

FATHOM // FDM MATERIAL CHART

	ABSplus-P430*	PLA	ABSi	ABS-ESD7	ABS-M30	ABS-M30i	ASA	PC-ABS	PC-ISO	PC	Nylon 12	Nylon 12CF	ULTEM 9085	ULTEM 1010	PPSF	
FDM 3D PRINTERS	Mojo	✓														
	uPrint SE	✓														
	uPrint SE Plus	✓														
	F170		✓			✓	✓									
	F270		✓			✓	✓									
	F370		✓			✓	✓	✓								
	Dimension 1200es	✓														
	Dimension Elite	✓														
	Fortus 250mc	✓														
	Fortus 360mc					✓		✓	✓		✓	✓				
	Fortus 400mc			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Fortus 380mc				✓	✓	✓	✓	✓	✓	✓	✓				
	Fortus 450mc				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Fortus 900mc			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
LAYER THICKNESS	0.013 inch	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	0.010 inch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	0.007 inch	✓		✓	✓	✓	✓	✓	✓	✓	✓					
	0.005 inch			✓		✓	✓	✓	✓							
	Support Structure	Soluble	Breakaway	Soluble	Soluble	Soluble	Soluble	Soluble	Soluble	Breakaway	Breakaway / Soluble	Soluble	Soluble	Breakaway	Breakaway	Breakaway
Available Colors	Ivory, White, Black, Dark Gray, Red, Blue, Olive Green, Nectarine, Fluorescent Yellow, Custom Colors	Black, White, Light Gray, Medium Gray, Red, Blue, Colorless Translucent, Red Translucent, Blue Translucent, Yellow Translucent, Green Translucent	Colorless Translucent, Translucent Amber, Translucent Red	Black	Ivory, White, Black, Dark Gray, Red, Blue	Ivory	Ivory, Black, Dark Gray, Light Gray, White, Dark Blue, Green, Yellow, Orange, Red	Black	White, Translucent Natural	White	Black	Dark Gray	Black, Tan	Gold	Beige	
MECHANICAL PROPERTIES	Tensile Strength	5,300 psi (37 MPa)	XY: 6,990 psi (48 MPa) Z: 3,830 psi (26 MPa)	5,400 psi (37 MPa)	5,200 psi (36 MPa)	XY: 4,680 psi (32 MPa) Z: 4,055 psi (28 MPa)	5,200 psi (36 MPa)	XY: 4,720 psi (33 MPa) Z: 4,300 psi (30 MPa)	XY: 5,040 psi (35 MPa) Z: 4,345 psi (30 MPa)	8,265 psi (57 MPa)	9,800 psi (68 MPa)	7,000 psi (48 MPa)	10,967 psi (75.6 MPa)	10,390 psi (72 MPa)	12,000 psi (83 MPa)	8,000 psi (55 MPa)
	Elongation Strength	3.0%	XY: 1.5% Z: 1%	4.4%	3.0%	XY: 7% Z: 2%	4.0%	XY: 9% Z: 3%	XY: 5% Z: 2%	4.3%	4.8%	30%	1.9%	5.9%	4.0%	3.0%
	Flexural Stress	7,600 psi (53 MPa)	12,190 psi (84 MPa)	8,980 psi (62 MPa)	8,800 psi (61 MPa)	8,729 psi (60 MPa)	8,800 psi (61 MPa)	8,720 psi (60 MPa)	8,526 psi (59 MPa)	13,089 psi (90 MPa)	15,100 psi (104 MPa)	10,000 psi (69 MPa)	20,665 psi (142 MPa)	16,700 psi (115.1 MPa)	N/A	15,900 psi (110 MPa)
	IZOD Impact, Notched	2.0 ft-lb/in (106 J/m)	0.5 ft-lb/in (27 J/m)	1.8 ft-lb/in (96 J/m)	2.1 ft-lb/in (111 J/m)	2.4 ft-lb/in (128 J/m)	2.6 ft-lb/in (139 J/m)	1.2 ft-lb/in (64 J/m)	4.0 ft-lb/in (235 J/m)	1.6 ft-lb/in (86 J/m)	1.0 ft-lb/in (53 J/m)	3.74 ft-lb/in (200 J/m)	0.75 ft-lb/in (40 J/m)	2.0 ft-lb/in (106 J/m)	0.5 ft-lb/in (26 J/m)	1.1 ft-lb/in (58.73 J/m)
	Heat Deflection	204°F (96°C)	124°F (51°C)	188°F (87°C)	204°F (96°C)	204°F (96°C)	204°F (96°C)	208°F (98°C)	230°F (110°C)	271°F (133°C)	280°F (138°C)	180°F (82°C)	289°F (143°C)	307°F (153°C)	415°F (213°C)	372°F (189°C)
Unique Properties	Variety of color options	Ultra-fast low-cost draft mode, opaque and translucent colors	Translucent material	Static dissipative with a target surface resistance of 107 ohms**	Variety of color options	ISO-10993 certified, gamma- or EtO-sterilizable	UV stability and best aesthetics	Highest impact resistance	ISO 10993 certified	High tensile strength	Fatigue resistant, high elongation at break	Highest tensile strength, highest specific stiffness	FST (flame, smoke, toxicity) certified material	Highest strength, heat, chemical resistance. Bio-compatible and food safe	Chemical resistant and autoclavable	

* The Mojo 3D Printer and the uPrint SE 3D Printer use ABSplus in ivory only.