

# Command and Feature Comparison between BricsCAD and AutoCAD

- User Level -

**This document will go through each of the ribbon tabs and each panel on each of the tabs, seeing as that is the primary interface of most CAD users. The tools and options of the two software packages will be compared and contrasted.**

# Home Tab

## Draw Panel

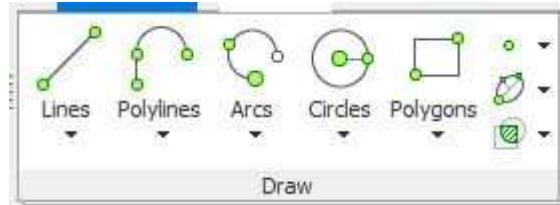


Figure 1 - BricsCAD Draw Panel

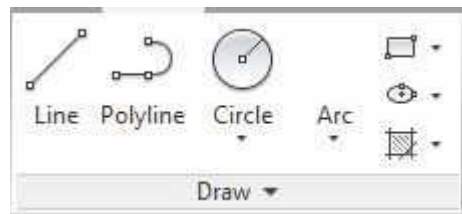


Figure 2 - AutoCAD Draw Panel

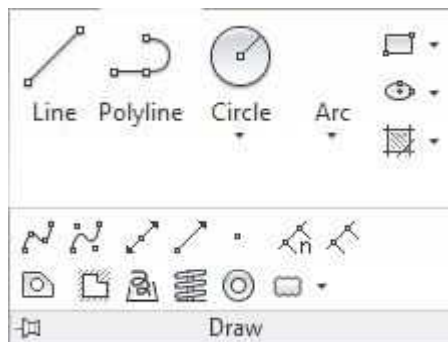
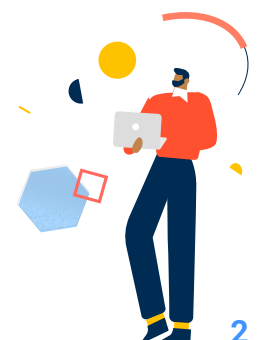


Figure 3 - AutoCAD Draw Panel Expanded

The Draw panel itself is cleaner than AutoCAD's equivalent panel. All commands are placed within appropriate fly-out buttons. AutoCAD panel uses some fly-out buttons, some individual tool buttons, and hides some lesser used commands.



## Lines Fly Out

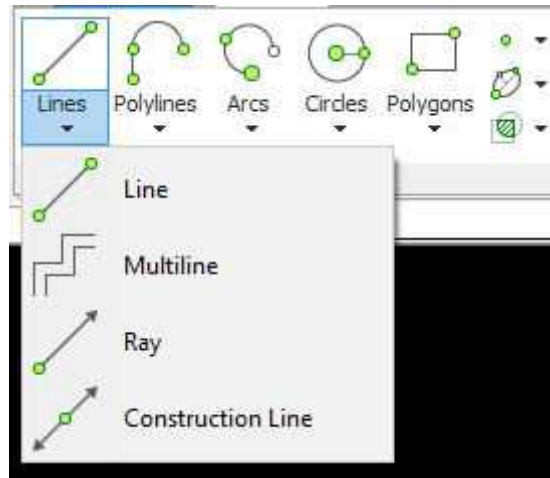


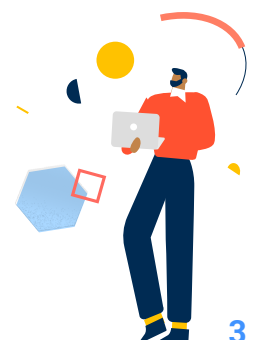
Figure 4 - Line Tool Fly-Out Options

### Line tool (shortcut: L)

- Works identically to AutoCAD
- Length and Angle options - Allows user to select either option, then type a value for either, but doesn't end the command. User is then prompted for the info not yet entered.
- Follow option – Allows user to continue arcs tangentially or lines to be extended or continued tangentially off an arc. AutoCAD has this but it is a “hidden” feature - user has to know to hit the enter key at the first point prompt to perform same operation.
- Would like to see <exit> at end of prompt so user knows how to end the command.

### Multiline tool (shortcut: ML)

- Works identically to AutoCAD
- Length, Angle, and Follow options as described above are included in prompting
- Ray tool (no shortcut for 3 letter tools!)
- Unlike AutoCAD, all options appear on the command line
- Construction Line tool (shortcut XL)
- Same options as AutoCAD – but no Offset option as has AutoCAD



## Polylines Fly-Out

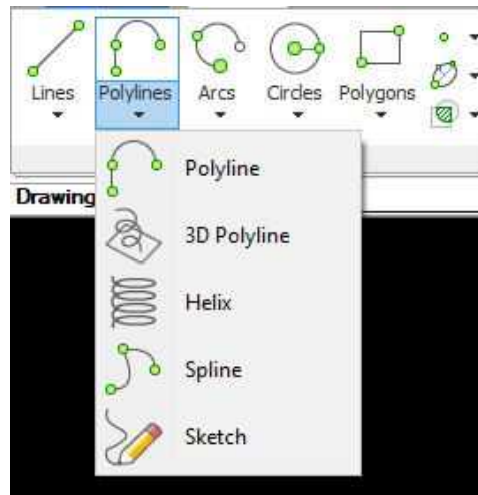


Figure 5 - BricsCAD Polylines Fly-Out

### Polyline tool (shortcut PL)

- Follow and “last point” visibly available (AutoCAD can do this but it is not apparent to new users)
- Otherwise identical to AutoCAD

### 3D Polyline tool (shortcut 3P)

- Works identically to AutoCAD
- Easier to find in BricsCAD

### Helix (no shortcut)

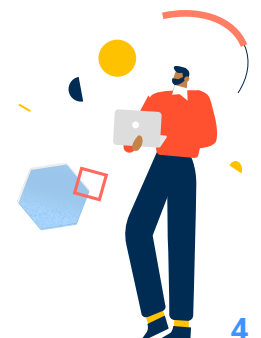
- Works identically to AutoCAD
- Easier to find in BricsCAD

### Spline (shortcut SPL)

- Identical to AutoCAD’s Spline Fit tool
- Prompts for start and end tangencies after picking all control vertices
- AutoCAD grips are more “intelligent” – start and end tangencies can be adjusted with grips

### Sketch tool (no shortcut)

- AutoCAD has no ribbon access to Sketch tool
- Prompting is similar to AutoCAD
- Cannot exit command with an <enter>, must type X
- SKPOLY controls sketching with polylines, just like AutoCAD



## Arcs Fly-Out

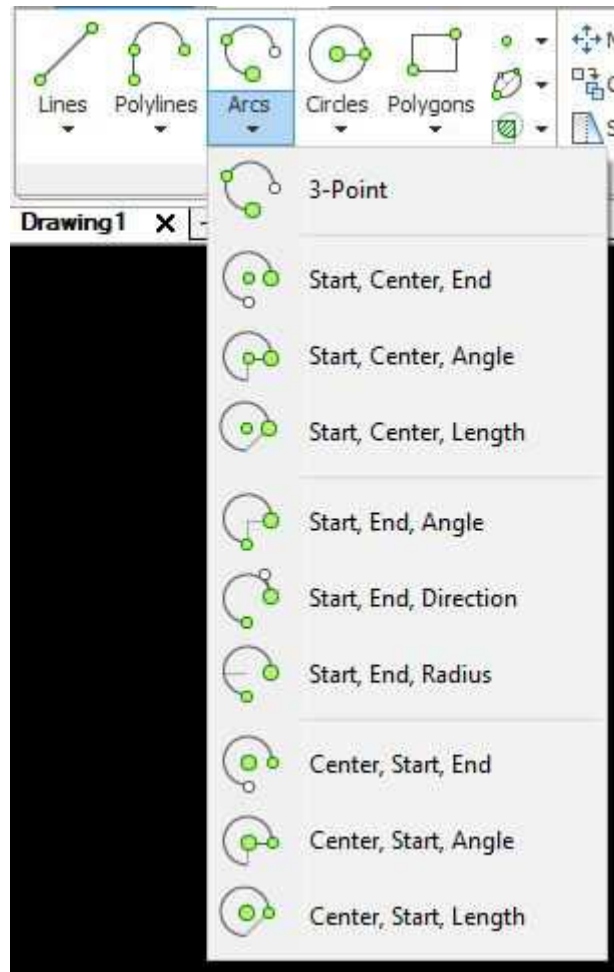
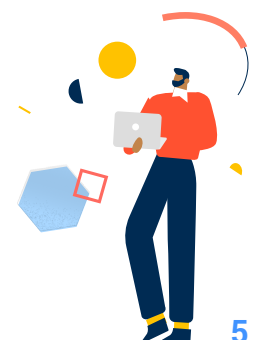


