











DESIGN RULES FOR 3D PRINTING

	Supported Walls	Unsupported Walls	Support	Embossed & Engraved Details	Horizontal Bridges	Holes	Connecting & Moving Parts	Escape Holes	Minimum Features	Pin Diameter
	Walls that are connected to other structures on at least two sides.	Walls that are connected to the rest of the print on only one side.	The maximum angle a wall can be printed out without requiring support.	Features on the model that are raised or recessed below the model surface.	The span a technology can print without the need for support.	The minimum diameter a technology can successfully print a hole.	The recommended clearance between 2 moving or connecting parts.	The minimum diameter of escape holes to allow for the removal of build material.	The recommended minimum size of a feature to ensure it will not fail to print.	The minimum diameter a pin can be printed at.
										
Fused Filament Fabrication	0.8mm	0.8mm	45°	0.6mm wide & 2mm high	10mm	Ø2mm	0.5mm		2mm	3mm
Stereolithography	1mm	0.5mm	support always required	0.1mm embossed & 0.4mm for engraved details		Ø0.5mm	0.5mm for moving parts	4mm	0.2mm	0.5mm
Selective Laser Sintering	0.7mm	NA as power offers support		1mm wide & high		Ø1.5mm	0.3mm for moving parts & 0.1mm for connections	3.5mm	0.8mm	1mm
Material Jetting	1mm	1mm	support always required	0.5mm wide & high		Ø0.5mm	0.2mm for moving parts		0.5mm	0.5mm
Binder Jetting	2mm	3mm		0.5mm wide & high	20mm	Ø1mm		5mm	2mm	2mm
Direct Metal Laser Sintering	0.4mm	0.5mm	support always required	1mm wide & high	2mm	Ø1.5mm		3mm	0.6mm	1mm