



- A ARC / Creates an arc.
- Z ZOOM / Increases or decreases the magnification of the view in the current viewport.
- W WBLOCK / Writes objects or a block to a new drawing file.
- S STRETCH / Stretches objects crossed by a selection window or polygon.
- X EXPLODE / Breaks a compound object into its component objects.
- **E ERASE** / Removes objects from a drawing.
- D DIMSTYLE / Creates and modifies dimension styles.
- C CIRCLE / Creates a circle.

- R REDRAW / Refreshes the display in the current viewport.
- F FILLET / Rounds and fillets the edges of objects.
- V VIEW / Saves and restores named views, camera views, layout views, and preset views.
- T MTEXT / Creates a multiline text object.
- **G GROUP** / Creates and manages saved sets of objects called groups.
- B BLOCK / Creates a block definition from selected objects.
- H HATCH / Fills an enclosed area or selected objects with a hatch pattern, solid fill, or gradient fill.

- J JOIN / Joins similar objects to form a single, unbroken object.
- U UNDO / Reverses the most recent action.
- M MOVE / Moves objects a specified distance in a specified direction.
- I INSERT / Inserts a block or drawing into the current drawing.
- O OFFSET / Creates concentric circles, parallel lines, and parallel curves.
- L LINE / Creates straight line segments.
- P PAN / Moves the view planar to the screen.

### Hot Keys

Cmd-1	Opens or closes the Tool Sets palette.
Cmd-2	Opens or closes the Content palette.
Cmd-3	Opens or closes the command window.
Cmd-4	Opens or closes the Layers palette.
Cmd-5	Opens or closes the Properties Inspector palette.
Cmd-6	Toggles the status bar.
Cmd-7	Opens or closes the Reference Manager palette.
Cmd-8	Opens or closes the Project Manager palette.
Cmd-9	Opens or closes the Material Browser palette.
Cmd-/	Launches the online help (browser).
Cmd-E	Displays the Export Data dialog.
Cmd-F	Displays the Find and Replace dialog.
Cmd-G	Groups selected objects.
Cmd-I	Displays the Properties Inspector palette.
Cmd-R	Regenerates the current viewport.
Cmd-W	Closes the current drawing.
Cmd-+	Zooms in 2x.
Cmd	Zooms out 0.5x.
Cmd-,	Displays the Application Preferences dialog.
Cmd	Displays the Quick View dialog.
Shift-Cmd-C	Displays the color palette.
Shift-Cmd-;	Displays the Check Spelling dialog.

### Toggles

Fn-F1 or Cmd-/	Displays Help.
Fn-F2	Expands or collapses the display of the Command Window.
Fn-F3 or Ctrl-F or Ctrl-Shift-F	Toggles object snap mode on and off.
Fn-F4	Toggles 3D object snap mode on and off.
Fn-F5	Toggles isoplane mode.
Fn-F6 or Cmd-D or Ctrl-D or	Toggles Dynamic UCS mode on and off.
Fn-F7 or Ctrl-G or Ctrl-Shift-G	Toggles grid display on and off.
Fn-F8 or Cmd-L or Shift-Cmd-O	Toggles ortho mode on and off.
Fn-F9 or Cmd-B or Ctrl-B	Toggles snap mode on and off.
Fn-F10 or Cmd-U or Ctrl-U	Toggles polar tracking on and off.
Shift-Cmd-D	Toggles Dynamic Input mode on and off.
Shift-Cmd-F	Toggles Clean Screen mode on and off.
Shift-Cmd-I or Shift-Ctrl-I	Toggles Infer Constraints mode on and off.
Shift-Cmd-T	Toggles object snap tracking on and off.
Ctrl-I	Toggles the coordinates display mode.

Ctrl-W or Ctrl-Shift-W	Toggles Selection Cycling.
Ctrl-H	Toggles PICKSTYLE on and off.
Shift-Cmd-H	Toggles the display of all palettes on or off.

