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AutoCAD Command Shortcuts

Summary

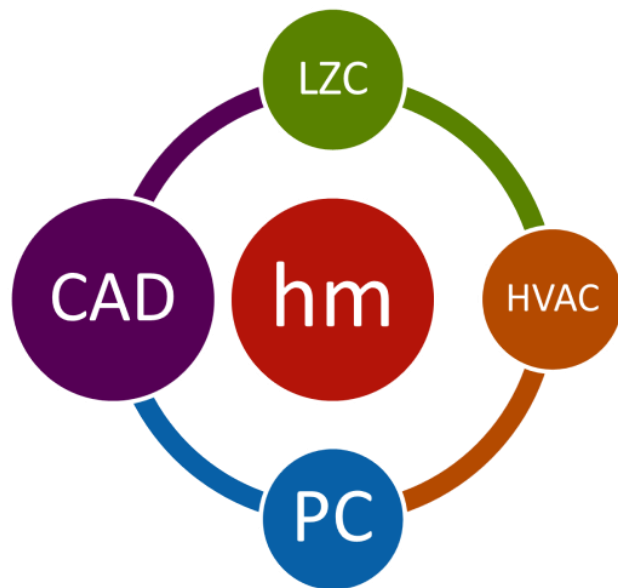
This homemicro.co.uk guide provides information on AutoCAD® command shortcuts by group. Keying in a command can be much quicker than selecting an icon or navigating through the menu bar, especially when autocomplete is active. For example, to draw a line simply type 'L' in the command bar and hit enter or the spacebar. Increase your drawing productivity by learning AutoCAD command shortcuts today.

This guide lists AutoCAD shortcuts in groups according to the command sequence. For example, all text relevant shortcuts are grouped together.

Tags: homemicro.co.uk; CAD; A to Z, AutoCAD Shortcuts, AutoCAD Commands

The web article relating to this subject can be found here:

http://www.homemicro.co.uk/cad_shortcut.html



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Introduction

AutoCAD® functions can be performed quickly by getting to grips with the many command shortcuts. Learning the essential shortcuts will increase your productivity. Keying in a shortcut command can be much quicker than selecting an icon or navigating through the menu bar.

Commands are entered in the command bar. AutoCAD is very intuitive as you type in characters, AutoCAD suggests similar commands with the same characters. If you cannot remember a shortcut, just start typing what you want such as 'L' for a line and the AutoCAD command line suggestion list will take over and provide a selection on commands as Figure 1.

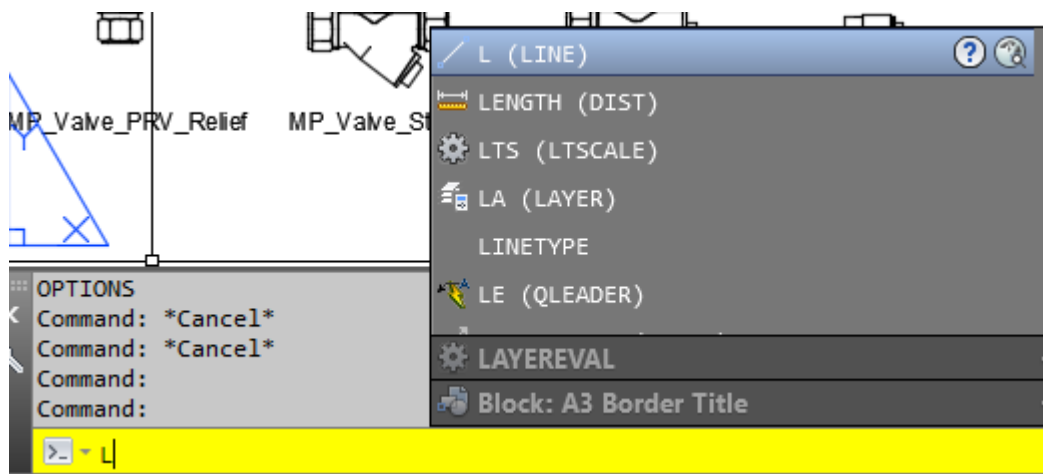


Figure 1 - AutoCAD command line shortcut example

Note the following:

- 1) Generally, a shortcut prefixed with “-” will suppress the associated dialogue from appearing.
- 2) Some of the following shortcuts only work with AutoCAD 2006 or newer.
- 3) Not all the shortcuts listed work with AutoCAD LT.

