

FDM

Fused Deposition Modeling

Staub Additive currently offers three types of materials, with new technologies and materials on the horizon. You can use the material specifications below to help you choose your material, or we can advise you based on your needs and our experience. We can optimize your part by helping you pick the right layer thickness to give you the resolution and detail that you need. When you tell us how your part will be used, we can orient your part so that it is strong where it needs to be. Our goal is to make sure that you get the part that you want the first time.

ABS-M30

Layer Thickness Options	Color Options	Heat Deflection	Tensile Strength	Tensile Elongation	Flexural Stress	IZOD Impact, notched
0.013 in 0.010 in 0.007 in 0.005 in	Ivory White Black Dark Grey Red Blue	204° F 96° C	5,200 psi	4%	8,800 psi	2.6 ft-lb/in

Highlights:

- Greater tensile, impact, and flexural strength than standard Stratasys ABS
- Layer bonding is significantly stronger for a more durable part than standard Stratasys ABS
- Versatile Material: Good for form, fit, and functional applications

Polycarbonate (PC)

Layer Thickness Options	Color Options	Heat Deflection	Tensile Strength	Tensile Elongation	Flexural Stress	IZOD Impact, notched
0.013 in 0.010 in 0.007 in 0.005 in	White	280° F 138° C	9,800 psi	4.8%	15,100 psi	1.0 ft-lb/in

Highlights:

- Most widely used industrial thermoplastic
- Accurate, durable, and stable for strong parts
- Superior mechanical properties and heat resistant

ULTEM 9085

Layer Thickness Options	Color Options	Heat Deflection	Tensile Strength	Tensile Elongation	Flexural Stress	IZOD Impact, notched
0.010 in	Tan Black	307° F 153° C	10,390 psi	5.9%	16,700 psi	2.0 ft-lb/in

Highlights:

- FST (flame, smoke, toxicity) certified thermoplastic
- High heat and chemical resistance; highest tensile and flexural strength FDM material
- Ideal for commercial transportation applications in airplanes, buses, trains, boats, etc.