Figure 6 - BricsCAD Arcs Fly-Out

- All Arc tool options shown in fly-out are identical to AutoCAD
- BricsCAD shows Follow and <start point> options in the default option, for a more intuitive method of continuing from a previous line or arc



## Circle Fly-Out

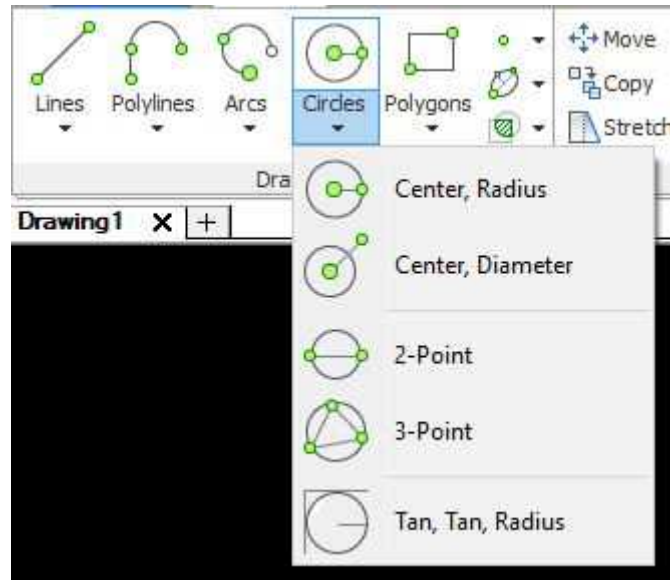
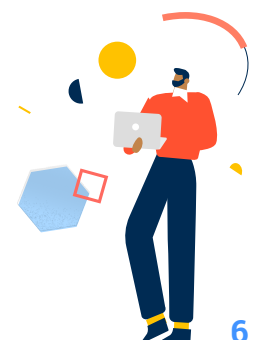


Figure 7 - BricsCAD Circles Fly-Out

- All Circle tool options shown in fly-out are identical to AutoCAD (AutoCAD does include a Tan-Tan-Tan option which is really an easily created macro)
- BricsCAD has two nice features for the default Circle tool:
  - “turn Arc into circle” – self explanatory
  - “Multiple circles” – allows selecting of additional center points after radius or diameter are established



## Polygon Fly-Out

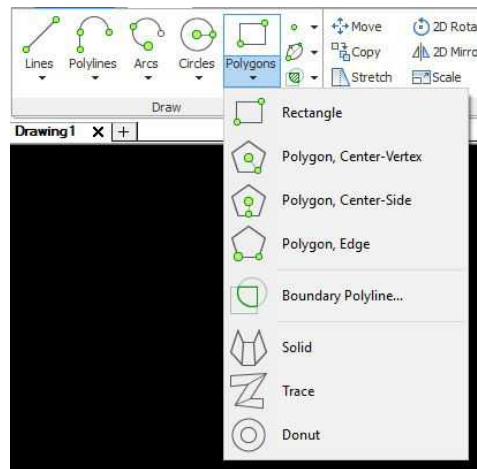


Figure 8 - BricsCAD Polygons Fly-Out

### Rectangle tool

- All possible options appear at first prompt
  - AutoCAD hides some prompts until first corner is selected Polygon tool(s)

### Polygon tool(s)

- Same options/methods as AutoCAD
- Macro provided for each method of creation (Center-Vertex, Center-Side, Edge)
  - No macros provided in AutoCAD

### Boundary Polyline tool

- Works identically to AutoCAD
  - (Author's note: It seems the object type should be able to be changed to "regions" but I cannot get the drop down list to become selectable)

### Solid tool

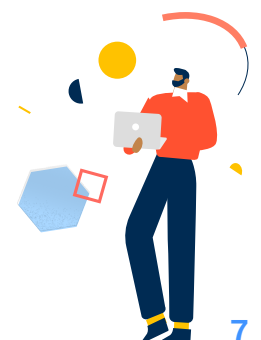
- More interactive "preview" than AutoCAD
- Has Rectangle, Square, and Triangle options

### Trace tool

- "Discontinued" and not readily available in AutoCAD

### Donut tool

- Has 2 Point, 3 Point, and Tangent Tangent Radius options
  - TTR requires user to activate Tangent object snap





## Points Fly-Out

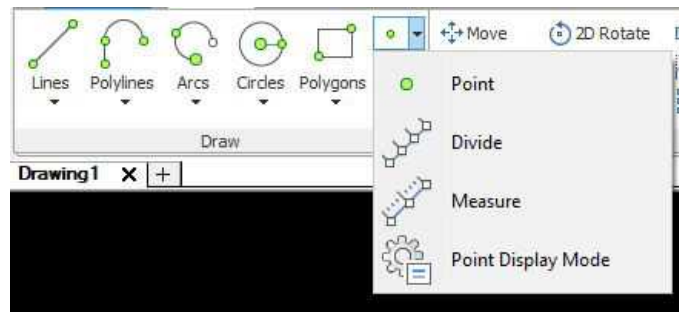


Figure 9 - BricsCAD Points Fly-Out

### Point tool

- Has Multiple point option
  - AutoCAD's ribbon pick defaults to this – user must know to hit <esc> to exit
- Has Points setting option
  - User must use separate command to change point style in AutoCAD

### Divide tool

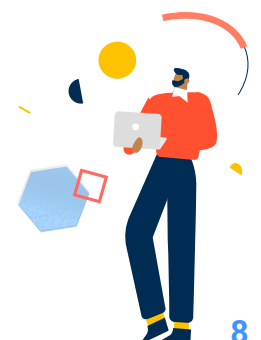
- Identical to AutoCAD

### Measure tool

- Identical to AutoCAD

### Point Display Mode tool

- Same options as AutoCAD
  - AutoCAD's dialog box interface is slightly more intuitive



## Ellipses Fly-Out

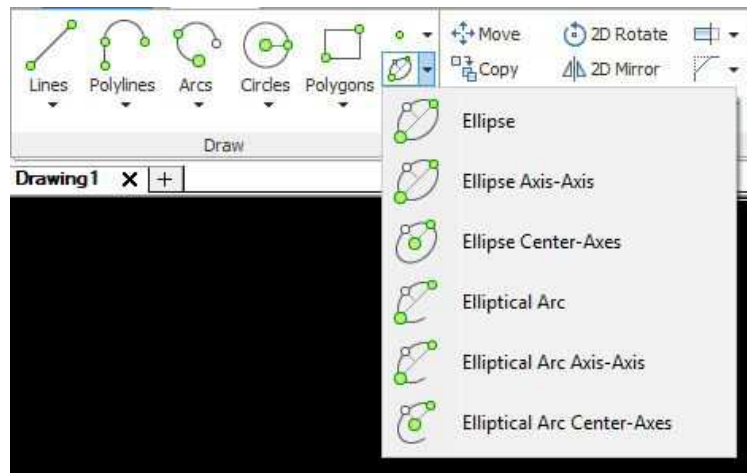


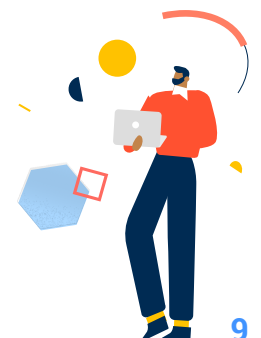
Figure 10 - BricsCAD Ellipses Fly-Out

### Ellipse tool(s)

- Identical to AutoCAD
- Has separate buttons for default command, Axis-Axis, and Center-Axes
  - Default button is the same as the Axis-Axis button

