

Approved and Prohibited Materials for Xtool S1

Materials used in the Xtool S1 must be diode laser compatible. Diode laser compatible means the material is safe to use with a laser. Xtool sells its own line of compatible materials, but you can also purchase laser safe materials from other vendors.

Library staff must approve your materials if you want to use anything other than the Makerspace's own materials or those sold by Xtool. You must provide a receipt or tag that states what the item is made of. We reserve the right to refuse material if we deem it to be unsafe, inappropriate, or we cannot confidently identify what it is.

The typical cutting area is 12.5"(width) x 19.6"(length) x 1/2" (height). However, you can remove the crumb tray and work with items up to 1.5" in height using supports. The Xtool S1's 20w diode laser can easily cut 1/4" (6mm) hardwood and acrylic, but it cannot cut through materials thicker than 10mm. Unfortunately, there are no rotary abilities so it cannot engrave on rounded objects.

It is highly recommended that you bring extra material for testing so that your final item comes out correct.

Approved Materials

Cut & Engrave	Engrave Only
<ul style="list-style-type: none">• Wood (Unstained, Untreated, Unpainted, No Glues)• 100% Acrylic (not white/blue/clear acrylic)• Leather (Vegetable Tanned Only)• Mylar• 100% Natural Cork• Card stock• Cardboard• Rubber	<ul style="list-style-type: none">• Stainless Steel• Ceramic• Anodized Aluminum• Marble• Stone

Prohibited Materials

PVC, ABS, HDPE (milk bottle plastic), Polycarbonate, coated carbon fiber, PolyStyrene Foam, PolyPropylene Foam, galvanized (zinc-coated) metals, Corian, Delrin, Epoxy, Electronics, Fiberglass, Painted or treated materials, Stained woods, Mirrors or reflective surfaces, Electronics, Artificial leather, Food products, Vinyl, Fabric, copy paper, MDF. **Anything not on the Approved List!**