BranchCAD

Command Cheat Sheet

Every command, its short aliases, and a worked example — type any of them in the command line at the bottom of the editor.

Legend
`COMMAND` `ALIAS` · `example input`
⏎ = Enter · ␣ = separate prompts

COORDINATES — TYPE AT ANY POINT PROMPT

`x,y`	Absolute point `100,250`
`@dx,dy`	Relative to the last point `@50,0`
`d<angle`	Absolute polar (distance < degrees CCW) `25<30`
`@d<angle`	Relative polar `@100<45`
`Ge,n`	Grid (map) coordinate — needs a GEOREF `G1752340.885,5428110.223`
`number`	With the cursor showing a direction, typing a length places the next point that far along it `12.5 ⏎`

PROMPT OPTIONS (WHILE A COMMAND RUNS)

`U`	Undo the last picked point / segment
`C`	Close — LINE, PLINE, SPLINE, AREA, REVCLOUD, FENCE
`D`	CIRCLE: switch to diameter entry
`I / C`	POLYGON: inscribed / circumscribed
`S / R`	INSERT: Scale / Rotate the block being placed
`DE P T DY`	LENGTHEN: Delta / Percent / Total / Dynamic
`C O J W F S D R`	PEDIT: Close / Open / Join / Width / Fit / Spline / Decurve / Reverse
`Y / N`	ALIGN: scale objects to the alignment points?
`⏎ / right-click`	Finish the command; on an empty line, repeat the last one
`Esc`	Cancel the command

DRAW

LINE `L`	Line segments, chained `L ⏎ 0,0 ⏎ @10,0 ⏎ @10<90 ⏎ C`
PLINE `PL, POLYLINE`	Polyline (one object) `PL ⏎ 0,0 ⏎ @20,0 ⏎ @0,10 ⏎ C`
RECTANG `REC, RECTANGLE`	Rectangle from two corners `REC ⏎ 0,0 ⏎ @30,20`
CIRCLE `C`	Centre + radius; **D** for diameter `C ⏎ 50,50 ⏎ D ⏎ 20`
ARC `A`	Three-point arc `A ⏎ 0,0 ⏎ 5,3 ⏎ 10,0`
ELLIPSE `EL`	Ellipse by centre and axes
ELLIPSEARC `EA, ELLIPTICALARC`	Elliptical arc
SPLINE `SPL, SPLINECV`	Spline by control vertices
SPLINEFIT `SPF`	Spline through fit points
POLYGON `POL`	Regular polygon; **I**nscribed / **C**ircumscribed
POINT `PO`	Point marker `PO ⏎ 12,8`
DDPTYPE `PTYPE`	Point style & size
RAY	Half-infinite construction line
XLINE `XL`	Infinite construction line
REVCLOUD `REVC, RC`	Revision cloud; **C** to close

MODIFY

MOVE `M`	Base point, then destination `M ⏎ (pick) ⏎ 0,0 ⏎ @5,0`
COPY `CO, CP`	Copy — repeats until Esc `CO ⏎ 0,0 ⏎ @12,0 ⏎ @24,0`
ROTATE `RO`	Base point + angle `RO ⏎ 10,10 ⏎ 45`
SCALE `SC`	Base point + factor `SC ⏎ 0,0 ⏎ 2`
MIRROR `MI`	Mirror about a two-point line
OFFSET `O`	Distance, pick object, pick side `O ⏎ 1.5 ⏎ (pick) (side)`
TRIM `TR`	Click the parts to cut away
EXTEND `EX`	Click near the end to extend
FILLET `F`	Round a corner between two objects
CHAMFER `CHA`	Bevel a corner
BREAK `BR`	Split an object at points
JOIN `J`	Join touching objects into one
STRETCH	Stretch vertices inside a window
LENGTHEN `LEN`	Change length (DE/P/T/DY)
ALIGN `AL`	Align by two source / target pairs
PEDIT `PE`	Edit polyline (see prompt options)
ARRAY `AR`	Rectangular / polar array of selection
EXPLODE `X`	Break blocks / polylines into parts
ERASE `E, DEL, DELETE`	Delete the selection (or press `Del`)
DIVIDE `DIV`	Mark N equal parts with points `DIV ⏎ (pick) ⏎ 5`
MEASURE `ME`	Mark every N units `ME ⏎ (pick) ⏎ 2.4`
MATCHPROP `MA`	Copy properties source → targets

SELECT & GROUP

SELECT `S`	Back to the select tool
QSELECT `QSE`	Select by type, layer, linetype, colour, length
GROUP `G`	Group the selection
UNGROUP `UNG`	Dissolve the selection's groups
GROUPS	Open the Groups manager

