PROTOLABS
Manufacturing. Accelerated.

Prototyping FDM

Prototyping ABS

Tough, impact-resistant thermoplastic with higher temperature resistance than PLA; common for functional prototypes.

Key Attributes

Good toughness and impact resistance, machinable and post-processable, moderate warpage (requires heated bed/controlled environment).

Properties

Property	Value (Imperial)	Value (Metric)
Maximum Part Size	19.685" x 19.685" x 19.685"	500 × 500 × 500 mm
Minimum Feature Size	.039"	1.0 mm
Tensile Strength	4.4-6.5 ksi	30-45 MPa
e_modulus	290.1-319.1 ksi	2.0–2.2 GPa
Heat Deflection	185-221 °F	85–105 °C
Elongation	10–30%	10–30%



© 2026 Proto Labs, Inc.