

CUSTOM ACRYLIC MAHJONG — OEM SPEC WORKSHEET

Mahjong Tile Spec Worksheet

The four spec axes below — substrate, engraving, edge, color register — are what turn a generic “polished acrylic, 144 tiles, custom logo” brief into a quotable production drawing. Fill it out and email it to inquiry@wetopacrylic.com — we quote within 24 hours.

Project Basics

Company	Contact email	Target delivery date
Set quantity (MOQ 50 sets)	Tiles per set ☐ 144 ☐ 152 NMJL ☐ Other	Delivery term ☐ FOB Shenzhen ☐ CIF ☐ DDP

AXIS 1 Substrate — cast vs extruded

cost delta typically 18–24% per finished tile at OEM volumes

- ☐ **Cast PMMA** **OUR DEFAULT** — holds optical clarity at the edges and laser-etches a clean, glossy recessed channel. Reads premium past year five on sub-30 mm tile parts.
- ☐ **Extruded PMMA** — lower material cost, but residual extrusion stress clouds the laser-etched character channel on tile-scale parts. Fine for sheet-scale panels; not our recommendation for tiles.

AXIS 2 Engraving method

most production-grade sets use all three on the same tile

- ☐ **Laser etch** — 0.3 mm recessed character channel in the tile body. The character is *in* the acrylic, not on it — it cannot wear off. Our default for the character + numeral set.
- ☐ **UV print** — ~0.05 mm ink stack for suit colors and brand graphics. Add clear-coat seal ($\approx +6\%$ per tile): extends the “feels new” window from ~18 months to 5+ years. ☐ with clear coat ☐ without
- ☐ **CNC bevel** — the tactile edge treatment that makes a premium tile feel premium when it lands. Spec the geometry under Axis 3.

AXIS 3 Edge geometry

the spec most shops skip — put the tolerance on the drawing

- ☐ **0.3 mm chamfer, all four edges, ± 0.05 mm tolerance, CNC machined** **RECOMMENDED DRAWING LANGUAGE** — catches edge light at 45°, distributes tile-on-tile click load. The tolerance call makes the spec auditable.
- ☐ **Square edge (no chamfer)** — concentrates click-impact stress at the corner; buyers report it as “sharp” or “cheap” in the hand. Not recommended.

AXIS 4 Color register

 $\Delta E \leq 2$ acceptance, spectrophotometer-verified at 4 points per batch

- ☐ **Single colorway** — from the standard cast range. Colorway / Pantone ref:

- ☐ **Multi-colorway run** — number of colorways:

 Pantone refs:

 Custom colorways run on a Pantone-matched mill-cert protocol; the custom mill batch adds a 14-day pre-production lead time on the front end.

Packaging & transit (optional — mahjong sets fail in transit before they fail in play)

- ☐ **Silicone-cradle insert** — individual tile recess, ± 0.2 mm fit tolerance
- ☐ **Lid latch with mechanical interlock** — magnets alone fail under freight vibration
- ☐ **ISTA 3A drop-test verification** — single random sample case per production run ☐ **Gift box / retail unit pack** — sized to your tile dimensions

What happens next: email the completed worksheet to inquiry@wetopacrylic.com or paste it into the inquiry form at wetopacrylic.com/contact/. You’ll get a tier-matched quote within 24 hours. Samples ship in 3–14 days depending on tier; production runs 15–20 days from sample sign-off.