Shortcuts vs. Commands

Shortcuts and commands are not the same. Shortcuts are the keyboard combos and the function key toggles, e.g., F3 to turn object snap on and off, and F8 which locks the cursor movement to horizontal or vertical or CTRL+P to activate the Print dialogue box and Ctrl+S to save a file.

Commands are the instructions that tell the AutoCAD what to do. A command is typed in the command line text box and activated by pressing the 'Enter' or 'Spacebar' keys. If automatic command completion is turned on, autocompletion will show command alternatives based on the letters entered. These suggestions can be selected from the list. The A to Z command shortcuts provided in this article are the key combinations which provide the default suggestion for quick access to the commands. For example, typing 'C' followed by 'Enter' will start the draw a CIRCLE command, but typing 'CO' then 'Enter' will start the COPY command.

Core Drawing Commands

AutoCAD's core drawing commands—such as Line, Circle, Rectangle, and Polyline—serve as the foundational tools for creating precise geometric shapes within a digital drafting environment. These commands enable users to construct both simple and complex forms, which can be further modified, annotated, and dimensioned to meet specific design requirements.

Table 1 – Core Drawing Commands

Shortcut	Command	Comment
L	LINE	Draws a straight line between two points
C	CIRCLE	Creates a circle from center and radius
REC	RECTANGLE	Draws a rectangle using two corner points
PL	POLYLINE	Creates connected lines and arcs
A	ARC	Draws an arc using three points

Dimensioning & Annotation Commands

AutoCAD's dimensioning commands can be used to add measurements to a drawing to define the size, location, and geometry of objects. AutoCAD provides a suite of dimensioning tools that automatically generate linear (horizontal, vertical, aligned), angular (between lines or around corners) or radial and diameter dimensions (for circles and arcs).

Annotation in AutoCAD includes all non-geometry elements that convey additional information, such as text labels (e.g., room names, material notes), multileaders (arrows with attached notes), hatches (to indicate materials or fill areas) and tables (for schedules, quantities, or specifications).

Table 2 – Dimensioning & Annotation Commands

Shortcut	Command	Comment
D	DIMSTYLE	Opens dimension style manager
DIM	DIM	Adds dimensions (linear, angular, etc.)
T	MTEXT	Creates multiline text
DT	TEXT	Creates single-line text

Modifying Tools

AutoCAD's modifying commands allow users to adjust, refine, or reorganize existing geometry within a drawing.

Table 3 – Modifying Tools

Shortcut	Command	Comment
M	MOVE	Moves selected objects
CO	COPY	Copies objects to a new location
RO	ROTATE	Rotates objects around a base point
SC	SCALE	Resizes objects proportionally
TR	TRIM	Trims objects to meet edges
EX	EXTEND	Extends objects to meet edges
MI	MIRROR	Creates a mirrored copy

Common Commands

The following are some of the best command shortcuts for improving productivity.

Table 4 – Common Commands

Shortcut	Command	Comment
A	ARC	Draw an arc
AL	ALIGN	Align an object with another
AP	APPLOAD	Opens application load dialogue box
AR	ARRAY	Opens array dialogue box
AUDIT	AUDIT	Audit drawing for errors
AV	DSVIEWER	Opens ariel view of drawing
B	BLOCK	Opens block dialogue box
C	CIRCLE	Draw a circle
CO	COPY	Copy an object
CHA	CHAMFER	Chamfer between 2 non-parallel lines
COL	COLOR	Opens select color dialogue box
CUI	CUI	Opens customise user interface dialogue
D	DIMSTYLE	Opens dimstyle manager
DC	ADCENTER	Opens designcenter
DI	DIST	Check a distance
DIV	DIVIDE	Inserts point node a set division
DO	DONUT	Draw a solid donut shape

