

Subject: RE: laser cutter questions

From: Dan Meyer <Dan.Meyer@msichicago.org>

Date: Fri, Oct 02, 2015 7:59 pm

To: "jim@jimlaurwilliams.org" <jim@jimlaurwilliams.org>

Attach: image001.gif

Jim,

It's so cool that you guys have a laser cutter now!!!!

We cut only the following on our laser cutters:

Acrylic, balsa wood, plywood (with minimal glue), cardboard, fun foam, laserable rubber, paper, delrin

You can pick the covering off acrylic later, but I think it's better to peel it off first, also it cuts cleaner with the paper off. We almost always remove the covering off any lasered material.

We get our acrylic sheet from inventables here in Chicago, prices are very good, sheets are cut to size and they have lots of colors including fluorescent.

We get delrin from McMaster Carr

We get plywood from www.nationalbalsa.com 1/8 x 12 x 24 birch ply 3ply

Other stuff we get from laserbits

Cutting other plastics or weird materials runs the risk of dissolving the exhaust ductwork, and coating the optics with enamel like crud that is impossible to remove. Although you'd have to probably cut a lot to do that. Also who wants to possibly breath fumes that can do these things to the machine. I think some materials like abs sheet release chlorine gas for example when they are lasered. Research materials before lasering them! In a hackerspace people want to cut weird stuff, require them to research non approved materials to get them added to the list.

Have fun Lasering!!!! :)

Sincerely,

--

Daniel N. Meyer

Fab Lab Manager

Museum of Science and Industry, Chicago
5700 S Lake Shore Drive, Chicago, IL 60637
(773) 753-6817 desk phone | <http://msichicago.org>
(773) 947-3182 lab phone
Dan.Meyer@msichicago.org



----- Forwarded message -----

From: Jim Williams <jim@jimlaurwilliams.org>

Date: Fri, Oct 2, 2015 at 4:07 AM

Subject: laser cutter questions

To: Dan Meyer <meistertek@gmail.com>

Hi Dan,

W88 just got its first laser cutter up and running. It was a reject which had blown one too many power supplies and was donated dead to us. It's a 40W FSE 12x20 Hobby laser.

It seems to me you said you'd learned (maybe the hard way?) about problems cutting some kinds of plastic. Maybe with/without protective paper? Bad fumes that messed up the optics? I don't remember any details. But any tips and insights you can offer would be greatly appreciated.

Also - where do you buy fluorescent acrylic sheet? How about thin plywood? You must have done some research into best price options. May we learn from your efforts?

Thanks!

Jim