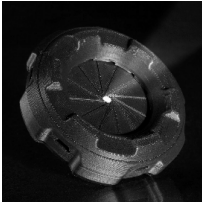


Printing and Submission Guides

Determine whether you are ready to submit your print with the checklist below!

Submit to Print Checklist • Complete Orientation • Read the Submit to Print Policy • Prepared your file • Reviewed the Printing Guide • Select your Material • Review the Printer Capabilities • Ensure model fits within the printer build volume • Review the Default Slicing Settings	Submission Form Requirements • Name • Email • Print • Name Model • Scale in mm: X, Y, Z • .STL File • Material	Optional • Model orientation description • Model orientation photo • Sliced File Slicing Settings
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	Material	Support Material	Colour(s)	Material Price	Build Tray Price	Printer
	PLA (Polylactic Acid)	Model Material	• Black • White • Green • Blue • Red • and many more (or sometimes less)	Print it yourself: Free	\$0	Prusa MK3S+ & Prusa MK4
blocked URL	PETG (Polyethylene Terephthalate Glycol)	Model Material	• Black			
	ASA (Acrylonitrile Styrene Acrylate)	SR 30 (Soluble)	• Blue (450mc) • Dark Grey (450mc) • Ivory (F120)	Model Material: \$0.39 / g Support Material: \$0.35 / g	\$0 (F120) \$10.86 (450mc)	Stratasys F120 & Fortus 450mc
	Biocompatible Polycarbonate (ISO 10993)	PC-ISO Support (Breakaway)	White	Model Material: \$0.26 / cc Support Material: \$0.25 / cc	\$10.86	Stratasys Fortus 450mc
	ULTEM 1010	ULTEM 1010 Support (Breakaway)	Brown	Model Material: \$0.45 / cc Support Material: \$0.43 / cc	\$23.64	
	Nylon 12	SR 110 (Soluble)	Black	Model Material: \$0.26 / cc Support Material: \$0.57 / cc	\$20.40	

	Nylon 12 Carbon Filled	SR 110 (Soluble)	Black	Model Material: \$0.39 / cc Support Material: \$0.57 / cc	\$20.40	
	Material	Support Material	Colour(s)	Material Price	Printer	
	Castable Wax 40	Model Material	Blue	\$0.48 / mL	Formlabs Form 3+ SLA	
	Draft Resin	Model Material	Grey	\$0.31 / mL		
blocked URL	Durable Resin	Model Material	Clear	\$0.40 / mL		
	Flexible 80A	Model Material	Clear (White)	\$0.55 / mL		
	High Temp	Model Material	Clear (Beige)	\$0.40 / mL		
	Rigid 10k	Model Material	White	\$0.98 / mL		

	Rigid 4000	Model Material	White	\$0.72 / mL	
	Standard Resin	Model Material	• Black • Clear • Grey • White	\$0.31/ mL	
	Tough V5 Please Note: There is limited supply as this resin has been discontinued and replaced by Formlabs Tough 2000 resin.	Model Material	Blue	\$0.40 / mL	
	Tough 2000	Model Material	Grey	\$0.67 / mL	
blocked URL	Tough 1500	Model Material	Grey	\$0.40 / mL	
	Vero	SUP 706 (Soluble)	• White • Black • Clear • Clear Cyan • Clear Magenta • Clear Yellow *Full colour w/ material mixing	Model Material: \$0.31 / g Support Material: \$0.26 / g	Stratasys J750
	Agilus30Clear	SUP 706 (Soluble)	Clear White or Mix w/ Single Vero Colour	Model Material: \$0.37 / g Support Material: \$0.26 / g	

	Digital ABS	SUP 706 (Soluble)	White	Model Material: \$0.37 / g Support Material: \$0.26 / g	
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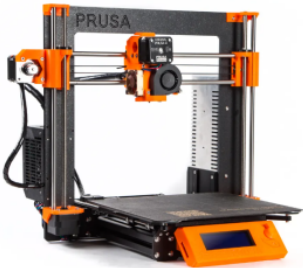
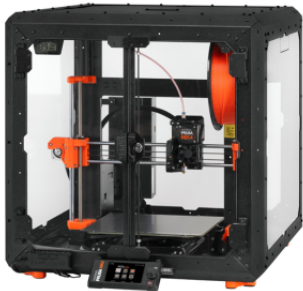
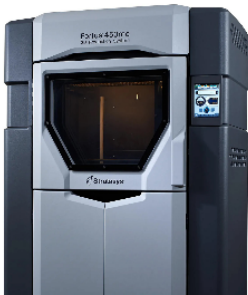
What is FDM, SLA, Polyjet?