DV	DVIEW	Perspective view
E	ERASE	Erase a selection
EX	EXTEND	Extend a selection
F	FILLET	Draw an arc between 2 intersecting lines
FI	FILTER	Opens filter dialogue box
FLATTEN	FLATTEN	Converts 3D to 2D
G	GROUP	Launches the group dialogue box
H	HATCH	Opens hatch and gradient dialogue box
I	INSERT	Insert a block
IM	IMAGE	Launches image manager
J	JOIN	Joins 2 objects to form single object
JPGOUT	JPGOUT	Creates a JPEG file of current drawing
L	LINE	Draw a line
LA	LAYER	Opens layer manager
LE	QLEADER	Draw a leader line (may need to adjust settings)
LEAD	LEADER	Leader line with annotation
LI or LS	LIST	Display information about objects in a text window
LO	-LAYOUT	Creates a new layout tab
LTS	LTScale	Change the linetype scale
M	MOVE	Move a selection
MA	MATCHPROPERTIES	Match properties of an object
ME	MEASURE	Inserts point node at input distance
O	OFFSET	Offset a selection
OP	OPTIONS	Launches options dialogue box
P	PAN	Pan in drawing
PE	POLYEDIT	Edit a polyline
PL	PLINE	Draw a polyline
PLOT	PLOT	Opens plot/print dialogue box
PO	POINT	Point marker or node - DDPTYPE to change pointstyle
PR	PROPERTIES	Opens properties dialogue box
PRE	PREVIEW	Preview a plot
PU	PURGE	Opens purge dialogue box to remove unused elements
RE	REGEN	Regenerate the display
REC	RECTANG	Draw a rectangle
REN	RENAME	Opens dialogue box to rename blocks, layers, etc

RO	ROTATE	Rotate a selection
SP	SPELL	Spell check a selection - ALL to check entire drawing
T	MTEXT	Insert multiline text
TB	TABLE	Opens insert a table dialogue box
TP	TOOLPALETTES	Displays toolpalette
TR	TRIM	Trim a selection
U	UNDO	Undo last command
UN	UNITS	Opens units dialogue box
V	VIEW	Opens view dialogue box
W	WBLOCK	Write a block
X	EXPLODE	Explode a selection
XR	XREF	Opens x-reference manager
Z	ZOOM	Zoom in display - A=All, E=EXTENTS, W=WINDOW

Control Keys

Some Ctrl shortcuts in AutoCAD follow standard Windows behaviour—like Ctrl + S to save or Ctrl + P to print—while others are tailored to AutoCAD’s design tools and interface.

Table 5 – Control Keys

Shortcut	Command	Comment
CTRL+0	CLEANSCREEN	Turns user interface elements on/off
CTRL+1	PROPERTIES	Turns properties on/off
CTRL+2	ADCENTER	Turns design center on/off
CTRL+3	TOOLPALETTES	Turns tool palettes window on/off
CTRL+8	QUICKCALC	Launches calculator window
CTRL+9	COMMANDLINEHIDE	Toggle Command Line visibility
CTRL+A		Select all
CTRL+C	COPYCLIP	Copies objects to clipboard
CTRL+G		Turns background grrid on or off
CTRL+H		Turns a group on or off
CTRL+J		Repeats last command
CTRL+N	NEW	Opens create new drawing dialogue box
CTRL+O	OPEN	Opens the select file dialogue box
CTRL+P	PLOT	Opens the plot dialogue box
CTRL+R	CVPORT	Switches between viewports

CTRL+S	QSAVE	Opens the save drawing as dialogue box
CTRL+SHIFT+S		Save as
CTRL+V	PASTECLIP	Pastes data from clipboard to drawing
CTRL+X	CUTCLIP	Removes select object from drawing to clipboard
CTRL+Y	REDO	Performs the operation cancelled by UNDO
CTRL+Z	UNDO	Undoes the last operation
CTRL+TAB		Switches between open drawings
CTRL+PAGE UP		Switch up between layout tabs
CTRL+PAGE DOWN		Switch down between layout tabs
ARROW UP/Down		Recall last command

Function Keys

AutoCAD's function keys (F1–F12) are useful shortcuts that toggle key drafting features and settings. Quick toggles like F3 (Osnap) and F8 (Ortho) can dramatically improve precision and speed.

Table 6 – Function Keys

Shortcut	Command	Comment
F1	HELP	Opens Autocad help
F2	TEXTSCR GRAPHSCR	Switches between text screen and graphic area
F3	OSNAP	Switches osnap on/off. Toggles Object Snap (Osnap) on/off for precise point selection.
F4	3D Object Snap	Activates Osnap for 3D objects
F5 or CTRL+E	ISOPLANE	Cycles through isoplanes. Cycles through isometric planes (Top, Right, Left) for isometric drawing.
F6 or CTRL+D	COORDS	Turns coordinate display on/off
F7 or CTRL+G	GRID	Turns grid on/off
F8 or CTRL+L	ORTHO	Turns ortho on/off. Restricts cursor movement to horizontal/vertical directions.
F9 or CTRL+B	SNAP	Turns snap on/off. Toggles Snap to Grid, aiding alignment.
F10 or CTRL+U	POLAR	Turns polar on/off. Guides cursor movement along specified angles.