### Manage Workflow

Cmd-C or Ctrl-C	Copies the selected objects to the Clipboard.
Cmd-E	Displays the Export Data dialog box.
Cmd-F	Displays the Find and Replace dialog box.
Cmd-V or Ctrl-V	Pastes the contents of the Clipboard to the current layout.
Cmd-X or Ctrl-X	Removes the selected from the drawing and adds them to the Clipboard.
Cmd-Y or Ctrl-Y or Shift-Cmd-Z	Reverses the most recent undo.
Cmd-Z or Ctrl-Z	Undoes the most recent action.
Ctrl-[ or Ctrl-\	Cancels.
Shift-Cmd-;	Displays the Check Spelling dialog box.
Ctrl-J or Ctrl-M	Repeats the previous command.
Shift-Ctrl-C	Copies the selected objects with a specified base point.
Shift-Ctrl-E	Implied Face Extrusion (PressPull).

### Manage Drawings

Cmd-A or Ctrl-A	Selects all objects in the current layout.
Cmd-G	Groups the selected objects.
Cmd-H	Hides AutoCAD window.
Cmd-M	Minimizes the current drawing window.
Cmd-N or Ctrl-N	Creates new drawing.
Cmd-O or Ctrl-O	Opens drawing.
Cmd-P or Ctrl-P	Displays the Print/Plot dialog box.
Cmd-Q or Ctrl-Q	Closes the program.
Cmd-R	Regenerates the current viewport.
Cmd-S or Ctrl-S	Saves the current drawing. If the drawing has not been saved yet, the Save Drawing As dialog box is displayed.
Cmd-W	Closes the current drawing.
Cmd-Opt-W	Closes all drawings.
Shift-Cmd-G	Ungroups the selected group.
Shift-Cmd-P	Displays the Page Setup Manager.
Shift-Cmd-R	Regenerates all viewports in the current layout.
Shift-Cmd-S or Shift-Ctrl-S	Displays the Save Drawing As dialog box.
Ctrl-A	Selects all objects in the current layout.
Cmd-Opt-M	Minimizes all.

### Manage Screen

Fn-F11	Hides all open windows.
Fn-F12	Display dashboard.
Cmd-1 or Ctrl-3	Opens or closes the Tool Sets palette.
Cmd-2 or Ctrl-2	Opens or closes the Content palette on and off.
Cmd-3 or Ctrl-9	Shows or hides the Command Window.
Cmd-4	Opens or closes the. Layers palette.
Cmd-5 or Cmd-I or Ctrl-1	Opens or closes the Properties Inspector palette.
Cmd-6	Toggles the display of the status bar on and off.
Cmd-7	Opens or closes the Reference Manager palette.
Cmd-8 or Ctrl-4	Project Manager.
Cmd-9	Material Browser.
Cmd-0 or Ctrl-0	Toggles Clean Screen on and off.
Cmd	Zooms out.
Cmd-+	Zooms in.
Cmd-,	Options.
Cmd or Shift-Cmd	Displays the Quick View dialog box.
Shift-Cmd-C	Displays the Color Palette. Select a new color to make it the current color for new objects.
Cmd-Opt-H	Hides the Windows of all other applications.
Cmd-Opt-I	Properties.
Cmd-Opt-T	Toggles Toolset Palette.



3A 3DARRAY / Creates copies of objects arranged in a 3D pattern.

**3AL 3DALIGN** / Aligns objects in 3D.

### 3DMIRROR

MIRROR3D / Mirrors objects across a specified mirroring plane.

3DO 3DORBIT / Rotates the view in 3D space, but constrained to horizontal and vertical orbit only.

3F 3DFACE / Creates a 3D polyface mesh by specifying each vertex; also can specify whether an edge segment is invisible.