### Elliptical Arc tool(s)

- Identical to AutoCAD
- Has separate buttons for default command, Axis-Axis, and Center-Axes
  - Default button is the same as the Axis-Axis button



## Hatches Fly-Out

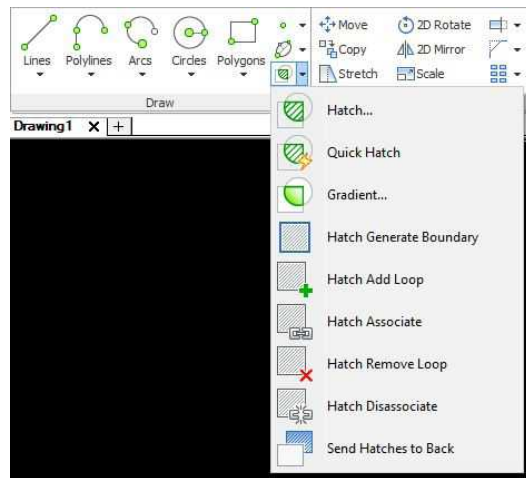


Figure 11 - BricsCAD Hatches Fly-Out

### Hatch tool

- Dialog box interface is more intuitive than AutoCAD's ribbon interface
- Works identically to AutoCAD

### Quick Hatch tool

- Same as –HATCH in AutoCAD
- Works identically to AutoCAD

### Gradient tool

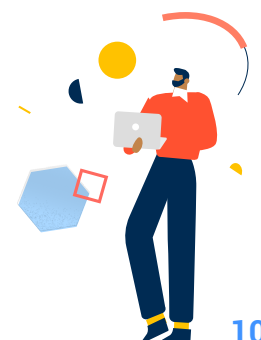
- Dialog box interface is more intuitive than AutoCAD's ribbon interface
- Works identically to AutoCAD

### Quick Hatch tool

- Same as –HATCH in AutoCAD
- Works identically to AutoCAD

### Hatch Generate Boundary tool

- Prompts to select a hatch, creates boundary around hatch
- No equivalent tool in AutoCAD



### **Hatch Add Loop tool**

- Prompts to select a hatch, then prompts for new area to be hatched – creates all as one hatch
- Can be duplicated via editing in AutoCAD

### **Hatch Associate tool**

- Prompts to select a hatch, then prompts for internal point – creates an association between hatch and boundary objects
- Can be duplicated via editing in AutoCAD

### **Hatch Remove Loop tool**

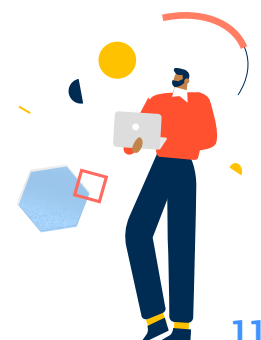
- Prompts to select a hatch, then prompts to select entities – and removes hatch within that area
- Can be duplicated via editing in AutoCAD

### **Hatch Disassociate tool**

- Prompts to select a hatch, then removes association between hatch and boundary objects
- Can be duplicated via editing in AutoCAD

### **Send Hatches to Back tool**

- Automatically selects all hatch objects and moves them to the back of the “draw order”
- CANNOT be duplicated in AutoCAD



## Modify panel

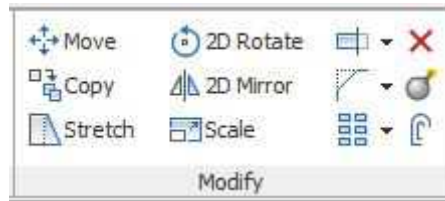


Figure 12 - BricsCAD Modify Panel

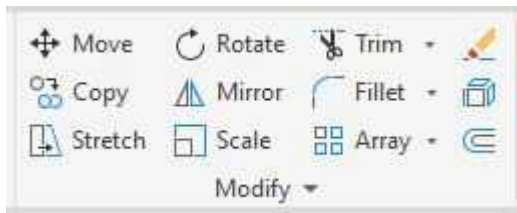


Figure 13 - AutoCAD Modify Panel

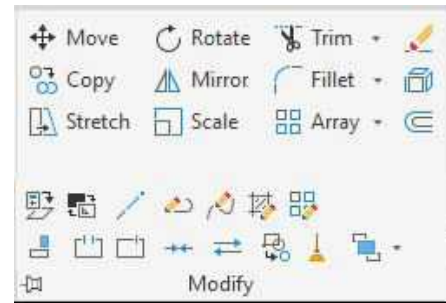
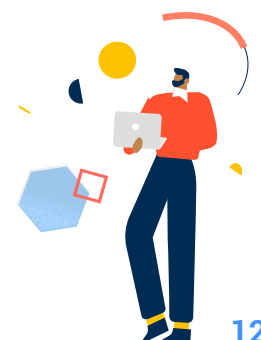


Figure 14 - AutoCAD Modify Panel Expanded

### Move, Copy, Stretch, Rotate, Mirror, Scale, Trim, Extend, Break, Join, Fillet, Chamfer, Rectangular Array, Polar Array, Path Array, Erase, Explode, Offset Tools

- All of these tools work identically in both BricsCAD and AutoCAD
- BricsCAD offers all selection methods as a popup menu on the right edge of the graphics window
  - AutoCAD does not show you all the selection techniques – until the user attempts an unavailable options, then the valid methods are prompted to the command prompt
- BricsCAD has four selection methods that are unavailable in AutoCAD
  - Inside Circle
  - Crossing Circle
  - Outside Circle
  - Outside Window
    - These last two are particularly convenient... they are “everything but...” selection methods



- AutoCAD has a few additional tools included in the “under the panel title” fly-out
  - Most of these are object specific editing commands
  - BricsCAD allows access to these same commands merely by double clicking or by use of its unique roll over editing palette
    - Roll over editing palette allows specific property editing just like AutoCAD’s property palette
    - Roll over editing palette also allows access to common editing commands pertaining to the object being rolled over

## Annotation panel

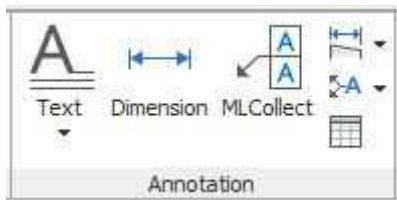


Figure 15 - BricsCAD Annotation Panel

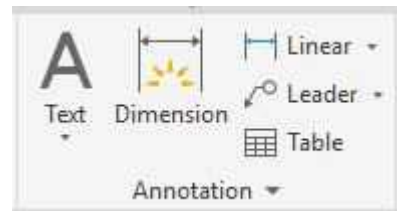


Figure 16 - AutoCAD Annotation Panel

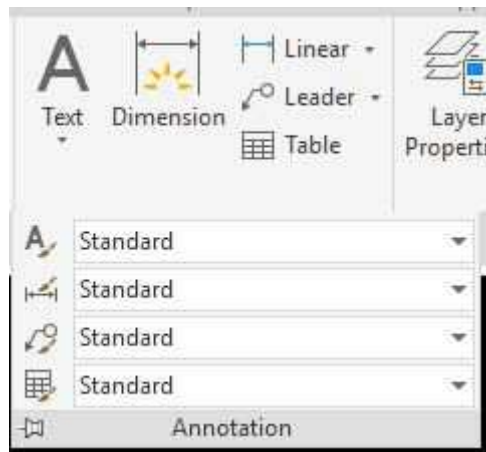
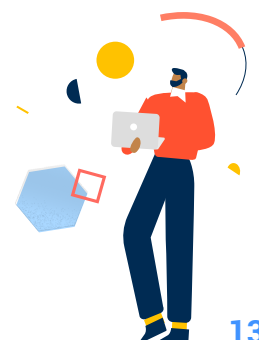


