

Digital Fabrication Lab (Laser Cutters)

- All materials must be flat and must not exceed the maximum bed size of the machine.
- Only one sheet of material may be cut at a time (multiple sheets may not be stacked).
- Only approved materials are permitted inside of the laser cutters.

Approved

Material		Max Thickness for Cutting
Plastic	Acrylic/Plexiglass	3/8"
	Duralar/Mylar Plastic (transparency sheet)	N/A
	PETG Plastic*	1/16"
	Coroplast/Corrugated Plastic**	5/32" (standard)
Paper	Chipboard	30-ply (double-thick)
	Paper/Cardstock	N/A
	Posterboard/Museumboard/Matboard	30-ply (double-thick)
	Cardboard**	5/32" (standard)
Wood	Balsa Wood	1/8"
	Basswood	3/32"
	Craftply (hobby store brand)	1/8"

*PETG is a thermoplastic and is not optimal for laser cutting, the edges may warp or melt

**Results may vary due to middle corrugated fluting

Banned

Material	Examples
Metal	Sheet metal, galvanized metal
Mirrored surfaces	Mirrored papers, acrylics
Polystyrene foam	Foamboard, Styrofoam (e.g., white, pink, blue)
Polycarbonate (looks like acrylic/plexiglass)	Lexan
ABS	Thermoplastic, 3D-print filament
HDPE	Milk bottle plastic
PVC	Plastic, vinyl, pleather, Sintra, Kydex
Fiberglass	Circuit boards, resin, textiles, glass, Kevlar
Epoxy	Cast or coated polymer
Pressure-treated wood	Wood w/ added chemical preservatives
Plywood Sheets	Wood from Home Depot or Lowes

Built Environment Innovation Lab

- Check with staff about any materials not listed below. There are materials that may be missed from this list or new materials that have not been used in the space previously.

Approved

Material	
Plastics and Polymers *	Acrylic/Plexiglass
	Rigid Foams/Polystyrene foam (Foamboard, EPS/XPS)
	PETG Plastic
	Coroplast/Corrugated Plastic
Wood and Composites	Plywood
	OSB
	Wood
	MDF
Metals**	Mild steel (rod, bar)
	Aluminium
	Threaded rod (Sometimes these are made with other metals)

**Only for materials that cannot be cut in the Digital Fabrication Lab. Quality for thinner materials vary with tools*

***Metal working tools are limited and are only usable outside, behind the lab. Ask staff for assistance with these tools*

Banned

Material
Pressure Treated Wood
Polycarbonate (looks like acrylic/plexiglass)
Floral foam
Rubber and flexible materials