

Aluminium Fabrication RFQ Checklist

P&A International — custom aluminium fabrication, welding, machining & finishing ·
www.pa-international.com.au

Share as much of this as you can and we will return a proposed fabrication approach and indicative pricing, typically within 48 hours. A drawing, DXF or sample is ideal.

1. Part & material

- Aluminium grade if known (1050, 5052, 5083, 6061, 6082) — we can specify a suitable grade
- Plate / sheet thickness (we fabricate aluminium to ~55 mm plate) and overall size
- A drawing, DXF/STEP model or a sample to work from
- Quantities — one-off / prototype, or volume

2. Fabrication scope

- Processes: laser / waterjet cutting, bending, rolling, welding (TIG/MIG), assembly
- Welding standard / cosmetic requirement on visible seams
- Tolerances and any flatness / straightness requirements
- Machining of features after fabrication (holes, faces, threads)

3. Finish & delivery

- Finish: mill, anodise (clear / colour / hard), powder coat, paint, bright dip
- Assembly, hardware insertion, kitting and packaging
- Target cost, annual volume or call-off pattern
- Compliance / test: RoHS, REACH, weld or dimensional reports

Email this with your drawing to support@pa-international.com.au or use the quote form on the page.

Aluminium Fabrication — Quick Reference

Grades, processes and finishes at a glance

Common grades

| Grade | Strengths | Typical use |
|-------------|---|--|
| 5052 / 5083 | Excellent corrosion resistance and weldability | Enclosures, marine, tanks, sheet work |
| 6061 / 6082 | Higher strength, good machinability and weldability | Structural frames, brackets, machined fabrications |
| 1050 / 1100 | Soft, highly formable, best for forming and finish | Trim, formed panels, decorative work |

Process & finish factors

| Decision | Rule of thumb |
|-------------|--|
| Cutting | Laser for thin/medium sheet and fine detail; waterjet for thick plate and heat-sensitive parts. |
| Welding | TIG for thin gauge and cosmetic seams; MIG for thicker sections and speed. Specify visible seams. |
| Distortion | Aluminium moves with heat — fixturing and weld sequence matter; share flatness needs early. |
| Finish | Anodise needs anodise-grade alloy and clean welds; powder coat hides more and adds corrosion protection. |
| Plate limit | We fabricate aluminium up to roughly 55 mm plate; flag anything thicker so we can confirm. |

How we work: P&A International is an engineering-led contract manufacturer. One dedicated engineer engineers your part, free off-tool samples are provided before mass production, and volume is produced through our vetted partner-factory network — every supplier is ISO 9000 certified or better.

P&A International · support@pa-international.com.au · +86-769-81551002 · www.pa-international.com.au · © 2026