Figure 17 - AutoCAD Annotation Panel Expanded

**MText, Text, MLeader** and associated editing tools, “Smart” dimensioning, Individual dimensioning (**Linear, Aligned, Angular, Rotated, Diameter, Radius, etc.**), and **Table** tools on this panel are identical in both BricsCAD and AutoCAD

- AutoCAD has tools and dropdowns for creating, modifying and setting the styles for annotation items included in the “under the panel title” fly-out



## Layers panel

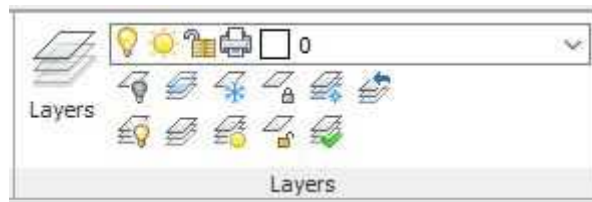


Figure 18 - BricsCAD Layer Panel

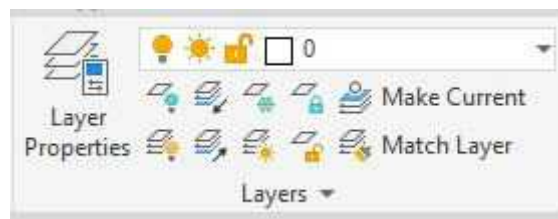


Figure 19 - AutoCAD Layer Panel

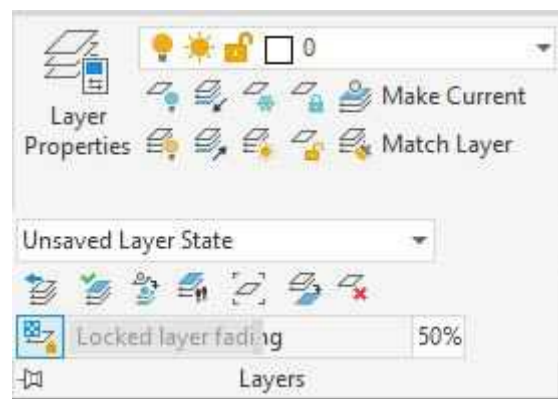
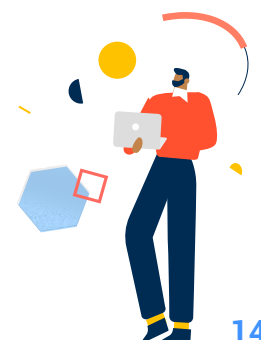


Figure 20 - AutoCAD Layer Panel Expanded

All layer tools on this panel are identical in both BricsCAD and AutoCAD

- Layer filter list is displayed on initial layer palette in AutoCAD
  - Layer filter lists can be created and displayed within the Layer Explorer dialog box, which can be accessed on the initial layer dialog box in BricsCAD
- AutoCAD has additional layer property and object property tools available included in the “under the panel title” fly-out



## Block panel

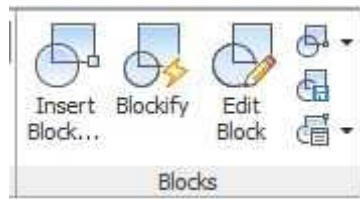


Figure 21 - BricsCAD Blocks Panel



Figure 22 - AutoCAD Block Panel

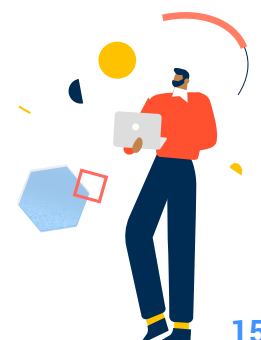


Figure 23 - AutoCAD Block Panel Expanded

The block creation, block modify, attribute definition, attribute editing, and attribute manager tools on this panel are identical in both BricsCAD and AutoCAD

### Insert tool

- Upon selecting, launches the Insert Block dialog box in BricsCAD
- Upon selecting a drop down graphic menu of known blocks appears in AutoCAD
  - 4 blocks are shown at a time
    - Must scroll through list to get to the rest of the blocks
    - Selecting More Options at bottom of dropdown menu launches Insert Block dialog box





## Edit Block tool

Selection of this tool launches the Edit Block Definition dialog box in both applications.

- Block editing works identically in both applications
  - AutoCAD changes the background color as a reminder that block editing mode is active

## Blockify tool

- Automatically makes blocks from identical sets of objects or groups of objects
  - AutoCAD does not have this functionality

## Blocks... tool

- BricsCAD provides access to the Drawing Explorer dialog box (similar to AutoCAD's Design Center palette) that opens to the list of Blocks objects and their editable properties

## Block Attribute Manager fly-out tool

- BricsCAD includes an attribute extraction tool on a fly-out from this tool
  - AutoCAD has this tool on the Tables panel of the Annotate tab

## Properties panel

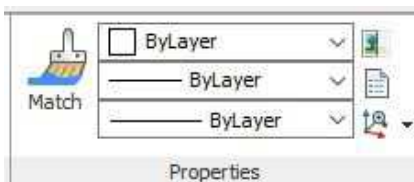


Figure 24 - BricsCAD Properties Panel

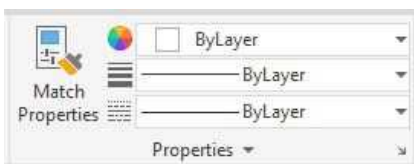


Figure 25 - AutoCAD Properties Panel

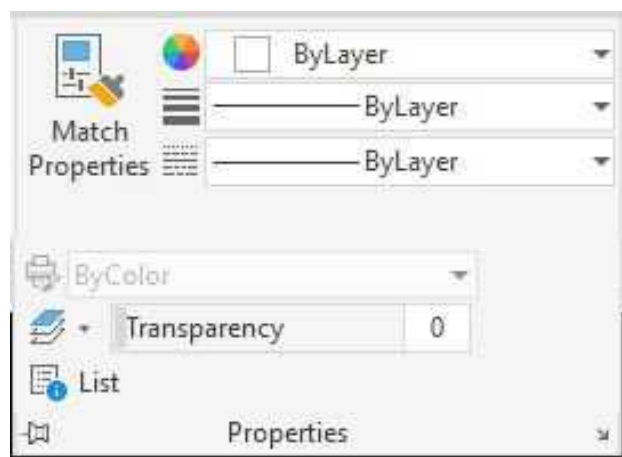
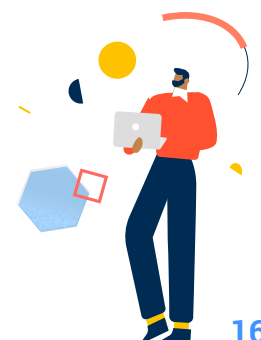


Figure 26 - AutoCAD Properties Panel Expanded

Match properties, and color, lineweight, and linetype dropdowns are identical on this panel in both BricsCAD and AutoCAD

- Additionally BricsCAD provides access to Transparency, List, ID, and Status commands



## Group panel

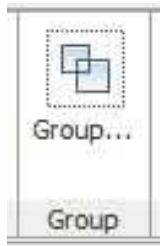


Figure 27 - BricsCAD Group Panel



Figure 28 - AutoCAD Groups Panel

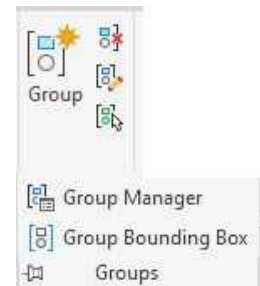


Figure 29 - AutoCAD Groups Panel Expanded

BricsCAD launches a dialog box with all of the Group command's options with the panel tool

- BricsCAD also has the –Group command line version of the command
- AutoCAD provides macros for Undo Group, Group Edit, Group On/Off toggle – as well as Group Manager and Group Bounding Box included in the “under the panel title” fly-out

## Utilities panel

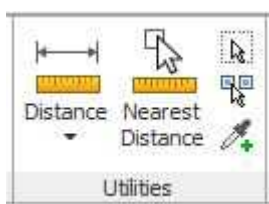


Figure 30 - BricsCAD Utilities Panel



Figure 31 - AutoCAD Utilities Panel

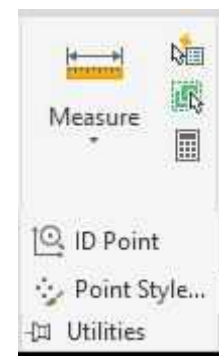


Figure 32 - AutoCAD Utilities Panel Expanded

This panel is quite different when comparing the two software applications. Tools will be addressed and compared in this document individually.

