

# 3D PRINTING FUNDAMENTALS COURSE

## DESIGN FOR MANUFACTURING (DFM) GUIDE



		FDM	SLA	SLS	MJF	SLM	DMLS
<b>Supported Wall Minimum Thickness</b>		0.8mm	0.5mm	0.6mm	0.7mm	0.4mm	0.4mm
<b>Unsupported Wall Minimum Thickness</b>		1.0mm	1.0mm	0.7mm	1.0mm	0.5mm	0.5mm
<b>Support Requirement</b>		Overhangs >45°	Always Required	Not Required	Not Required	Overhangs >45°	Overhangs >45°
<b>Minimum Surface Details</b> <i>(Embossing &amp; Debossing)</i>		0.6mm (Width) 2.0mm (Height)	0.4mm (Width) 0.4mm (Height)	1.0mm (Width) 1.0mm (Height)	1.0mm (Width) 1.0mm (Height)	0.4mm (Width) 0.4mm (Height)	0.4mm (Width) 0.4mm (Height)
<b>Horizontal Bridge Maximum Span</b>		10mm	N/A	N/A	N/A	1.2mm	2.0mm
<b>Minimum Clearances</b> <i>(Connecting/Moving Parts)</i>		0.5mm	0.5mm	0.3mm (Movement) 0.1mm (Connection)	0.3mm (Movement) 0.1mm (Connection)	1.0mm	N/A
<b>Escape Hole Minimum Diameter</b>		N/A	4.0mm	3.5mm	5.0mm	5.0mm	5.0mm
<b>Minimum Feature Size</b>		2.0mm	0.2mm	0.5mm	0.4mm	1.0mm	0.6mm
<b>Minimum Pin Diameter</b>		3.0mm	0.5mm	0.8mm	0.8mm	1.5mm	1.5mm
<b>Tolerance</b>		±0.3%	±0.2%	±0.3%	±0.3%	±0.2%	±0.1%

Values are general recommendations and may vary based on specific machines, materials, and settings | For critical dimensions and features - check with the manufacturer.