**3M 3DMOVE** / Moves selected objects along an axis or plane.

**3P 3DPOLY** / Creates a 3D polyline.

**3R 3DROTATE** / Rotates selected objects about a specified axis.

**3S 3DSCALE** / Scales selected objects along a specified plane or axis, or uniformly along all 3 axes.



A ARC / Creates an arc.

AA AREA / Calculates the area and perimeter of objects or of defined areas.

AC BACTION / Adds an action to a dynamic block definition.

AL ALIGN / Aligns objects with other objects in 2D and 3D.

AP APPLOAD / Load Application.

AR ARRAY / Creates multiple copies of objects in a pattern.

ATE ATTEDIT / Changes attribute information in a block.

ATI ATTIPEDIT / Changes the textual content of an attribute within a block.

ATT ATTDEF / Redefines a block and updates associated attributes.

ATTE ATTEDIT / Changes attribute information in a block.

### B

B BLOCK / Creates a block definition from selected objects.

BC BCLOSE / Closes the Block Editor.

BE BEDIT / Opens the block definition in the Block Editor.

BH HATCH / Fills an enclosed area or selected objects with a hatch pattern, solid fill, or gradient fill.

### **BLENDSRF**

**SURFBLEND** / Creates a transition surface between two existing surfaces or solids.

BO BOUNDARY / Creates a region or a polyline from an enclosed area.

**BPUB** PUBLISH / Publishes a set of drawings to PDF files or printers.

BR BREAK / Breaks the selected object between two points.

BS BSAVE / Saves the current block definition.

BVS BVSTATE / Creates, sets, or deletes a visibility state in a dynamic block.



(

C CIRCLE / Creates a circle.

CBAR CONSTRAINTBAR / A toolbar-like UI element that displays the available geometric constraints on an object.

CH PROPERTIES / Controls properties of existing objects.

CHA CHAMFER / Bevels the edges of objects.

CL COMMANDLINE / Displays the Command Line window.

### **CLIPVIEWPORT**

**VPCLIP** / Clips layout viewport objects and reshapes the viewport border.

CO COPY / Copies objects a specified distance in a specified direction.

**COL** COLOR / Sets the color for new objects.

### COMMANDHIDE

**COMMANDLINEHIDE** / Hides the Command Line window.

### CREASE

**MESHCREASE** / Selects mesh subojects to crease.

### **CREATESOLID**

**SURFSCULPT** / Converts a group of surfaces that enclose a watertight region to a 3D solid.

### **CSETTINGS**

**CONSTRAINTSETTINGS** / Controls the display of geometric constraints on constraint bars.

CT CTABLESTYLE / Sets the name of the current table style.

CUBE NAVVCUBE / Controls the visibility and display properties of the ViewCube tool.

### C-D

### **CURVATUREANALYSIS**

ANALYSISCURVATURE / Evaluates areas of high and low surface curvature by displaying a color gradient.

### CUSTOMIZE

**CUI** / Manages the customized user interface elements.

CYL CYLINDER / Creates a 3D solid cylinder.

D DIMSTYLE / Creates and modifies dimension styles.

DAL DIMALIGNED / Creates an aligned linear dimension.

DAN DIMANGULAR / Creates an angular dimension.

DAR DIMARC / Creates an arc length dimension.

DBA DIMBASELINE / Creates a linear, angular, or ordinate dimension from the baseline of the previous or selected dimension.

**DCE DIMCENTER** / Creates the center mark or the centerlines of circles and arcs.

DCO DIMCONTINUE / Creates a dimension that starts from an extension line of a previously created dimension.

**DCON DIMCONSTRAINT** / Applies dimensional constraints to selected objects or points on objects.

DDA DIMDISASSOCIATE / Removes associativity from selected dimensions.

**DDI DIMDIAMETER** / Creates a diameter dimension for a circle or an arc.

### **DDPTYPE**

**PTYPE** / Specifies the display style and size of point objects.

### **DDVPOINT**

**VPOINT** / Sets the viewing direction for a 3D visualization of the drawing.

DED DIMEDIT / Edits dimension text and extension lines.

