

Design a Patch — the Patch Builder, step by step

The Patch Builder is where every design is made. Work down the numbered panel on the left, then finish with the toolbar across the top. This is the whole flow.

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1 Open the builder

Click **Design** in the top nav to open the Patch Builder. You'll see three areas: the numbered **steps panel** on the left, the **canvas** in the middle (your patch, with a live cut-line preview), and the **toolbar** across the top.

First time in? A short welcome tour points out each area. You can reopen it anytime from Settings.

2 ① Process — how it's made

Choose the fabrication method first, because it drives your materials, the preview, and the export files:

- **UV Printed** — full-color artwork printed on the patch surface.
- **Laser Engraved** — the design is burned into the material; the preview recolors to the material's engrave color so you see the real result.

Not sure which? UV print is best for full-color logos and photos; laser engraving is best for leather, one- or two-tone marks, and that classic burned-in look.

3 ② Artwork — add your design

Open **Artwork** and upload a **PNG, JPG, or SVG** (up to 20 MB). SVG vector art gives the crispest result, especially for engraving.

Two clean-up tools live here: **Background Removal** knocks out a white or busy background right in your browser, and **Vectorize for Engraving** turns a photo or logo into a clean engrave-ready outline with a live threshold slider. See the **Artwork & Uploads** guide for details.

4 ③ Material & shape

Open **Material & shape** and set three things:

- **Material** — pick a leather/leatherette colorway, a vinyl, or a dual/tri-layer acrylic. The patch preview updates to that material instantly.
- **Size** — choose a common preset (Cap Front, Name Tag, Chest, etc.) or type an exact width and height in inches.
- **Cut shape** — 20+ shapes (rectangle, rounded square, circle, oval, hexagon, shield, banner, badge...) plus **Custom Contour**, which traces the exact outline of your artwork for a die-cut look. Set the border style too (merrowed, hot-cut, laser, or none).

The Materials & Effects guide explains engrave colors and how tri-layer acrylic reveals different colors at different depths.

5 ④ Text & shapes

Open **Text & shapes** to add lettering and elements. For a curved label, use the **Arc Text** controls: type your text, set the arc radius, choose the flip direction, and add it — you can adjust the curve after it's placed. Straight text, basic shapes, and lines are here too.

Select any object to fine-tune it (color, size, position, rotation) in the properties panel. Double-click text to edit it.

6 ⑤ Layers

Open **Layers** to see every object stacked in order. Drag to reorder, click the eye to hide/show, and click the lock to freeze an object so you don't move it by accident.

On dual/tri-layer acrylic, the Layers panel is also where you assign which artwork piece engraves to which bonded color — the **Top / Mid / Deep** swatches. More on that in the Materials & Effects guide.

7 Use the toolbar

Across the top you have: the **design name**, **Save** (`Ctrl+S`), **New** (`Ctrl+N`), **Save as variant**, **undo/redo** (up to 50 steps — `Ctrl+Z` / `Ctrl+Shift+Z`), a zoom control, and the live **\$ price chip**.

Two buttons finish the job: **Preview on hat** saves your design and jumps to the Hat Builder, and **Export** ▼ opens the production file options.

Keep going

Ready to show a customer? Head to the **Hat Mockups & Client Proofs** guide. Ready to produce? See **Exporting Production Files**.

Need blank hats and patch materials to go with your designs? Shop them at <https://makerfoundryco.com>.

That's the whole build — five steps and a toolbar.

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