“Main” fly-out tool in both applications:

- BricsCAD provides access to Distance, Area, and Mass Properties commands
- AutoCAD provides access to the Distance, Radius, Angle, Area, and Volume options of the MeasureGeom command



### **Nearest Distance on BricsCAD tool:**

- In BricsCAD, allows the display of and adjustment to the nearest distance between two selected objects
  - AutoCAD does not have this functionality

### **Select All on BricsCAD tool:**

- Available on this panel in both BricsCAD and AutoCAD

### **Select Similar on BricsCAD tool:**

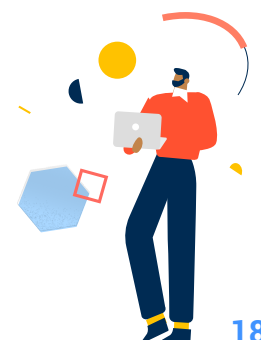
- BricsCAD includes this tool on this panel
  - AutoCAD has this functionality included in a shortcut menu
- AutoCAD includes a Quick Select tool on this panel
  - BricsCAD has this functionality built into the Properties panel

### **Add Selected on BricsCAD tool:**

- BricsCAD provides this tool which launches the command that was used to create the selected object, and the new object inherits the properties of the selected object
  - AutoCAD does not have this functionality

### **Quick Calculator on AutoCAD panel:**

- AutoCAD includes this tool on this panel
  - BricsCAD does not have this functionality
  - AutoCAD provides access to ID and Point Style tools on the “under the panel title” fly-out
- BricsCAD provides access to the ID command in the Properties panel
- BricsCAD provides access to adjusting the point display style in the Setting dialog box



## Clipboard panel

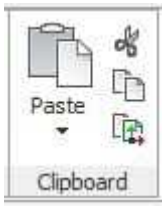


Figure 33 - BricsCAD Clipboard Panel



Figure 34 - AutoCAD Clipboard Panel

This panel is identical in both BricsCAD and AutoCAD, with the following exceptions:

- AutoCAD includes a Paste as Hyperlink tool in the Paste fly-out
  - BricsCAD does not have this functionality
- BricsCAD includes a tool for Copy with Base Point
  - AutoCAD provides access to this tool in a shortcut menu

## Insert Tab

### Blocks panel (BricsCAD)

This panel is identical to the Blocks panel on the Home tab

### Block and Block Definition panel (AutoCAD)



Figure 35 - AutoCAD Block Panel



Figure 36 - AutoCAD Block Panel Expanded



Figure 37 - AutoCAD Block Definition Panel

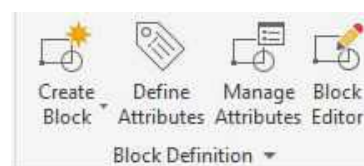
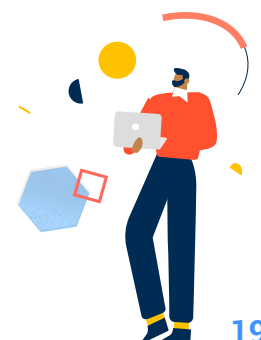


Figure 38 - AutoCAD Block Definition Panel Expanded

All of the tools found on the Blocks panel of BricsCAD can be found on these two panels in AutoCAD

- AutoCAD provides access to the Base in the “under the panel title” fly-out



## Reference panel (BricsCAD)

## Image panel (BricsCAD)

## PDF panel (BricsCAD)

## Reference panel (AutoCAD)

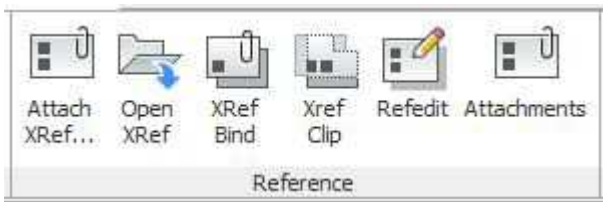


Figure 39 - BricsCAD Reference Panel

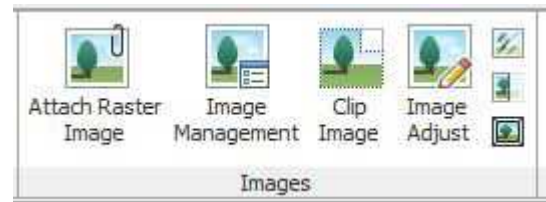


Figure 40 - BricsCAD Images Panel



Figure 41 - BricsCAD PDF Panel

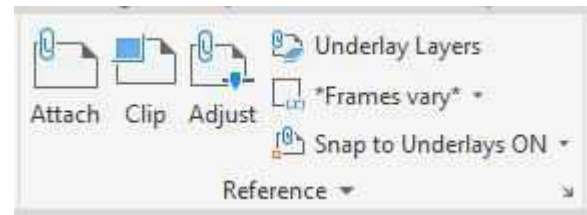


Figure 42 - AutoCAD Reference Panel

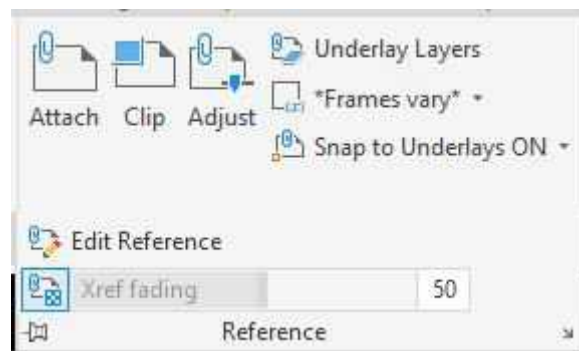
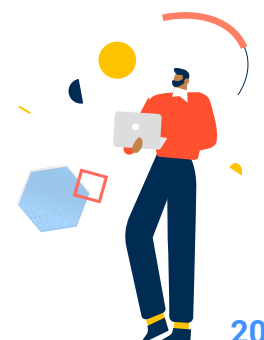


Figure 43 - AutoCAD Reference Panel Expanded



AutoCAD makes no differentiation between drawing files, image files, and PDF files being externally referenced. BricsCAD uses a separate set of commands for referencing these three types of files.

- All tools for working with externally referenced files seem to work identically in both applications
- AutoCAD provides access to the RefEdit tool in the “under the panel title” fly-out
- BricsCAD displays a tool for the Xbind command, but the command is not yet supported in BricsCAD
- AutoCAD supports “underlays” for drawing, image, and PDF files
  - BricsCAD supports “underlays” for PDF files only

## Import panel



Figure 44 - BricsCAD Import Panel

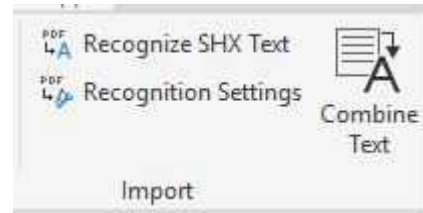
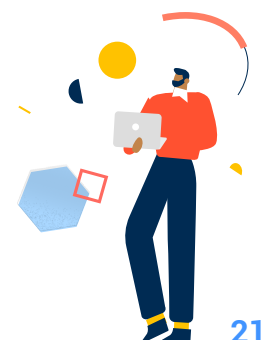
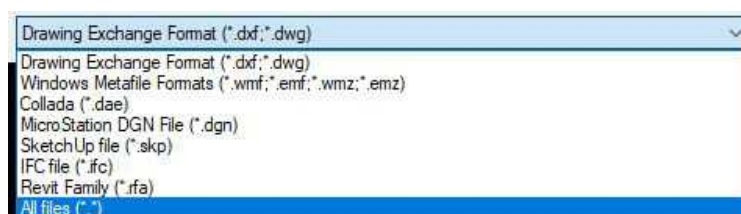
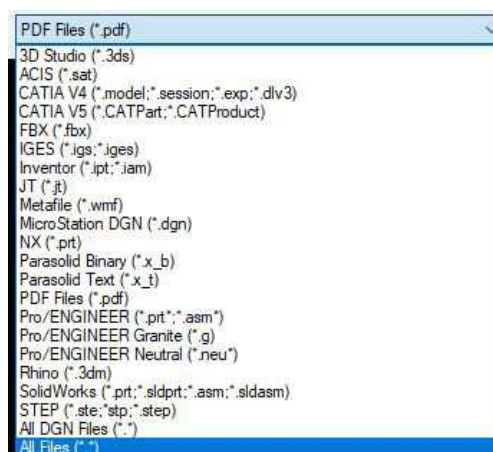