F11 or CTRL+W	OSNAP TRACK	Turns object snap tracking on/off. Enables tracking along Osnap points.
F12	DYNMODE	Turns dynamic input on/off

UCS

AutoCAD's UCS (User Coordinate System) commands give control over how a drawing's orientation is defined and manipulated.

Table 7 – UCS

Shortcut	Command	Comment
OB	OBJECT	Align UCS with an object, first select UCS
PLAN	PLAN	Aligns the view to the current or specified UCS.
UC	DDUCS	Display UCS manager dialogue box
UCS	UCS	Universal co-ordinate system options
UCSICON	UCSICON	Change the UCS icon appearance
UCSMAN	UCSMAN	Opens the UCS Manager to create, rename, and manage named UCSs
W	WORLD	Return to the WCS

Drawing Objects

Drawing objects in AutoCAD is the foundation of any design workflow. The basic drawing commands include L –Line, REC –Rectangle, PL –Polyline, C–Circle and A –Arc.

Tips for using Points (PO) in drawings:

- 1) Use PO to create node point - if you do not see anything try changing the node properties DDPTYPE.
- 2) Alternatively set PDMODE to 3 to display an X at id point set PDMODE to 0 to clear.

Table 8 – Drawing Objects

Shortcut	Command	Comment
B	BLOCK	Opens block dialogue box in order to make a block
BO	BOUNDARY	Draw a boundary
C	CIRCLE	Draw a circle
DO	DONUT	Draw a solid donut shape
DT	TEXT	Single line text
DIV	DIVIDE	Inserts point node a set division
EL	ELLIPSE	Draw an ellipse

F	FILLET	Draw an arc between 2 intersecting lines
G	GROUP	Opens object grouping dialogue
H	HATCH	Opens hatch and gradient dialogue box
L	LINE	Draw a line
LE	QLEADER	Draw a leader line (may need to adjust settings)
LEAD	LEADER	Leader line with annotation
ML	MLINE	Draw multilines
O	OFFSET	Offset an object by distance
PL	PLINE	Draw a polyline - a complex line
PO	POINT	Point marker or node - DDPTYPE to change pointstyle
POL	POLYGON	Draw a regular polygon 3 to 1024 sides
RAY	RAY	Construction line in one direction
REC	RECTANG	Draw a rectangle
REG	REGION	Region - for shading for example
REVCLOUD	REVCLOUD	Revision cloud - note can select a polyline
SPL	SPLINE	Spline or smooth curve along points
T	MTEXT	Multi-line text
WIPEOUT	WIPEOUT	Masks part of drawing for clarity
XL	XLINE	Construction line of infinite length

Coordinate Entry

Points are entered relative to the origin (0,0) of the drawing using the axis format X,Y or X,Y,Z (for 3D). Typing 100,50 (an absolute coordinate) places a point exactly at X=100, Y=50 regardless of where your last point was. For points relative to the last location the input format @X,Y or @X,Y,Z is used. If your last point was at 100,50, typing @10,0 places the next point at 110,50.

Table 9 – Coordinate Entry

Shortcut	Example	Comment
#X,Y	10,20 or 10,20,5	Absolute Coordinates. Location measured by distance from 0,0 in current UCS
@X,Y	@5,5	Relative Coordinates. Location measured by distance from last point
#distance<angle	10<45	Polar Coordinates. Location measured by distance and angle from 0,0 in current UCS
@distance<angle	@10<45	Location measured by distance and angle from last point

<angle	<15	An angle override from current point
Dynamic Input		Enabled via F12. Displays input prompts near the cursor for real-time coordinate entry.
Object Snap (OSNAP)		Activated with F3. Snaps to key geometry points like endpoints, midpoints, and intersections.
Grid & Snap		Using F7 GRIDMODE & F9 SNAPMODE. Restricts cursor movement to defined intervals on grid for alignment.

Object Selection

AutoCAD's object selection commands can be used with editing commands to amend existing objects. Click directly on an object to pick a single selection or drag left to right to select objects entirely within a rectangle **Window** or drag right to left to select **Crossing** objects that touch or cross the rectangle or click and drag to draw a freeform **Lasso** selection shape

Tips:

- 1) Use SHIFT+LEFT MOUSE BUTTON to deselect an object.
- 2) When a grip point is selected cycle through command options using keyboard spacebar - sequence STRETCH, MOVE, ROTATE, SCALE, MIRROR.
- 3) Object Cycling - hold down the Control key while picking, AutoCAD will cycle through all the objects that fall under the pickbox as you continue to pick. When the correct object is highlighted, simply hit Enter. You don't need to continue to hold down the Control key after the first pick.

