Laser Cuttable Materials

Always know what material you are working with. Hazardous materials need to be avoided because they release toxic gasses when heated or are more likely to start serious fires. Ask staff if you have any questions. This materials list applies to CO_2 laser cutters, assuming all materials cut will be <¼" thick.

Approved Materials - Safe to Use	Hazardous Materials - Do Not Use
Natural • Birch Plywood • Chipboard • Cork • Corrugated Cardboard • Duron • Matboard • Natural, Uncoated Fabrics (Raw Denim, Pure Cotton). • Paper/Card Stock • Some Hardwoods (Ash, Basswood, Black Cherry, Maple, Pine, Poplar, Walnut) • Vegetable-Tanned Animal Leather Plastics • Acrylic • Silicone • Synthetic Felt Other • Ripstop/Ballistic Nylon (Cordura) • Foam Core Poster Board • Kapton Tape • Mylar Film • PHBV	Natural • Food • Hardwoods not listed as approved • MDF Plastics • ABS • Delrin • Neoprene • Polypropylene (HDPE, LDPE) • Polytetrafluoroethylene (PTFE /Teflon) • Polyvinyl Butyral (PVB) • Polyvinyl Chloride (PVC) Other • Any Materials Containing Halogens (Fluorine, Chlorine, Bromine, Iodine and Astatine), Epoxy, Phenolic Resins • Beryllium Oxide • Carbon Fiber • Fiberglass (including Circuit Boards) • Pleather/Artificial Leather or Chrome-Tanned Animal Leather • PolyPropylene Foam • PolyStyrene Foam • "Laser Safe" Stamp Rubber Silicone • Transparency Sheets/Camera Gels • Fabrics with Unknown Coatings

Use Caution For These Materials
• Polycarbonate (Plexiglass/Lexan) - cutting melts and chars the edges (CNC far better) • Reflective Metals - Engraving only if coated with ceramic (CerMark), anodized, or painted. • Glass & Stone - Engraving Only (sandblasting with vinyl "stencil" works better) • Exotic wood (veneers only) - may be more resinous or produce irritant particulates