Figure 45 - AutoCAD Import Panel

## Import to

- AutoCAD supports more files types than BricsCAD:



### PDF Import tool

- BricsCAD displays a tool button for the command
  - Same tool is part of a three tool fly-out in AutoCAD

### DGN Import tool

- BricsCAD displays a tool button for the command
  - Same tool is part of a three tool fly-out in AutoCAD

### Pointclouds panel (BricsCAD)

### Point Cloud panel (AutoCAD)



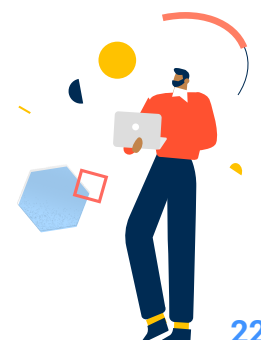
Figure 46 - BricsCAD Pointcloud Panel

(Point Clouds panel was present on the previous version of AutoCAD that I was reviewing, but is no longer available in AutoCAD 2020)

- BricsCAD provides tools for pre-processing, attaching, increasing and decreasing point size, and color map on this panel
- AutoCAD provides a tool for accessing the Autodesk ReCap application, and attaching a point cloud

### Data panel (AutoCAD)

### Linking & Extraction panel (AutoCAD)



## Location panel (AutoCAD)

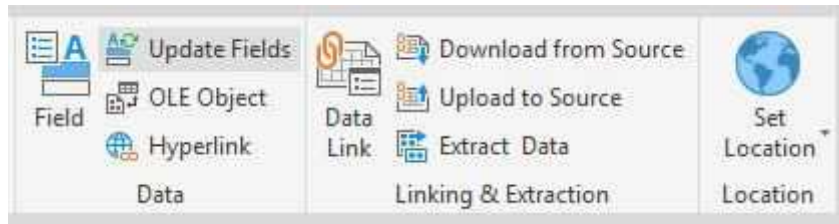


Figure 47 - AutoCAD Data, Linking and Extraction, and Location Panels

- AutoCAD provides tools on these panels for working with data fields, OLE objects, hyperlinks, data extraction, and attaching location information

## Annotate Tab

### Text Panel

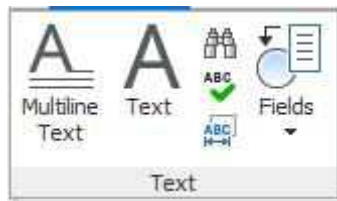


Figure 48 - BricsCAD Text Panel



Figure 49 - AutoCAD Text Panel

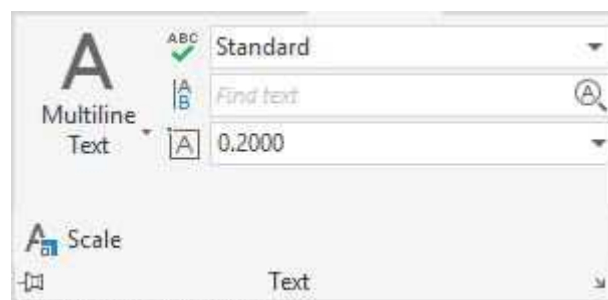
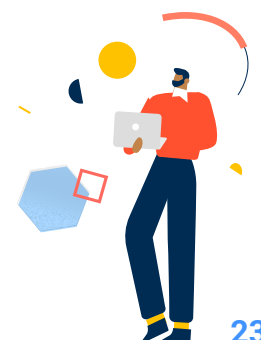


Figure 50 - AutoCAD Text Panel Expanded





## Mtext tool

- Command works identically in both BricsCAD and AutoCAD
- BricsCAD presents the command options in a floating toolbar
  - AutoCAD presents options in a contextual ribbon tab

## Text tool

- Command works identically in both BricsCAD and AutoCAD
- BricsCAD provides a singularly selectable button to access command
  - AutoCAD provides access to the command as part of a fly-out/toggle

## Spellcheck, and Find tools

- Both tools work identically in BricsCAD and in AutoCAD

BricsCAD includes tools for controlling draw order of text and dimensions, and a fly-out tool for working the data fields on this panel

AutoCAD includes tools for aligning text, modifying text justification, changing and editing text styles, and changing and edit text height on this panel

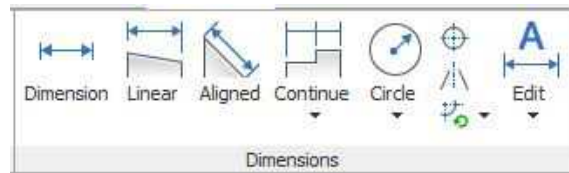


Figure 51 - BricsCAD Dimensions Panel

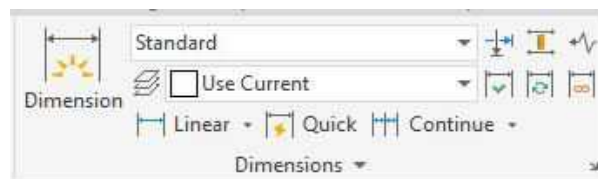


Figure 52 - AutoCAD Dimensions Panel

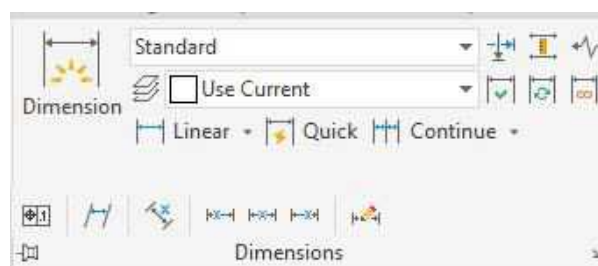
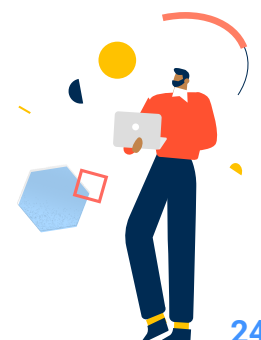


Figure 53 - AutoCAD Dimensions Panel Expanded



## Dimension tool

- Command works identically in both BricsCAD and AutoCAD  
Linear, Aligned, Radius, Diameter, Angular, Arc length, Continue, Baseline, Ordinate tools
- Work identically in both BricsCAD and AutoCAD
- Both applications make use of fly-outs to save space
  - AutoCAD uses more fly-outs than BricsCAD on this panel
- AutoCAD provides a jogged dimension tool

## Center Mark, Centerline tools

- Work identically in both BricsCAD and AutoCAD
  - AutoCAD includes these tools on a separate panel
  - BricsCAD includes tools for editing center marks and centerlines

BricsCAD includes tools for editing dimension text on this panel

AutoCAD includes tools setting and managing dimension styles, breaking extension lines, adjusting dimension spacing, adding a jog to a dimension line, adding inspection information, updating, and reassociating dimensions