Table 10 – Object Selection

Shortcut	Command	Comment
A	ADD	Adds each successive object, switches from remove
ALL	ALL	All objects on thawed layers
CP	CPOLYGON	Objects touching or enclosed by selection polygon
C	CROSSING	Objects touched or enclosed by window - Move right to left
F	FENCE	Objects touch by single selection fence
G	GROUP	Opens object grouping dialogue - use with copy/move/etc
L	LAST	Most recently created visible object
P	PREVIOUS	Most recent selection set
QSELECT	QSELECT	Opens dialogue for filtering objects based on properties like color, layer, etc.
R	REMOVE	Objects to remove from selection set

SELECTSIMILAR	SELECTSIMILAR	Selects objects with similar properties (layer, type, etc.)
SNAPANG	SNAPANGLE	Change the snap angle from default 0°
U	UNDO	Undo last selection action
W	WINDOW	Objects enclosed by window - Move left to right
WP	WPOLYGON	Objects within a window polygon

Modifying Objects

Modifying objects in AutoCAD is key to refining designs with commands to reshape, reposition, and clean up geometry. Essential editing commands are: CO –Copy; M –Move; RO –Rotate; E –Erase; and SC –Scale.

Tips:

- 1) When a grip point is selected cycle through command options using keyboard spacebar - sequence STRETCH, MOVE, ROTATE, SCALE, MIRROR.
- 2) Switch between Group and Ungroup using CTRL+H (yes, H).

Table 11 – Modifying Objects

Shortcut	Command	Comment
AL	ALIGN	Align an object with another
AR	ARRAY	Make multiple copies of an object
BR	BREAK	Break a line by defining 2 points
CO or CP	COPY	Copy object
COPYTOLAYER	COPYTOLAYER	Copy object from one layer to another
CHA	CHAMFER	Chamfer between 2 non-parallel lines
E	ERASE	Erase selection
EX	EXTEND	Extend a line to meet another
F	FILLET	Draw an arc between 2 intersecting lines
G	GROUP	Opens object grouping dialogue - use to copy or move
LEN	LENGTHEN	Lengthen or shorten a line
M	MOVE	Move an object
MI	MIRROR	Mirror an object
MOCORO	MOVE/COPY/ROTATE	Copy move and rotate an object with one command
NCOPY	NCOPY	Copies nested objects from blocks or external references (XREFs)
O	OFFSET	Offset an object by distance

OVERKILL	OVERKILL	Cleans up duplicate or overlapping geometry to reduce clutter.
RO	ROTATE	Rotate an object
S	STRETCH	Stretch an object
SC	SCALE	Scale an object
TR	TRIM	Trim objects
X	EXPLODE	Explode single entity to component parts

Text

The two main methods for entering text are Single Line Text (TEXT/DTEXT) and Multiline Text (MTEXT)—each suited to different types of annotations. **Single Line Text (DT)** is best for short labels or callouts with each line a separate object allowing precise placement but less flexibility for formatting. **Multiline Text (MT)** is ideal for longer notes, specifications, or formatted blocks with all text in a single entry staying within one object which can be over multiple lines as traditional printed material.

Tips:

- 1) To fit or align text in a defined area use DTEXT and select JUSTIFY/ALIGN or FIT - very useful if text is enclosed by a rectangle/ circle/etc.
- 2) Text entered in paperspace is 1:1, e.g. 5mm high text will print 5mm high.

Table 12 – Text

Shortcut	Command	Comment
%%C	∅	Diameter dimensioning symbol
%%D	°	Degrees symbol
%%O	OVERSCORE	Toggles overscore mode on/off
%%P	±	Plus/minus symbol
%%U	UNDERSCORE	Toggles underscore on/off
DT	DTEXT	Single line dynamic text - Justify/Align to fit within text line
ED	DDEDIT	Edit text
FIND	FIND	Opens find and replace dialogue box
JUSTIFYTEXT	JUSTIFYTEXT	Change the justification point without moving text
MIRRTEXT	MIRRTEXT	Mirrtext 0 to turn off
SCALETEXT	SCALETEXT	Scales text without moving the text insertion point
SPELL	SPELLCHECK	Performs spellcheck - ALL checks all text in drawing
ST	STYLE	Opens text style dialogue box
T or MT	MTEXT	Multiline/paragraph text

TCIRCLE	TCIRCLE	Places circle, slot, or rectangle around each selected text object
TEXT	DTEXT	Single line dynamic text
TEXTFIT	TEXTFIT	Stretches/shrinks text by selecting new start and/or end points
TORIENT	TORIENT	Rotates text, mtext, and attribute definition objects
TXTEXP	TXTEXP	Explodes text or mtext objects into polyline objects.
TXT2MTXT	TXT2MTXT	Converts DTEXT to MTEXT
WIPEOUT	WIPEOUT	Masks part of drawing for clarity

Dimensioning

Dimensioning in AutoCAD adds measurement annotations to drawings, enhancing clarity and precision. Built-in tools streamline the process, helping users produce accurate and professional results efficiently.