- [Fused Deposition Modeling \(FDM\)](#)
- [Stereolithography \(SLA\) 3D Printing](#)
- [Polyjet 3D Printing](#)

Technical Data Sheets:

- [Industrial FDM Materials](#)
- [Formlabs SLA Materials](#)
- [Polyjet Materials](#)

Printers:

	Fused Deposition Modeling				S
	 Prusa MK3S+	 Prusa MK4	 Stratasys Fortus 450mc	 Stratasys F120	
Print it Yourself?					
Submit to Print?					
Material(s)	• PLA (Polylactic Acid) • PETG (Polyethylene Terephthalate Glycol)	• PLA (Polylactic Acid) • PETG (Polyethylene Terephthalate Glycol)	• ASA (Acrylonitrile Styrene Acrylate) • Biocompatible Polycarbonate (ISO 10993) • ULTEM 1010 • Nylon 12 • Nylon 12 Carbon Filled	• ASA (Acrylonitrile Styrene Acrylate)	

B u i l d V o l u m e (x ,y, z)	255 x 155 x 170 mm	250 x 210 x 210 mm	400 x 355 x 400 mm	250 x 250 x 250 mm	
L a y e r H e i g h t	0.10 to 0.30 mm	0.050 to 0.350 mm	0.1778 mm - Biocompatible Polycarbonate Only 0.2540 mm	0.1778 mm 0.2540 mm 0.3302 mm	Refer
D e s k t o p / I n d u s t r i a l	Desktop	Desktop	Industrial	Industrial	
S l i c i n g S o f t w a r e	3DPrinterOS	PrusaSlicer	GrabCAD Print	GrabCAD Print	

Slicing Guides:

- Prusa MK3S+ & MK4 - Included in [Desktop FDM Training!](#)
- [Form 3](#) (PreForm)
- [F120 & 450mc](#) (GrabCAD Print)
- [J750](#) (GrabCAD Print)
- [More GrabCAD Print guides](#)

Default Slicing Parameters:

Default Slicing Parameters																	
Material	PLA	PETG	ASA	PC-ISO	ULTEM 1010	Nylon 12	Nylon 12 CF	Formlabs Draft Resin	Formlabs Standard Resin	Formlabs Tough 2000 Resin	Formlabs Rigid 4000 Resin	Formlabs High Temp V2 Resin	Formlabs Flexible 80A Resin	Vero	Agilus 30 Clear	Agilus 30 Clear mixed with Vero	Digital ABS
	Infill Style	Zig Zag	Zig Zag	Hex	Hex	Hex	Hex	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid
	Infill Density	20%	20%	20%	59%	60%	59%	20%	1000%	100%	100%	100%	100%	100%	100%	100%	100%
	Layer Height (mm)	0.2	0.2	0.254	0.1778	0.254	0.254	0.2	0.1	0.1	0.1	0.1	0.1	0.027	0.027	0.027	0.027
	Line Width (mm)	0.4	0.4	0.254	0.1778	0.254	0.254	-	-	-	-	-	-	-	-	-	-
	Wall Thickness (mm)	0.8	0.8	Auto	Auto	Auto	Auto	Auto	-	-	-	-	-	-	-	-	-
	Plate Adhesion	Skirt	Skirt	Auto	Auto	Auto	Auto	Auto	-	-	-	-	-	-	Auto	Auto	Auto
	Support?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Self Support Angle	65°	65°	43°	43°	43°	50°	50°	-	-	-	-	-	-	-	-	-
	Stabilizers	-	-	No	No	No	No	No	-	-	-	-	-	-	-	-	-
Support Type	-	-	-	SMART	SMART	SMART	SMART	Full Raft	Full Raft	Full Raft	Full Raft	Full Raft	Full Raft	Standard	Standard	Standard	Standard
Support Density	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	1.00	1.00	100%	100%	100%	100%
Touchpoint Size (mm)	-	-	-	-	-	-	-	0.50	0.60	0.60	0.60	0.60	0.70	-	-	-	-
Internal Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shore-A Level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	50	-
Finish	-	-	-	-	-	-	-	-	-	-	-	-	-	Matte	Matte	Matte	Matte
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	None	None	None	None
Coating	-	-	-	-	-	-	-	-	-	-	-	-	-	None	None	None	None

How does payment and quoting work?

1. After submitting a print, an Elko Engineering Garage staff member will review your submission.
2. If all checks out you will receive an email with instructions for payment, followed by a second email with your invoice and a link to the [Material Store](#) to complete payment. Accepted methods of payment are credit and debit card.
3. Your print will be added to the queue after payment is received.

How do I receive my print?

Makers will receive an email once their print is complete. Makers can pick up their print by speaking to an Elko Engineering Garage Staff member and presenting their ONEcard and Print Number.

How long does it take?

Each model, printer, and material are unique. We ask that Makers understand that Staff are learning about 3D Printing at the same time as you. Once payment confirmation is received, we aim to complete a print in five (5) to ten (10) business days.

Fulfillment time varies on print size, sliced settings, support material type, and current Submit to Print demand. If your print is expected to be delayed, we will notify you as soon as we can.

Why is the Submission Form closed?

The Elko Engineering Garage Staff will temporarily close the submission form if the print queue is full. We will re-open for submissions as soon as we can!