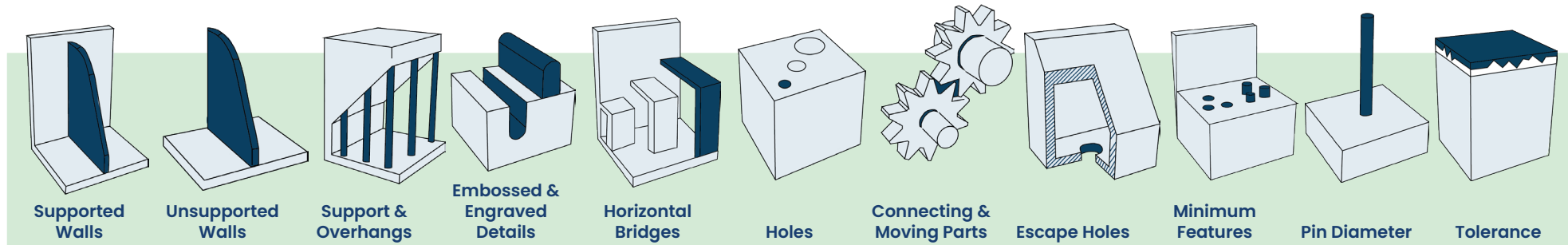


3D printing guidelines for every technology



| | Supported Walls | Unsupported Walls | Support & Overhangs | Embossed & Engraved Details | Horizontal Bridges | Holes | Connecting & Moving Parts | Escape Holes | Minimum Features | Pin Diameter | Tolerance |
|-----------------|--|----------------------|-------------------------|-----------------------------|--------------------|----------------------------------|--|--------------------------------------|--|----------------------------------|---|
| SLS | PIXX 0.6 mm P3XX 0.8 mm P5XX 0.6 mm P7XX 0.8 mm | 1 mm | N/A | 1 mm width & height | N/A | > Ø1.5 mm depending on thickness | > 0.3 mm for moving parts; > 0.1 mm for connection assemblies; > 0.5 mm radial | > 12 mm multiple holes are preferred | PIXX 0.5 mm P3XX 0.6 mm P5XX 0.5 mm P7XX 0.6 mm | > 1 mm diameter < 15 mm height | Minimum ± 0.3 mm & ± 0.25% of dimension |
| SAF™ | 0.8 mm | 1 mm | N/A | 1 mm width & height | N/A | > Ø1.5 mm depending on thickness | > 0.3 mm for moving parts; > 0.1 mm for connection assemblies; > 0.5 mm radial | > 12 mm multiple holes are preferred | 2 mm | > 2 mm diameter < 15 mm height | Minimum ± 0.3 mm & ± 0.25% of dimension |
| MJF | 0.5 mm | 1 mm | N/A | 0.4 mm width & height | N/A | > Ø0.8 mm depending on thickness | > 0.3 mm for moving parts; > 0.3 mm for connection assemblies; > 0.3 mm radial | > 6 mm multiple holes are preferred | 0.5 mm | > 1 mm diameter < 15 mm height | Minimum ± 0.3 mm & ± 0.25% of dimension |
| FDR | 0.2 mm | 0.4 mm | N/A | 0.4 mm width & height | N/A | > Ø0.6 mm depending on thickness | > 0.3 mm for moving parts; > 0.1 mm for connection assemblies; > 0.5 mm radial | > 6 mm multiple holes are preferred | 0.25 mm | > 0.5 mm diameter < 15 mm height | Minimum ± 0.2 mm & ± 0.2% of dimension |
| SLA | HR 0.25 mm NR 0.5 mm | HR 0.5 mm NR 1 mm | Support ≤ 30° | 0.4 mm width & height | N/A | > Ø0.5 mm depending on thickness | > 0.1 mm for moving parts > 0.1 mm for connections | > 3 mm multiple holes are preferred | 0.25 mm | > 0.5 mm diameter < 15 mm height | Minimum ± 0.1 mm & ± 0.15% of dimension |
| PolyJet™ | 0.8 mm | 1 mm | Support always required | 0.5 mm width & height | N/A | > Ø0.5 mm | > 0.2 mm for moving parts; > 0.1 mm for connection assemblies; > 0.8 mm radial | > 20 mm multiple holes are preferred | 0.5 mm | > 1 mm diameter < 15 mm height | Minimum ± 0.2 mm & ± 0.25% of dimension |
| FDM | 0.8 mm | 1 mm | Support ≤ 45° | 0.6 mm width & height | 10 mm | > Ø2 mm | > 0.5 mm | > 20 mm | 2 mm | > 3 mm diameter < 15 mm height | Minimum ± 0.2 mm & ± 0.25% of dimension |