

Blender Addons

Menus & how to open them

- Edge menu edit mesh
- Vertex menu edit mesh
- Face menu edit mesh
- Context menu edit / object
- Object menu object

Ctrl + E

Ctrl + V

Ctrl + F

Right-click

Object ▼ header

CUTTING & BOOLEANS

Hard Ops

The hub of the hard-surface workflow — booleans, bevels, mirroring, modifier management, and material/viewport helpers, all behind one menu.

WHEN Any destructive/boolean hard-surface work; managing the modifier stack.

- Main menuQ
- Pie menuShift + Q
- HOps HelperCtrl + `
- MaterialsAlt + M
- ViewportAlt + V
- Interactive mirrorAlt + X
- Bevel helpersCtrl + Shift + B

Booleans (object mode): Ctrl + Num - difference · + union · * intersect · + slash.

BoxCutter

Draw-on-surface cutting. Sketch a shape and it becomes a live boolean cut, inset, or new object. Pairs with Hard Ops.

WHEN Fast carving of panels, slots, and shapes directly in the viewport.

Activate BoxCutterAlt + W

Tool active: Ctrl + D pie menu · D helper · C custom.

PUNCHit

MACHIN3, DeusEx bundle

Manifold inset + extrude — "punch" clean holes and recesses that stay watertight, without the boolean cleanup.

WHEN Insetting/extruding faces where you need manifold, fuse-ready geometry.

Edit meshShift + E

SURFACE REFINEMENT

MESHmachine

Post-bevel surgery: rework chamfers and fillets after the fact, fuse/unfuse/refuse surfaces, flatten, normal-edit, and stamp on detail with the Plug library.

WHEN Fixing or reshaping bevels/fillets that a normal bevel can't handle.

Menu edit + objectY

All tools live inside this one menu.

Edge Flow MENU-ONLY

Relaxes selected edges/loops to follow surrounding surface curvature (like Maya's Edit Edge Flow). Also sets edge/vertex curve.

WHEN Cleaning up edge loops so they flow smoothly across curved surfaces.

Edge menu → Set Flow / Curve / LinearCtrl + E

Vertex menu → Set Vertex CurveCtrl + V

Also in the edit-mode Right-click context menu → Set Flow.

CURVES

CURVEmachine

MESHmachine's little brother for curves — building and editing clean curve geometry for hard-surface detailing.

WHEN Cable runs, pipes, and curve-based detail work.

Menu curve edit modeY

Curves to Mesh

Generates a clean quad surface that flows between two or more curves.

WHEN Building surfaces/patches from curve "rails."

Run from the curve tools

While live: Alt + ⇅ subdivisions · Ctrl + R refresh · Shift + V preview · Alt + Enter commit.

CAD-STYLE PRECISION

Construction Lines

CAD-style accurate modelling — work to exact dimensions with construction guides, snapping, and numeric input.

WHEN Anything that needs real-world measurements and precise constraints.

Launch key left of 1 Alt + `

Then follow the on-screen prompts.

Mesh Align Plus

Align, move, and rotate geometry using points/lines/planes picked from the mesh itself — precise alignment without eyeballing.

WHEN Matching parts together exactly using existing geometry as reference.

Sidebar → Align Plus tab N

Grid Modeler MENU-ONLY

Draw shapes on an interactive grid to cut into or build out geometry, with precise grid snapping.

WHEN Greebles, panel detailing, and precise on-surface shapes.

Edit → Right-click → Grid Modeler

While live: Q / Enter confirm · Ctrl + Scroll resolution · Alt + Scroll extend grid · W / RMB switch mode · Z close shape · X from edge.

Simple Bend MENU-ONLY

Bend geometry along an axis interactively, with angle/segment control.

WHEN Curving a straight object (pipes, brackets, signage) to a set angle.

Edit → Right-click → Simple Bend

While live: W swap axis · C one side · S selected verts · Shift snap 5° · Q confirm.

WORKFLOW & UTILITY

MACHIN3tools

A large suite of quality-of-life tools and pie menus: Smart Vert/Edge/Face, Focus, Mirror, Group, customised pies, and Hard Ops / BoxCutter integration.

WHEN Everyday modelling speed-ups; ties the other tools together.

Modes pie Tab

Focus F / Ctrl + F

Group Ctrl + G

Symmetrize Alt + X

Edge-constrained transform Alt + R

Smart select Alt + LMB

Select Sim MENU-ONLY

Quickly select faces/edges similar to the current selection (by shape hash).

WHEN Grabbing all matching faces/edges in one step.

Edit → Right-click → Select Sim

Conform Object MENU-ONLY

Wrap / conform one object onto the surface of another.

WHEN Laying detail, decals-as-geometry, or panels onto a curved surface.

Object → Object or Right-click → Conform Object

Quick Snap

Maya-style interactive vertex/point snapping — grab a point and snap it precisely onto another.

WHEN Precise point-to-point placement during edit/object mode.

Snap Ctrl + Shift + V

Mesh Copier MENU-ONLY

Copy mesh detail from a source edge-ring/face onto destination faces.

WHEN Reusing mesh detail across multiple surfaces.

Edit → Right-click → Mesh Copier

Set Source, then Paste.

DETAILING ASSETS

Just Panels

Generates panelling/greeble detail, with an accompanying asset pack.

WHEN Fast sci-fi / hard-surface surface detailing.

Pie menu Alt + K

Install the addon zip; load **JustPanels_ASSETS** via Preferences → File Paths → Asset Libraries.

Shortcuts reflect the addons' default keymaps as verified in Blender 5.0 (no personal overrides). "Menu-only" tools register no keymap of their own — they live solely inside the listed menus.