#### DELCON

**DELCONSTRAINT** / Removes all geometric and dimensional constraints from a selection set of objects.

DI DIST / Measures the distance and angle between two points.

DIV DIVIDE / Creates evenly spaced point objects or blocks along the length or perimeter of an object.

DJL DIMJOGLINE / Adds or removes a jog line on a linear or aligned dimension.

DJO DIMJOGGED / Creates jogged dimensions for circles and arcs.

DL DATALINK / The Data Link dialog box is displayed.

**DLI DIMLINEAR** / Creates a linear dimension.

DLU DATALINKUPDATE / Updates data to or from an established external data link.

**DO DONUT** / Creates a filled circle or a wide ring.

DOR DIMORDINATE / Creates ordinate dimensions.

DOV DIMOVERRIDE / Controls overrides of system variables used in selected dimensions.



DR DRAWORDER / Changes the draw order of images and other objects.

**DRA DIMRADIUS** / Creates a radius dimension for a circle or an arc.

### **DRAFTANGLEANALYSIS**

ANALYSISDRAFTANGLE / Evaluates whether a model has adequate draft between a part and its mold.

DRE DIMREASSOCIATE / Associates or re-associates selected dimensions to objects or points on objects.

**DRM DRAWINGRECOVERY** / Displays a list of drawing files that can be recovered after a program or system failure.

DS DSETTINGS / Sets grid and snap, polar and object snap tracking, object snap modes, Dynamic Input, and Quick Properties.

**DT TEXT** / Creates a single-line text object.

DV DVIEW / Defines parallel projection or perspective views by using a camera and target.

### E-F

**E ERASE** / Removes objects from a drawing.

ED TEXTEDIT / Edits a dimensional constraint, dimension, or text object.

EL ELLIPSE / Creates an ellipse or an elliptical arc.

**ER EXTERNALREFERENCES** / Opens the External References palette.

**EX EXTEND** / Extends objects to meet the edges of other objects.

**EXIT** QUIT / Exits the program.

**EXP EXPORT** / Saves the objects in a drawing to a different file format.

**EXT EXTRUDE** / Extends the dimensions of a 2D object or 3D face into 3D space.

### **EXTENDSRF**

**SURFEXTEND** / Creates new surface by extending existing surface.

F FILLET / Rounds and fillets the edges of objects.

### FILLETSRF

**SURFFILLET** / Creates new surface by filleting existing surface.

### **FREEPOINT**

**POINTLIGHT** / Creates lighting effect that radiates in all directions from its location.

**FSHOT FLATSHOT** / Creates a 2D representation of all 3D objects based on the current view.

### **FULLSCREEN**

**CLEANSCREENON** / Clears the screen of the menu bar and all palettes.

### **FULLSCREENOFF**

**CLEANSCREENOFF** / Restores the state of display before CLEANSCREENON was used.

## G-H

G GROUP / Creates and manages saved sets of objects called groups.

**GCON GEOCONSTRAINT** / Applies or persists geometric relationships between objects or points on objects.

GD GRADIENT / Fills an enclosed area or selected objects with a gradient fill.

### **GENERATESECTION**

**SECTIONPLANETOBLOCK** / Saves 2D and 3D sections as blocks.

H HATCH / Fills an enclosed area or selected objects with a hatch pattern, solid fill, or gradient fill.

HB HATCHTOBACK / Sets the draw order for all hatches in the drawing to be behind all other objects.

HE HATCHEDIT / Modifies an existing hatch or fill

HI HIDE / Regenerates a 3D wireframe model with hidden lines suppressed.