Core dimensioning commands are DIM for all-in-one dimensioning tool, DLI for a linear horizontal or vertical dimensions, DCO for continuing a dimension from the end of the last one.

Tips:

- 1) Use **associative dimensions** (DIMASSOC = 2) so they update with geometry changes.
- 2) Create **custom dimension styles** (DIMSTYLE) for different drawing types (e.g., schematic vs. construction).
- 3) Use **layer control** to manage visibility and plotting of dimensions.
- 4) Combine with **annotative scaling** to maintain readability across viewports.

Table 13 – Dimensioning

Shortcut	Command	Comment
CTRL+8	QUICKCALC	Displays the calculator
D	DIMSTYLE	Opens dimension style manager dialogue box
DAL	DIMALIGNED	Aligned linear dimension line
DAN	DIMANGULAR	Angular dimension line
DAR	DIMARC	Arc length dimension
DBA	DIMBASELINE	Ordinate dimension from baseline of previous dimension
DCO	DIMCONTINUE	Ordinate dimension from 2nd extension line of previous dimension
DDI	DIMDIAMETER	Diameter dimension for circles and arcs
DED	DIMEDIT	Edit dimension text on dimension objects

DI	DIST	Check a distance
DIM	DIM	Creates multiple dimensions and types of dimensions
DIMCENTER	DIMCENTER	Creates center mark
DLI	DIMLINEAR	Linear dimension
DOR	DIMORDINATE	Ordinate point dimension
DOV	DIMOVERRIDE	Override dimension style
DRA	DIMRADIUS	Radial dimension for circles and arcs
ID	ID	Display the co-ordinate values of a point
UN	UNITS	Opens drawing units dialogue box

Layers

Layers are used to help organise objects in drawings by function, category type and provides control of visibility of drawing objects whilst modelling and in paperspace.

Tip:

- 1) Layer States - Create a layer state in Layer Manager (LA then Alt+S) to quickly switch between different layer property settings.

Table 14 – Layers

Shortcut	Command	Comment
LA	LAYER	Opens layer manager
LMAN	LMAN	Access Layer manager to save and restore layer states
LAYCUR	LAYERCURRENT	Change objects to current layer
LAYDEL	LAYERDELETE	Delete a layer by selecting object
LAYERP	LAYERPREVIOUS	Restores previous layer state
LAYFRZ	LAYERFREEZE	Freeze a layer by selecting object
LAYISO	LAYERISOLATE	Isolates a layer by selecting object
LAYLCK	LAYERLOCK	Lock a layer by selecting object
LAYMCH	LAYERMATCH	Match properties of a layer
LAYMRG	LAYERMERGE	Moves objects from first layer to second and deletes first
LAYOFF	LAYEROFF	Switches a layer off
LAYON	LAYERON	Switches all layers on except frozen layers
LAS	LAYERSTATE	Opens the layer state manager dialogue
LAYTHW	LAYTHW	Thaws all layers
LAYWALK	LAYERWALK	Walk through layers

Blocks

Using blocks in AutoCAD simplifies workflow. Blocks eliminate the need to redraw repetitive elements, provide consistency and reduce file size.

Tips for working with blocks:

- 1) Create a new block on layer 0 so that the block will use the layer and properties of the current layer it is inserted on. Text can be set to colour white.
- 2) Set ATTDIA to 1 to use dialog box with block attributes or 0 to use command line.
- 3) AutoCAD allows you to change the insertion point on the fly. INSERT and select BASEPOINT. This allows you to pick anywhere in the drawing (and anywhere in the block you are inserting) as your new insertion point (basepoint).

