referenced file, all Xref-related procedures apply.

### **Scaling the .PDF to Make It 1:1**

There's not a .PDF on the planet that's 1:1, so here's how to use the *Scale* command to make it full scale.

## How to Scale a PDF Underlay to 1:1

- 1.. Click *Scale* [*Home* tab > *Modify* panel].
- 2.. Select any part of the geometry on the .PDF, then press [Enter].



**MEMO:** Although the .PDF geometry does not highlight after you click on it like other objects in your drawing, you will notice '1 found' on the command line, confirming your selection.

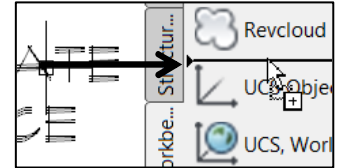
- 3.. When prompted for the base point, enter **0,0**.

- 4.. When prompted to specify a scale factor, enter **R** for the *Reference* option.
- 5.. For the reference length, zoom up to a location where you know the distance between two identifiable points, such as a door opening.
- 6.. Accurately (i.e., using an object snap) pick two points that specify the distance you want to scale. In this case, the two sides of a 3'-0" door opening.
- 7.. When prompted for the new length, enter the true distance between those two points.

### TOOL NO. 7: PUSHBUTTON MTEXT

And finally, a new button for your palette to automate the placement of Mtext!

The key player in this scenario is the variable TEXTSIZE. If we can automate the setting of that variable before launching the Mtext command, we're good to go!



#### How to Automate Mtext on the Tool Palette

- 1.. Open a drawing containing Mtext in Model space that is on a layer you typically use and in the desired text style. Or you could just add some Mtext to a new drawing if you set your layer and text style first.
- 2.. Open the Tool Palette window [View tab > Palettes panel or Ctrl + 3 ], then set your favorite tab to be current.
- 3.. Select the Mtext in the drawing, breathe, then drag the Mtext over and drop it onto your palette.
- 4.. Right-click on the Mtext button on the palette, then click *Properties*.
- 5.. Change the Name for this tool; I'm going with **Mtext @ 9"**.
- 6.. If you want the text in Model space to be 9" high, change the Command String to read as follows:

**^C^CTEXTSIZE;9;MTEXT;**

#### *Text Character Reference*

**^C^C** Hit Esc to cancel the current command

**TEXTSIZE** System variable that stores the text height the next time you use a text command

**;** Press [Enter]

**9** The desired height of the text

**Mtext** Launches the Mtext command

- 7.. Under General, confirm the standard properties, as well as the Text style.
- 8.. Click *OK* to save your changes and close the Tool Properties dialog box.

Standard testing procedures apply. Open any other drawing that doesn't have those layer and text style settings, go to Model space and test it out!

### FREE ADDITIONAL RESOURCES



Get downloads at my website, [www.autocadtrainerguy.com](http://www.autocadtrainerguy.com). Click on the "AutoCAD Stuff" link, then read the instructions.

#### What The .LSP Files Do

**ATTSTRIP.VLX** - Fabulous feature strips the attributes of the selected attributed blocks, but retains the integrity of the block itself. This is great if you have to provide a drawing to the customer or an architect and would rather not pass along the product information. The .VLX extension means it is a compiled Lisp routine that was created using Visual Lisp and should be treated the exact same way as a .LSP. [Original .LSP found at [www.dotsoft.com](http://www.dotsoft.com)].

**DLINE:** Parallel line generator. [See Michael's Corner - August 2003 & September 2005]

[www.autocadtrainerguy.com](http://www.autocadtrainerguy.com)

**GLUE:** Joins two lines into a single line. Ideal for mending walls after deleting a door or a wall. The JOIN command in AutoCAD requires that the lines being joined be exactly co-linear, the Glue routine does not.

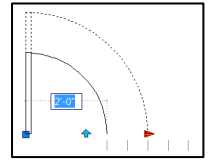
**OBJNO:** Simple numbering.

**PREFIX:** Prefix adjacent to the number.

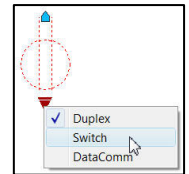
**WSNUM:** Prefix "With Space" before the number.

### Dynamic Blocks + Michael's Sample Template

**DynaDoor.dwg** - This dynamic door block is created with five sizes - 24", 30", 36", 42", & 48" - and also has a flip parameter.



**DynaLabel.dwg** - This dynamic label block is intended for use in Paper space; the line can be stretched to accommodate the length of the text.



**DynaPower.dwg** - This dynamic block has three visibility parameters: Duplex receptacle, DataComm, and Single pole light switch. This block also has an alignment parameter at the insertion point which causes the block to align to the line where it's placed.

**NOTE Regarding the 'Dyna-' drawings:** After unzipping the file, open Dyna-.DWG (don't Insert it). If you want to put it on a palette, open your block source file, then drag the Dyna- block into your block source. Save your block source drawing, then drag the Dyna- block onto your palette.

**ATGTemplate.dwt** - This is my template in case you don't have one and didn't want to start from scratch. Put this in AutoCAD's ..\Template folder (you will need to make one for A2009, A2010, and A2011). See Michael's Corner from February 2004 on how to set your system up to use this .DWT.

## AVAILABLE TRAINING SEMINARS

### AutoCAD® Trainer Guy Seminars...

- ❖ AutoCAD 2011 Update - 1-day
- ❖ AutoCAD 2010 Update - 1-day
- ❖ AutoCAD Intermediate [customized]
- ❖ AutoCAD Advanced [customized]
- ❖ CAP Studio - 2-day
  - CAP Designer [can be presented individually - 1-day]
  - CAP Worksheet [can be presented individually - 1-day]

Summaries for the above seminars can be found on the **Training Topics** link on my website.

**Autodesk**  
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*The mind of man plans his way, but the Lord directs his steps.  
Proverbs 16:9*

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