- I INSERT / Inserts a block or drawing into the current drawing.
- IAD IMAGEADJUST / Controls the image display of the brightness, contrast, and fade values of images.
- IAT IMAGEATTACH / Inserts a reference to an image file.
- ICL IMAGECLIP / Crops the display of a selected image to a specified boundary.
- ID ID / Displays the UCS coordinate values of a specified location.
- IM IMAGE / Displays the External References palette.
- **IMP IMPORT** / Imports files of different formats into the current drawing.
- IN INTERSECT / Creates a 3D solid, surface, or 2D region from overlapping solids, surfaces, or regions.
- INF INTERFERE / Creates a temporary 3D solid from the interferences between two sets of selected 3D solids.

### **ISOLATE**

**ISOLATEOBJECTS** / Displays selected objects across layers; unselected objects are hidden.

- J JOIN / Joins similar objects to form a single, unbroken object.
- JOG DIMJOGGED / Creates jogged dimensions for circles and arcs.

### **JOGSECTION**

**SECTIONPLANEJOG** / Creates a section plane that has multiple segments.

- L LINE / Creates straight line segments.
- LA LAYER / Manages layers and layer properties.
- LAS LAYERSTATE / Saves, restores, and manages named layer states.

### LAYERFREEZE

**LAYFRZ** / Freezes the layer of the selected object.

### LAYERHIDE

**LAYOFF** / Turns off the layer of a selected object.

### LAYERISOLATE

**LAYISO** / Hides or locks all layers except those of the selected objects.

### LAYERLOCK

**LAYLCK** / Locks the layer of a selected object.

### LAYERMAKECURRENT

**LAYMCUR** / Sets the current layer to that of a selected object.

### LAYERMATCH

LAYMCH / Changes the layer of a selected object to match the destination layer.

### **LAYERUNISOLATE**

**LAYUNISO** / Restores all layers that were hidden or locked with the LAYISO command.

### LAYERUNLOCK

**LAYULK** / Unlocks the layer of a selected object.

LE QLEADER / Creates a leader and leader annotation.

- **LEN LENGTHEN** / Changes the length of objects and the included angle of arcs.
- LESS MESHSMOOTHLESS / Decreases the level of smoothness for mesh objects by one level.
- LI LIST / Displays property data for selected objects.
- LO LAYOUT / Creates and modifies drawing layout tabs.
- LT LINETYPE / Loads, sets, and modifies linetypes.
- LTS LTSCALE / Changes the scale factor of linetypes for all objects in a drawing.
- LW LWEIGHT / Sets the current lineweight, lineweight display options, and lineweight units.



## M

M MOVE / Moves objects a specified distance in a specified direction.

MA MATCHPROP / Applies the properties of a selected object to other objects.

ME MEASURE / Creates point objects or blocks at measured intervals along the length or perimeter of an object.

MEA MEASUREGEOM / Measures the distance, radius, angle, area, and volume of selected objects or sequence of points.

MI MIRROR / Creates a mirrored copy of selected objects.

ML MLINE / Creates multiple parallel lines.

MLA MLEADERALIGN / Aligns and spaces selected multileader objects.

MLC MLEADERCOLLECT / Organizes selected multileaders that contain blocks into rows or columns, and displays the result with a single leader.

MLD MLEADER / Creates a multileader object.

MLE MLEADEREDIT / Adds leader lines to, or removes leader lines from, a multileader object.

MLS MLEADERSTYLE / Creates and modifies multileader styles.

MO PROPERTIES / Controls properties of existing objects.

MORE MESHSMOOTHMORE / Increases the level of smoothness for mesh objects by one level.

MS MSPACE / Switches from paper space to a model space viewport.

### M-N

MT MTEXT / Creates a multiline text object.

MV MVIEW / Creates and controls layout viewports.

### **NETWORKSRF**

**SURFNETWORK** / Creates non-planar surfaces in the space between edge subobjects, splines, and other 2D and 3D curves.

### **NEWPROJECT**

**NEWSHEETSET** / Creates a new project data (DST) file that manages drawing layouts, file paths, and project information.