EDIT HISTORY

UNDO `U`	Undo `Ctrl` + `Z`
REDO `MREDO`	Redo `Ctrl` + `Y`

KEYBOARD

Ctrl+Z / Ctrl+Y	Undo / redo (Ctrl+Shift+Z also redoes)
Ctrl+A	Select all
Ctrl+D · Ctrl+Shift+A	Deselect all
Ctrl+C / Ctrl+V	Copy / paste the selection
Del · Backspace	Erase the selection
+ / -	Zoom in / out (canvas focused)
Arrow keys	Nudge-pan the view
F7 · F9	Grid display · grid snap
F8 · F10 · F11	Ortho · polar · object-snap tracking
Mouse wheel	Zoom about the cursor
Esc	Cancel / clear selection

TEXT & TABLES

TEXT T, DTEXT	Single-line text; type in place
MTEXT MT	Wrapped paragraph in a two-corner box
TABLE TB	Place a table; double-click a cell to edit
STYLE ST, TEXTSTYLE	Text styles: font, height, width, oblique
LEADER LE, LEAD, MLD, MLEADER	Arrow + note LE ⏎ (tip) (bend) (end) ⏎ TIMBER DECK
UPDATEFIELD FIELDUPDATE	Refresh field-bound block attributes

DIMENSIONS

DIMLINEAR DLI	Horizontal / vertical DLI ⏎ (p1) (p2) (place)
DIMALIGNED DAL	Parallel to the measured points
DIMANGULAR DAN, DIMANG	Angle between two lines
DIMRADIUS DRA, DIMRAD	Radius of a circle / arc
DIMDIAMETER DDI, DIMDIA	Diameter of a circle / arc
DIMORDINATE DOR, DIMORD, ORDINATE	X/Y datum coordinate of a feature
DIMARC DAR	Arc length
DIMBASELINE DBA	Chain from a common baseline
DIMCONTINUE DCO, DIMCONT	Continue end-to-end
DIMSTYLE D, DST	Dimension styles: text, arrows, precision

HATCH & REGIONS

HATCH H, BH, BHATCH	Click inside a closed area to fill
HATCHEDIT HE	Edit pattern, angle, scale of a hatch
REGION REG, BO, BOUNDARY	Turn closed shapes into regions
UNION UNI	Merge selected regions
SUBTRACT SU	Cut regions from the first one
INTERSECT INT	Keep only the overlap

BLOCKS, IMAGES & REFERENCES

BLOCK B	Define a block from the selection
INSERT I	Blocks panel → Insert; S/R while placing
IMAGE IAT, IMAGEATTACH	Attach a raster image
XREF XR	External references manager
XATTACH XA	Attach a .dxf / .dwg as an underlay
XBIND	Bind the selected XREF into the drawing
XDETACH	Detach the selected XREF

LAYERS & PROPERTIES

LAYER LA	Layers panel: on/off, freeze, lock, plot, colour
LAYISO	Isolate the selection's layers
LAYUNISO	Restore layers after LAYISO
LAYDEL	Delete selection's layers **and their contents**
LAYMRG	Merge selection's layers into the current one
LINETYPE LT	Linetypes (dashed, center, hidden…)
LTSCALE LTS	Global linetype scale

VIEW & NAVIGATION

ZOOM Z	Zoom to the whole drawing
Z E / Z A ZE	Zoom Extents / All
Z W ZW	Zoom Window — drag a box
Z P ZP	Zoom Previous
Z O / Z S ZO	Zoom to the selected object(s)
Z I / Z OUT	Zoom in / out one step
Z R	Realtime zoom
PAN P	Hand-drag pan
VIEW V, VIEWS	Save / restore named views
NAV	Navigation settings (wheel, smooth zoom)

DRAFTING AIDS

GRID GRIDUNIT	Toggle grid display GRID 5 · GRID A · GRID ON · GRID OFF
GRID LOCK	Does grid spacing also set cursor snap? GRID LOCK OFF
SNAP SN, SNAPUNIT	Toggle / set grid snap step SNAP 0.5 · SNAP OFF
ORTHO	Horizontal / vertical only F8
POLAR	Polar tracking angles F10
OTRACK OST	Object-snap tracking F11

OBJECT SNAPS (OSNAP ON)

Endpoint	End of a line, arc or polyline segment
Midpoint	Middle of a segment
Center CEN	Centre of a circle, arc or ellipse
Quadrant	0° / 90° / 180° / 270° points of a circle
Intersection INT	Where two objects cross
Perpen-dicular PERP	Foot of the perpendicular from the last point
Tangent TAN	Tangent point on a curve
Nearest NEA	Closest point on an object
Extension	Along the extension of a line past its end
Parallel	Parallel to a segment you hover

The marker and a tooltip (e.g. *Endpoint · 8.38 < −162.6°*) show which snap will be used before you click. Toggle individual modes on the status bar.

