

Material	Max Thickness	Notes
Many woods	1/4"	Oily and resinous woods can catch fire easily
Plywood/ Composite woods	1/4"	Contain glue and do not cut as well as solid wood
MDF/ Hardboard	1/4"	Char significantly when cut, can not get wet!
Paper, card stock	1/4"	Cuts well and quickly
Cardboard, carton	1/4"	Cuts well but may catch fire
Cork	1/8"	Thin cork can be cut, but the quality of the cut depends on the thickness and quality of the cork. Engineered cork has a lot of glue in it, and may not cut as well.
Acrylic/Lucite/ Plexiglas/PMMA	1/4"	Cuts extremely well leaving a beautifully polished edge.
Thin Polycarbonate Sheeting	<1mm	Very thin polycarbonate can be cut, but tends to discolor badly. Extremely thin sheets (0.5mm and less) may cut with yellowed/discolored edges. Polycarbonate absorbs IR strongly, and is a poor material to use in the laser cutter.
Delrin (POM)	thin	Delrin comes in a number of shore strengths (hardness) and the harder Delrin tends to work better. Great for gears!
Kapton tape (Polyimide)	1/16"	Works well, in thin sheets and strips like tape.
Mylar	1/16"	Works well if it's thin. Thick mylar has a tendency to warp, bubble, and curl. Gold coated mylar will not work.
Depron foam	1/4"	Used a lot for hobby, RC aircraft, architectural models, and toys. Cuts nicely, with a smooth edge.
Cloth/felt/hemp/cotton	1/4"	Cut very well. No plastic coated or impregnated cloth!
Magnetic Sheet		Cuts beautifully
NON-CHLORINE-containing rubber	1/4"	Chlorine/vinyl react with the laser to create chlorine gas and destroy the machine and our lungs!
Teflon (PTFE)	thin	Cuts OK in thin sheets.
Carbon fiber mats/weave		Can be cut, very slowly. Must NOT be coated/epoxied!
Coroplast ("corrugated plastic")	1/4"	Difficult, it will be slightly connected still at the bottom from the vertical strips.

ETCHING ONLY

Material	Notes
Glass	Green seems to work best...looks sandblasted. Flat glass only: round or cylindrical objects like bottles or glasses will have distortion.
Ceramic tile	
Anodized aluminum	Vaporizes the anodization away.
Painted/coated metals	Vaporizes the paint away.
Stone, Marble, Granite, Soapstone, Onyx, Agate, Obsidian	Gets a white "textured" look when etched, the smoother the rock texture, the better looking the etch

MARKING

Cermark is a marking compound containing molybdenum that costs ~\$50-100 for a 12oz spray can, and can be sprayed onto stainless steel, brass, aluminum, copper, nickel, glass or light-colored stone/tile before being etched to leave behind a permanent dark black mark.