## Leaders panel



Figure 54 - BricsCAD Leaders Panel

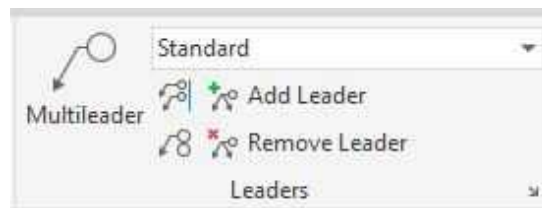
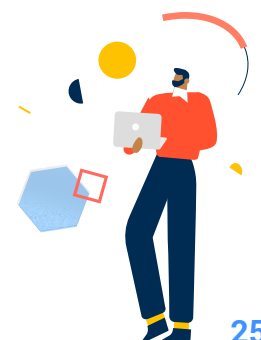


Figure 55 - AutoCAD Leaders Panel

## Multileader tool

- Commands are nearly identical in both applications
- BricsCAD presents the command options in a floating toolbar
  - AutoCAD presents options in a contextual ribbon tab



BricsCAD provide tool button for Leader and Quick Leader tools on same fly-out as the Multileader tool

- AutoCAD does not offer access to these two commands on the ribbon Edit Multileader tool
- BricsCAD provides a tool to add leaders to an existing multileader. An option to allow removal of leaders from an existing multileader is provided
- AutoCAD provides two separate tools for adding and removing leaders from multileaders

### **Multileader Styles tool**

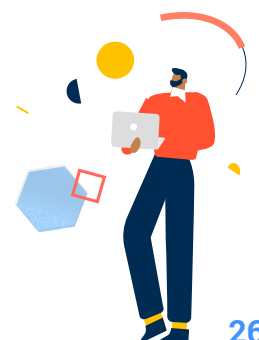
- BricsCAD tool button launches Drawing Explorer with Multileader Styles item selected
  - User can make a different style active, modify an existing style, or create a new style
- AutoCAD provides a drop down list of existing styles that can be used to make a different style active. Last item in drop down allows launching of the Multileader Style dialog box that can be used to make a different style active, modify an existing style, or create a new style.

### **Multileader Scale tool**

- BricsCAD provides a tool for changing the scale factor applied to newly placed multileaders
  - AutoCAD does not provide a similar tool, but scale can be adjusted in the Properties panel

### **Align and Collect tools**

- AutoCAD provides tools for aligning and collecting multileaders on this panel
- BricsCAD supports these commands but does not include tools on this panel



## Markup panel



Figure 58 - BricsCAD Markup Panel

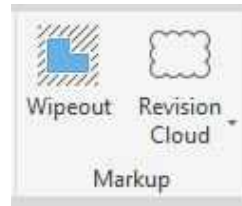


Figure 59 - AutoCAD Markup Panel

### Wipeout tool

- Command works identically in both BricsCAD and AutoCAD

### Revision cloud tool

- Command works identically in both BricsCAD and AutoCAD

AutoCAD provides macros for the rectangular, polygonal, and freehand options of the Revcloud command.

- BricsCAD supports these options also, but does not include macros for them

## Annotation Scaling panel

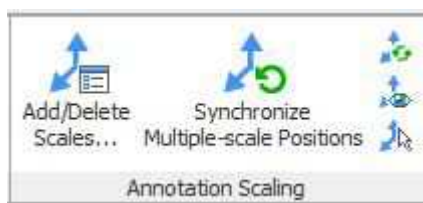


Figure 60 - BricsCAD Annotation Scaling Panel

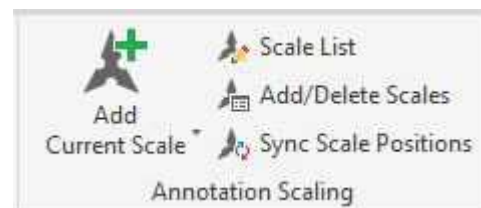


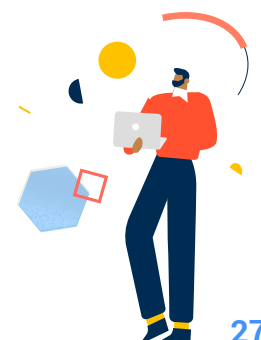
Figure 61 - AutoCAD Annotation Scaling Panel

### Add/Delete Scales tool

- Command works identically in both BricsCAD and AutoCAD

### Synchronize Multiple-scale Positions tool

- Command works identically in both BricsCAD and AutoCAD



### **Update Annotations tool**

- BricsCAD includes tool to update selected annotative objects with the current annotation settings
  - AutoCAD supports this command but does not provide access to the tool on the ribbon

### **Annotations All visible**

- BricsCAD includes tool to control visibility of annotative objects based on current annotative settings
  - AutoCAD supports this command but does not provide access to the tool on the ribbon

### **Selection Annotative Display**

- BricsCAD includes tool to control visibility of annotative objects regardless of current annotative scale
  - AutoCAD supports this command but does not provide access to the tool on the ribbon

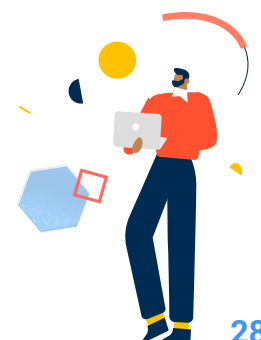
### **Add Current Scale, Delete Current Scale, Scale List tools**

- AutoCAD provides tools for these commands on this panel
  - BricsCAD supports the Scale List tool but does not provide access to the tool on the ribbon
  - BricsCAD does not appear to support the adding or deleting of the current annotative scale to selected annotative objects

## **Parametric Tab**

**Dimensional panel (BricsCAD)**

**Geometric panel (AutoCAD)**



## Dimensional panel (AutoCAD)

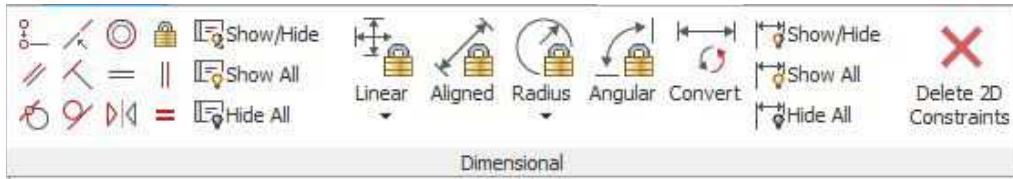


Figure 62 - BricsCAD Dimensional Panel



Figure 63 - AutoCAD Geometric and Dimensional Panels

- All tools on these panels operate identically in both BricsCAD and AutoCAD
  - The Dimensional panel in BricsCAD contains all the tools that are on the Geometric and Dimensional panel in AutoCAD
  - The result of editing or adding an equation to multiple dimensions is not apparent in BricsCAD until the command is completed, whereas it is apparent in AutoCAD after each individual dimension is edited

## Manage panel



Figure 64 - BricsCAD Manage Panel

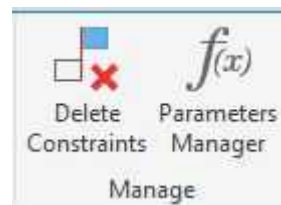
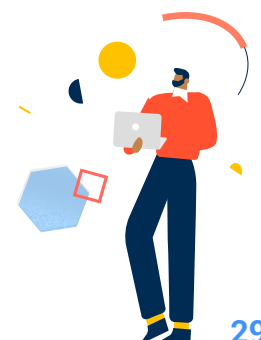


Figure 65 - AutoCAD Manage Panel

- Tools on this panel operate identically in both BricsCAD and AutoCAD



## View Tab

The View tabs in BricsCAD and AutoCAD are quite different, with only a couple similarities.

- In BricsCAD, for the most part, this tab has panels with tools mainly used to help view the drawing
- In AutoCAD, for the most part, this tab has panels with tools to control the visibility of other on-screen drawing aids such as the UCS Icon, the Properties Panel, Tool Palettes, etc.