Table 15 – Blocks

Shortcut	Command	Comment
ATT	ATTDEF	Opens attribute definition dialogue box
ATTDIA	ATTDIA	Controls whether the INSERT command uses a dialog box for attribute value entry
ATTEDIT	ATTEDIT	Edit attribute values for a specific block
B	BLOCK	Opens block dialogue box in order to make a block
BATTMAN	BATTMAN	Opens block attribute manager
BATTORDER	BATTORDER	Displays attribute order dialogue box
BC	BCLOSE	Closes the block editor
BCOUNT	BCOUNT	Counts the blocks in a drawing
BE	BEDIT	Opens the edit block definition dialogue box
EATTEXT	EATTEXT	Enhanced attribute extraction wizard to count blocks
GATTE	GATTE	Global attribute edit of multiple blocks
I	INSERT	Opens insert dialogue to insert a block
-I	INSERT	Insert a block by name
MINSERT	MINSERT	Insert block in rectangular array
REFEDIT	REFEDIT	Edit a block reference in place
REN	RENAME	Opens dialogue box to rename blocks, layers, etc
W	WBLOCK	Write a block - for use in other drawings
XLIST	XLIST	Lists type/block name/layer name/color/linetype of a nested object in a block or an xref

External Reference (XREF)

Files can be attached as an external reference or XREF in the current drawing. An external reference can be a drawing file, image, PDF, or one of several other file types. An xref is an external reference that is specifically a DWG file.

If a drawing has an Xref, the status bar will show the Manage Xref icon.

Xref tips:

- 1) Using RELATIVE PATH to find the Xref file relative to the existing location can be a benefit if files are moved between locations or sent to others.
- 2) OVERLAID should be used in place of ATTACH if 2 drawings share a common Xref, e.g. a mechanical drawing could be overlaid an electrical drawing to prevent the building outline 'appearing' twice.

Table 16 – External Reference

Shortcut	Command	Comment
REFEDIT	REFEDIT	Edit an external reference in place
XA	XATTACH	Opens select reference file dialogue for attaching Xref
XB	XBIND	Opens Xbind dialogue, allows import only of symbols etc
XC	XCLIP	Create a border in an xref to hide outside area
XOPEN	XOPEN	Opens a selected xref in a new window
XR	XREF	Opens Xref manager dialogue box

Formatting

AutoCAD offers a range of formatting commands that allows modelling customisation to control how drawing elements appear and behave.

Table 17 – Formatting

Shortcut	Command	Comment
AP	APPLOAD	Opens application load dialogue box
BE	BEDIT	Opens the edit block definition dialogue box
BH	BHATCH	Opens hatch and gradient dialogue box
CUI	CUI	Opens customise user interface dialogue
D	DIMSTYLE	Opens dimension style manager dialogue box
DC	ADCENTER	Opens designcenter
DDPTYPE	DDPTYPE	Opens point style dialogue box
LA	LAYER	Opens layer manager
LT	DDLTYPE	Opens line type manager

LTS	LTSCALE	Change the linetype scale
LW	LWEIGHT	Opens line weight settings dialogue box
MA	MATCHPROPERTIES	Match properties of an object
OP	OPTIONS	Launches options dialogue box
OS	DDOSNAP	Opens drafting settings object snap dialogue
PR	DDCHPROP	Opens properties dialogue box
SSM	SHEETSET	Opens sheet set manager palette
ST	DDSTYLE	Opens text style dialogue box
TP	TOOLPALETES	Displays toolpalette
TS	TABLESTYLE	Opens table style dialogue box

Inquiry

An AutoCAD inquiry command provides information about drawn objects' geometrical features: distance, area, angle, and volume.

Inquiry tips:

- 1) If you wish to identify a known location, use ID and enter co-ordinates on command line to mark that location with a node point - if you do not see anything, try changing the node properties DDPTYPE.
- 2) Alternatively set PDMODE to 3 to display an X at id point set PDMODE to 0 to clear.

Table 18 – Inquiry

Shortcut	Command	Comment
AA	AREA	Calculate the area
DI	DIST	Calculate a distance and angle
DDPTYPE	DDPTYPE	Opens point style dialogue box
ID	ID	Display the co-ordinate values of a point
LI or LS	LIST	Display information about objects in a text window
MASSPROP	MASSPROP	Calculate the region/mass properties of a solid
PR	PROPERTIES	Opens properties dialogue box
WHOHAS	WHOHAS	Displays who has a drawing open
XLIST	XLIST	Lists type/block name/layer name/color/linetype of a nested object in a block or an xref

Object Snap (OSNAP)

Object Snap (Osnap) in AutoCAD is one of the most essential precision tools—it lets you snap to exact points on geometry, ensuring accuracy in every line, arc, or annotation.