INQUIRY

DIST DI, DISTANCE	Distance & angle between two points
AREA AA	Area & perimeter of picked points; C to close

LAYOUTS & OUTPUT

LAYOUT LO	Create a paper-space sheet
MVIEW MV	Add a viewport on the sheet
PAGESETUP PAGESET	Paper size, margins, scale of the active sheet
PLOT PRINT	Plot to PDF (colour / mono / plot styles)

FILES

IMPORT OPEN, IMPORTDWG	Open a .dxf or .dwg file
EXPORT DXFOUT, SAVEAS	Export the drawing as DXF
DXFOUT GRID EXPORT GRID	DXF in real map (grid) coordinates
CSVIN POINTSIN	Import a CSV point schedule
GEOJSONIN	Import GeoJSON features

GIS & MAPPING

GEOREF GEO, GEOGRAPHICLOCATION	Coordinate system + where local 0,0 sits
GIS	GIS panel: basemap imagery, address, parcels
ADDRESS	GIS panel with the address search focused
PARCEL	Click a point → insert that land parcel
BUILDING BLDG	Click a house → insert its footprint (repeats)
MAP MAPMODE	Switch to the interactive map environment
CAD CADMODE	Back to the CAD canvas
AOI MAPAREA	Limit the map to a drawn area of interest

FENCES

FENCE FN	Draw a fence run like a polyline; C closes `FN ⏎ 0,0 ⏎ @30,0 ⏎ @0,40 ⏎ ⏎`
GATE FENCEGATE	Click on a fence to add a gate
FENCETYPE FT	Fences panel: the fence-type library
FENCEAPPLY	Apply the armed fence type to the selection
FENCEDESIGN	Open the fence designer
FENCEELEV FEL	Elevation of the selected fence

STATUS BAR (BOTTOM OF THE CANVAS)

Layer list	Current layer for new objects
X / Y	Cursor coordinates (E / N when georeferenced)
CAD / MAP	Current environment
SNAP · GRID	Grid snap · grid display (click to toggle)
AUTO (5)	Grid spacing — auto or the value you set
OSNAP	Object snap master switch
CEN INT PERP TAN NEA	Centre · intersection · perpendicular · tangent · nearest snap modes
ORTHO · POLAR 90°	Ortho lock · polar tracking and its angle
OTRACK	Object-snap tracking
LWT	Show lineweights
58%	Zoom level · ☰ settings

MOUSE & SELECTION

Click	Select an object (Properties opens)
Click, click →	Box from left to right: green crossing
Click, click ←	Box from right to left: blue window
Drag a grip	Stretch / move that vertex or centre
Drag selection	Move it
Double-click	Edit text, MTEXT or a table cell in place
Right-click	Finish / repeat the last command
Wheel	Zoom at the cursor
Space + drag	Pan

QUICK TIPS

Repeat	Enter on an empty command line repeats the last command
Transparent	PAN and the mouse wheel work in the middle of any command
Noun → verb	Select first, then type MOVE, ROTATE, GROUP, UNION…
Exact sizes	Type the length into the dynamic Length / Angle box next to the cursor
Properties	Every value of a selected object is editable in the Properties panel
Layers	Set the current layer on the status bar before drawing
Units	Choose mm, cm, m, in or ft in Settings → Editor defaults
Saving	Work autosaves; name a version in History to mark a milestone

WORKED EXAMPLES

A 30 × 40 m site boundary
`PL ⏎ 0,0 ⏎ @30,0 ⏎ @0,40 ⏎ @-30,0 ⏎ C`

A 1 m set-back inside it
`O ⏎ 1 ⏎` click the boundary, then click inside

A 16 × 11 m house, rotated 15°
`REC ⏎ 6,14 ⏎ @16,11 ⏎ RO ⏎` select `⏎ 6,14 ⏎ 15`

Five equally spaced posts
`DIV ⏎` pick the line `⏎ 5`

Fence a parcel with a gate
`FN ⏎` click corners `⏎ C · GATE ⏎` click the fence `· FEL`

Work in real map coordinates
`GEOREF` → NZTM2000, E/N → Apply · `L ⏎`
`G1752300,5428100 ⏎ @20<90`

Sheet at 1:250, then PDF
`LO ⏎` name, A3 · `MV` → drag frame · `PLOT` → Export PDF