### Zoom panel (BricsCAD)



Figure 66 - BricsCAD Zoom Panel

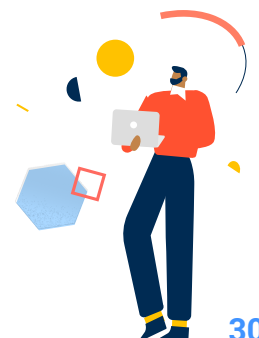
- Tools and macros for the Zoom command and all of its options are on this panel

### Navigate panel (BricsCAD)



Figure 67 - BricsCAD Navigate Panel

- Tools for “Real-time” zooming, panning, and rotating around the Z axis are on this panel



## View panel (BricsCAD)

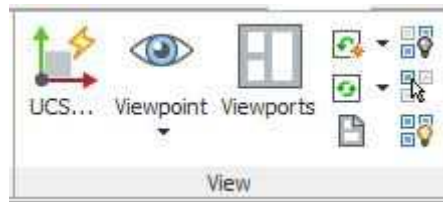


Figure 68 - BricsCAD View Panel

- Tools for UCS, Viewpoint, Model Space Viewports, Regen and Regen All, Redraw and Redraw All, Paper Space Viewports, Hide objects, Isolate objects, Unhide/Unisolate objects are on this panel
  - Model Space Viewports tool is command line driven only

## Interface panel (BricsCAD)



Figure 69 - BricsCAD Interface Panel

- Tools for cascading windows, and tiling windows horizontally and vertically are on this panel

## Viewports Tools panel (AutoCAD)

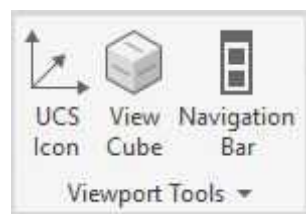
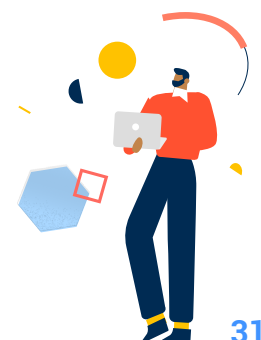


Figure 70 - AutoCAD Viewport Tools Panel

- Tools for controlling the visibility of the UCS Icon, the View Cube and the Navigation Bar in all viewports are on this panel





## Model Viewports panel (AutoCAD)

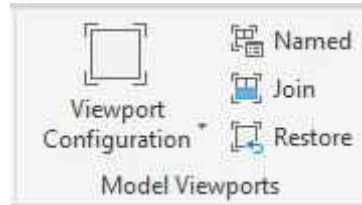


Figure 71 - AutoCAD Model Viewports Panel

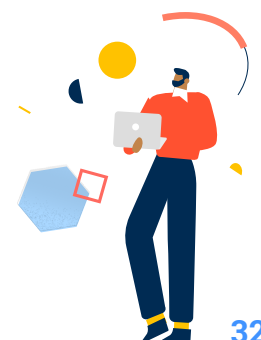
- Tools and macros for all viewport configurations, working with named viewport configurations, joining viewports, and toggling between single and multiple viewports are on this panel

## Palettes panel (AutoCAD)



Figure 72 - AutoCAD Palettes Panel

- Tools for controlling the display of Tool Palettes, Properties Palette, Sheet Set Manager, Command Line Palette, Layer Manager Palette, Design Center, Markup Set Manager Palette, Quick Calculator Palette, and External References Palette are on this palette



## Interface panel (AutoCAD)



Figure 73 - AutoCAD Interface Panel

- Tools for switching between drawing windows, controlling visibility of File Tabs and Layout Tabs, cascading windows, and tiling windows horizontally and vertically are on this panel

## Named Views panel (AutoCAD)

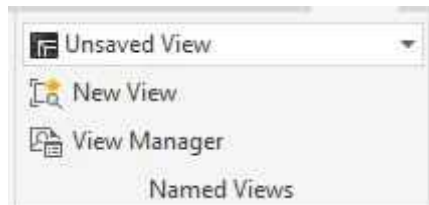
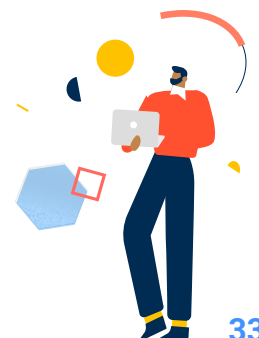


Figure 74 - AutoCAD Named Views Panel

- Tools for switching to predefined named views, creating a new named view, and launching the View Manager dialog box are on this panel



## Manage Tab

### Action Recorder panel



Figure 75 - BricsCAD Action Recorder Panel



Figure 76 - AutoCAD Action Recorder Panel

- Tools to work with the Action Recorder appear to be very similar in BricsCAD and AutoCAD

### Customization panel

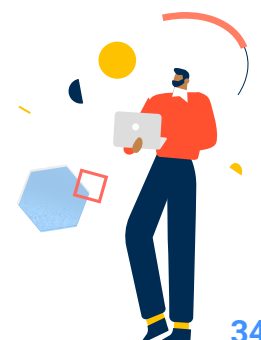


Figure 77 - BricsCAD Customization Panel



Figure 78 - AutoCAD Customization Panel

- The Customize User Interface tool is on this panel for both applications
  - The dialog box for BricsCAD is tab oriented for the various interface items
  - The dialog box for AutoCAD is an expandable and collapsible single column for the various interface items
- Additionally, BricsCAD provides tools for the Drawing Explorer, the Settings dialog box, and the Menu command
- Additionally, AutoCAD provides tools for customizing tool palettes, opening the CUI dialog box to the Transfer tab for importing and exporting partial CUI files, and editing command aliases



## Applications panel



Figure 79 - BricsCAD Applications Panel



Figure 80 - AutoCAD Applications Panel

- BricsCAD provides tools for loading custom LISP applications and launching the Visual Basic Editor
- AutoCAD provides tools for loading custom LISP applications, running a script file, launching the Visual Basic Editor, launching the Visual LISP Editor, and running a VBA macro

## CAD Standards (AutoCAD)

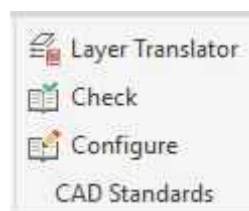
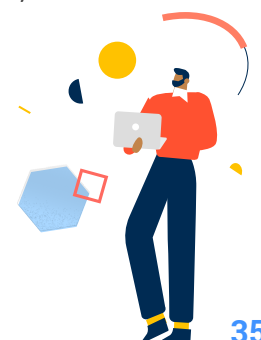


Figure 81 - AutoCAD CAD Standards Panel

- AutoCAD provides tools for Layer Translator, Checking CAD Standards, and Configuring CAD Standards
  - BricsCAD does not support these tools



## Output Tab

### Print (Plot) panel



Figure 82 - BricsCAD Print Panel

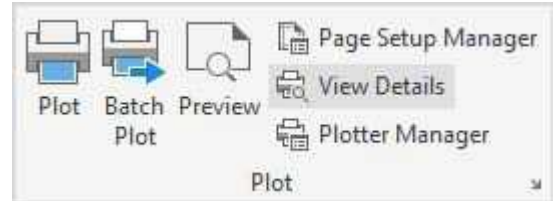


Figure 83 - AutoCAD Plot Panel

- Preview, Print (Plot), Page Setup, Publish (Batch Plot), Plotter Manager tools are all identical in both applications

### Print (Plot) panel

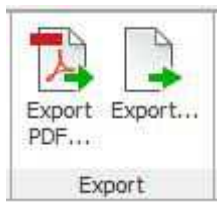


Figure 84 - BricsCAD Export Panel

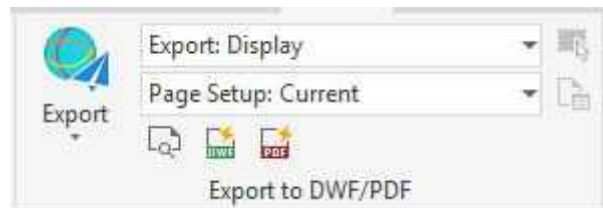


Figure 85 - AutoCAD Export to DWF/PDF Panel

- BricsCAD has a tool for exporting to PDF, and another tool for exporting to numerous other file types
- AutoCAD has tools for export to PDF, DWF, and DGN

