



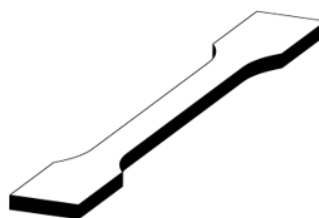
Physical Properties	Value	Standard
Density	1.28 g/cc	ASTM D792

Mechanical Properties

TENSILE TEST - STANDARD ISO 527

Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: OFF



xy

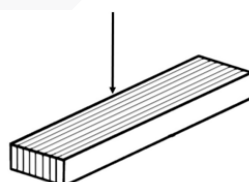
INFILL	15%	50%	100%
Tensile Strength (Mpa)	18.1	21,7	27.8
Elastic Modulus (Mpa)	862	1015	1452
Elongation at break (%)	4.68	5.21	4.68
Energy at break (J)	2.37	3.45	3.84

FLEXURAL TEST - STANDARD ISO 178

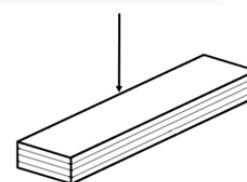
Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: OFF

zy - parallel



xy - normal



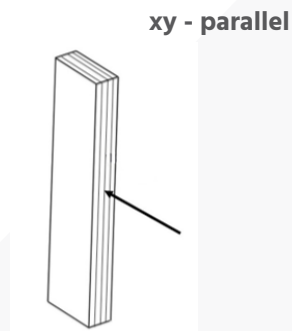
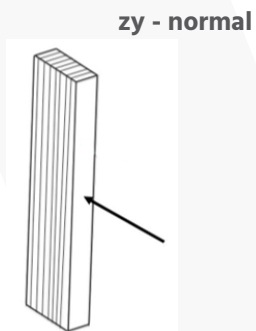
INFILL	50%	100%	50%	100%
Flexural Strength (Mpa)	58.0	63.9	50.3	57.8
Flexural Modulus (Mpa)	1298	1334	1239	1743
Deformation (%)	4.84	5.53	5.49	5.74



IMPACT TEST IZOD - STANDARD ISO 180

Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: OFF



INFILL	50%	100%	50%	100%
Impact Strength (KJ/m ²)	23.14	39.83	27.01	37.13
Impact Energy (J)	0.93	1.59	1.08	1.49

Thermal Properties	Value	Standard
Glass Transition Temp.	62 °C	ASTM D3418
Heat Deflection Temp.	72 °C	ASTM D648

Filament specifications and print settings

Diameter 1.75mm	1.75 ± 0.05 mm
Diameter 2.85mm	2.85 ± 0.05 mm
Roundness Deviation	max 2%
Suggested Print Temperature	230 – 245 °C
Suggested Print Speed	20 – 40 mm/s
Suggested Bed Temperature	85 °C
Cooling Fan	OFF – 50%