

MATERIAL AND FABRICATION TOLERANCES

Ridgeline Fabrication · Shop reference · Rev. 09/2025

Unless the print calls out something tighter, these are the tolerances we hold. If a print asks for tighter than what is listed here, it goes to engineering before it goes to quote.

SHEET AND PLATE — CUTTING

Process	Material thickness	Tolerance
Laser	Up to 0.250 in	± 0.005 in
Laser	0.251 – 0.500 in	± 0.010 in
Plasma	Up to 0.500 in	± 0.030 in
Plasma	0.501 – 1.000 in	± 0.045 in
Waterjet	Any	± 0.008 in
Shear	Up to 0.250 in	± 0.015 in

FORMING

Feature	Tolerance
Bend angle	± 1 degree
Bend-to-bend dimension, up to 12 in	± 0.015 in
Bend-to-bend dimension, over 12 in	± 0.030 in
Flatness, per foot	0.010 in
Hole-to-bend, minimum distance	2.5 × material thickness

WELDING

- Weldment overall dimensions: ± 0.060 in unless the print states otherwise
- Squareness on frames: 0.030 in per foot, measured diagonally
- Distortion control on anything over 48 in requires a fixture. No exceptions.

FINISH

- Powder coat thickness: 2.0 to 4.0 mils
- Standard mill finish is acceptable unless the print calls out a surface spec
- We do not polish. Anything requiring a polished finish goes outside.

Questions to the quality lead before the job runs, not after.