Tips:

- 1) **Toggle On/Off:** Press **F3** or click the Osnap button on the status bar.
- 2) **Set Modes:** Right-click the Osnap icon > Settings to choose which modes are active.
- 3) **Temporary Activation:** Hold **Shift + Right-click** to access a one-time Osnap menu.
- 4) **Cycle Snap Points:** Press **TAB** to cycle through nearby snap points when multiple are detected.
- 5) Combine with **Ortho (F8)** and **Polar Tracking (F10)** for geometric control.

Table 19 – Object Snap (OSNAP)

Shortcut	Command	Comment
F3	OSNAP	Switches osnap on/off
F8	ORTHO	Turns ortho on/off. Restricts cursor movement to horizontal/vertical directions.
F9	SNAP	Turns snap on/off
F10	POLAR	Turns polar on/off. Guides cursor movement along specified angles.
F11	OSNAP TRACK	Turns object snap tracking on/off. Enables tracking along Osnap points.
APP	APPARENT INT	Apparent intersection of 2 objects
CEN	CENTER or CENof	Snap to centre point (circle marker)
DS	DDOSNAP	Opens drafting settings/object snap dialogue
END	ENDPOINT	Snap to end of line etc (square marker)
EXT	EXTENSION	Extends lines beyond endpoint (dashed line marker)
FRO	FROM	Snap to an offset distance from an object snap
INS	INSERTION	Snap to insertion point of text or block
INT	INTERSECTION	Snap to intersection of lines, circles, arcs (X marker)
MID	MIDPOINT	Snap to midpoint of line etc (triangle marker)
MTP		Snap midpoint between two points
NEA	NEAREST	Snap near to an object
NOD	NODE	Snap to point node (dot marker)
NON	NONE	Turns off object snap modes
OSMODE	OSMODE	Set and control the running object snaps
PAR	PARALLEL	Continues a line parallel to existing (twin line marker)
PER	PERPENDICULAR	Snap to perpendicular of line etc (right angle marker)

QUA	QUADRANT	Snap to quadrant of circle, arc, ellipse (diamond marker)
TAN	TANGENT	Snap to tangent of circle, arc, ellipse (curved line marker)
TK	TRACK	Locate points without drawing lines
TT	TT	Temporary tracking point

Three dimensional (3D)

Table 20 – Three Dimensional (3D)

Shortcut	Command	Comment
3D	3D	Command line 3D solid options
BOX	BOX	Draw a cube
CYLINDER	CYLINDER	Draw a cylinder
DDUCS	DDUCS	Opens ucs dialogue
DDUCSP	DDUCSP	Opens ucs dialogue at orthographic tab
EXT	EXTRUDE	Extrude a face
IN	INTERSECT	Intersect an object
REV	REVOLVE	Revolves an object about an axis
RR	RENDER	Open render dialogue box
SE	SECTION	Section
SL	SLICE	Slice a solid
SU	SUBTRACT	Subtract selection from solid
TOR	TORUS	Draw torus shape
UC	DDUCS	Displays UCS manager dialogue box
UCS	UCS	UCS command line options
UNI	UNION	Union solids
VPORTS	VPORTS	Opens viewport dialogue box
WE	WEDGE	Draw a wedge

Viewports

AutoCAD viewports are essential for presenting modelling in layout (paper space)—enabling the display of different views, scales, and sections of a drawing all on one sheet.

Tip:

- 1) To prevent a viewport from editing **right mouse click** on the viewport and select **DISPLAY LOCKED/YES**.
- 2) Use **named views (VIEW)** to quickly assign views to viewports.
- 3) Use **layer states (LAS)** to control visibility across multiple viewports.
- 4) Create **non-rectangular viewports (VPCLIP)** for creative layouts or highlighting specific zones.

Table 21 – Viewports

Shortcut	Command	Comment
CTRL+R		Cycle through viewports
CTRL+PAGE UP		Switch up between layout tabs
CTRL+PAGE DOWN		Switch down between layout tabs
DV	DVIEW	Perspective view.
MS	MSPACE	Switch to modelspace in a viewport
MV	MVIEW	Make a viewport in paperspace
PS	PSPACE	Switch to paperspace from viewport
VIEW	VIEW	The View Manager is displayed
VPCLIP	VPCLIP	Clips a viewport to a non-rectangular shape using a polyline or object
VPORTS	VPORTS	Opens viewports dialogue box
-VPORTS	-VPORTS	Create a viewport using command line



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