**NVIEW VIEW** / Saves and restores named views, camera views, layout views, and preset views.

## C

O OFFSET / Creates concentric circles, parallel lines, and parallel curves.

### **OBJECTSELECTIONLIMIT**

PROPOBJLIMIT / Limits the number of objects that can be changed at one time with the Properties Inspector.

### **OFFSETSRF**

**SURFOFFSET** / Creates a parallel surface or solid by setting an offset distance from a surface.

OP OPTIONS / Customizes the program settings.

### **OPENPROJECT**

**OPENSHEETSET** / Opens a selected project data (DST) file.

ORBIT 3DORBIT / Rotates the view in 3D space, but constrained to horizontal and vertical orbit only.

OS OSNAP / Sets running object snap modes.

# P

P PAN / Moves the view planar to the screen.

PA PASTECLIP / Pastes objects from the Clipboard into the current drawing.

### **PALETTESCLOSE**

**TOOLSETSCLOSE** / Closes the tool palettes window.

PAR PARAMETERS / Controls the associative parameters used in the drawing.

### **PARAM**

**BPARAMETER** / Adds a parameter with grips to a dynamic block definition.

PATCH SURFPATCH / Creates a new surface by fitting a cap over a surface edge that forms a closed loop.

PE PEDIT / Edits polylines and 3D polygon meshes.

PGP ALIASEDIT / Creates, modifies, and deletes AutoCAD command aliases.

PL PLINE / Creates a 2D polyline.

PM SHEETSET / Opens the Project Manager.

### **PMAUTOOPEN**

**SSMAUTOOPEN** / Controls the display behavior of the Project Manager when a drawing associated with a layout is opened.

### **PMFOUND**

**SSFOUND** / Displays the path and file name if a search for a project file is successful.

### **PMHIDE**

**SHEETSETHIDE** / Closes the Project Manager.

### **PMLAYOUTSTATUS**

**SMSHEETSTATUS** / Controls how the status data in a project is refreshed.

### **PMLOCATE**

**SSLOCATE** / Controls whether the project associated with a drawing is located and opened when the drawing is opened.

### **PMPOLLTIME**

**SSMPOLLTIME** / Controls the time interval between automatic refreshes of the status data in a project.

### **PMSTATE**

SSMSTATE / Indicates whether the Project Manager window is open or closed.

PO POINT / Creates a point object.

POFF HIDEPALETTES / Hides currently displayed palettes (including the command line).

### **POINTOFF**

**CVHIDE** / Hides the control vertices for both NURBS surfaces and curves.

### **POINTON**

**CVSHOW** / Displays the control vertices for both NURBS surfaces and curves.

POL POLYGON / Creates an equilateral closed polyline.

PON SHOWPALETTES / Restores the display of hidden palettes.

**PR PROPERTIES** / Displays Properties palette.

### **PRCLOSE**

**PROPERTIESCLOSE** / Closes the Properties Inspector palette.

PRE PREVIEW / Displays the drawing as it will be plotted.

**PREF** OPTIONS / Customizes the program settings.

**PRINT** PLOT / Plots a drawing to a plotter, printer, or file.

PS PSPACE / Switches from a model space viewport to paper space.

**PSOLID POLYSOLID** / Creates a 3D wall-like polysolid.

PU PURGE / Removes unused items, such as block definitions and layers, from the drawing.

**PYR PYRAMID** / Creates a 3D solid pyramid.

# Q-R

**QSAVE QSAVE / Saves the current drawing.** 

QVD QUICKVIEW / Displays a list of all open drawings, and the layouts contained in the current drawing or the selected drawing when more than one drawing is open.

R REDRAW / Refreshes the display in the current viewport.

RA REDRAWALL / Refreshes the display in all viewports.

**RE REGEN** / Regenerates the entire drawing from the current viewport.

**REA REGENALL** / Regenerates the drawing and refreshes all viewports.

### **REBUILD**

**CVREBUILD** / Rebuilds the shape of NURBS surfaces and curves.

**REC RECTANG** / Creates a rectangular polyline.

REFINE MESHREFINE / Refines mesh objects.

**REG** REGION / Converts an object that encloses an area into a region object.

REN RENAME / Changes the names assigned to items such as layers and dimension styles.

**REV** REVOLVE / Creates a 3D solid or surface by sweeping a 2D object around an axis.

### **RIBBON**

**TOOLSETS** / Opens the Tool Sets palette.

### RIBBONCLOSE

**TOOLSETSCLOSE** / Closes the Tool Sets palette.

RO ROTATE / Rotates objects around a base point.

## R-S

RR RENDER / Creates a photorealistic or realistically shaded image of a 3D solid or surface model.

RW RENDERWIN / Displays the Render window without starting a rendering operation.

S STRETCH / Stretches objects crossed by a selection window or polygon.

SC SCALE / Enlarges or reduces selected objects, keeping the proportions of the object the same after scaling.

**SCR SCRIPT** / Executes a sequence of commands from a script file.

SE DSETTINGS / Sets grid and snap, polar and object snap tracking, object snap modes, and Dynamic Input.

**SEC** SECTION / Uses the intersection of a plane and solids, surfaces, or mesh to create a region.

### **SELECTIONLIMIT**

**PROPOBJLIMIT** / Limits the number of objects that can be changed at one time with the Properties Inspector.

**SET SETVAR** / Lists or changes the values of system variables.

SHA SHADEMODE / Starts the VSCURRENT command.

**SL SLICE** / Creates new 3D solids and surfaces by slicing, or dividing, existing objects.

### **SMOOTH**

MESHSMOOTH / Converts 3D solids, surfaces, and legacy mesh objects to the enhanced mesh object for smoothing, refinement, creasing, and splitting.

# 5

**SN SNAP** / Restricts cursor movement to specified intervals.

**SO SOLID** / Creates solid-filled triangles and quadrilaterals.

**SP SPELL** / Checks spelling in a drawing.

**SPE SPLINEDIT** / Edits a spline or spline-fit polyline.

SPL SPLINE / Creates a smooth curve that passes through or near specified points.

### **SPLANE**

**SECTIONPLANE** / Creates one or more section objects and places them throughout a 3D model.

SPLIT MESHSPLIT / Splits a mesh face into two faces

**SSM** SHEETSET / Opens the Sheet Set Manager.

ST STYLE / Creates, modifies, or specifies text styles.

SU SUBTRACT / Combines selected 3D solids, surfaces, or 2D regions by subtraction.

# Τ

- T MTEXT / Creates a multiline text object.
- TA TEXTALIGN / Aligns multiple text objects vertically, horizontally, or obliquely.
- TB TABLE / Creates an empty table object.
- **TEDIT TEXTEDIT** / Edits a dimensional constraint, dimension, or text object.

### **TEXTSTYLEEDIT**

- **STYLE** / Creates, modifies, or specifies text styles.
- TH THICKNESS / Sets the default 3D thickness property when creating 2D geometric objects.
- **THEME COLORSCHEME** / Stores the current color scheme used by the program.
- TI TILEMODE / Controls whether paper space can be accessed.
- TO TOOLSETS / Opens the Tool Sets palette.
- TOL TOLERANCE / Creates geometric tolerances contained in a feature control frame.
- TOR TORUS / Creates a donut-shaped 3D solid.
- TP CONTENT / Opens the Content palette.
- TRIM / Trims objects to meet the edges of other objects.

### U-W

- U UNDO / Reverses the most recent action.
- UC UCSMAN / Manages defined user coordinate systems.
- UN UNITS / Controls coordinate and angle display formats and precision.

### UNCREASE

**MESHUNCREASE** / Removes crease from selected mesh object.

### UNHIDE

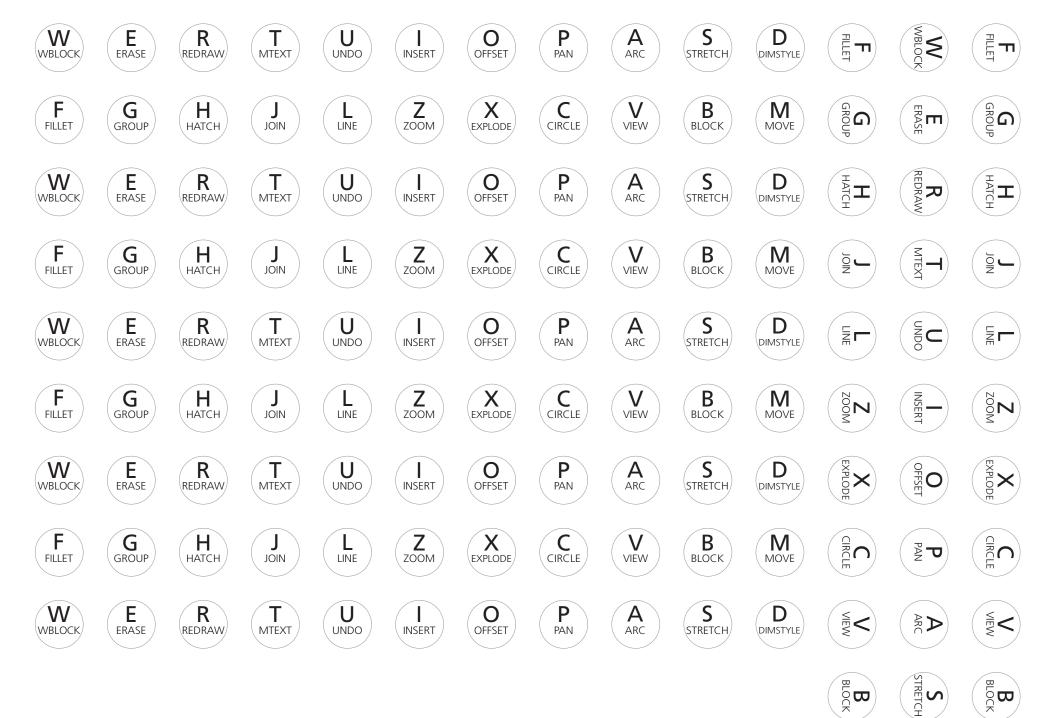
- UNISOLATEOBJECTS / Displays objects previously hidden with the ISOLATEOBJECTS or HIDEOBJECTS command.
- UNI UNION / Unions two solid or two region objects.
- V VIEW / Saves and restores named views, camera views, layout views, and preset views.

### VIEWPORTCLIP

- **VPCLIP** / Clips layout viewport objects and reshapes the viewport border.
- VP VPOINT / Sets the viewing direction for a 3D visualization of the drawing.
- **VPORT VPORTS** / Creates multiple viewports in model space or paper space
- VS VSCURRENT / Sets the visual style in the current viewport.
- W WBLOCK / Writes objects or a block to a new drawing file.
- WE WEDGE / Creates a 3D solid wedge.

## X-Z

- X EXPLODE / Breaks a compound object into its component objects.
- XA XATTACH / Inserts a DWG file as an external reference (xref).
- XB XBIND / Binds one or more definitions of named objects in an xref to the current drawing.
- XC XCLIP / Crops the display of a selected external reference or block reference to a specified boundary.
- XL XLINE / Creates a line of infinite length.
- XR XREF / Starts the EXTERNALREFERENCES command.
- Z ZOOM / Increases or decreases the magnification of the view in the current viewport.
- **ZEBRA** ANALYSISZEBRA / Projects stripes onto a 3D model to analyze surface continuity.
- **ZIP ETRANSMIT** / Creates a Self-Extracting or Zipped Transmittal Package.



Move