

# Resin Printing Guide:

-The Fab Lab uses a Stratasys J55 resin printer for all color 3D printing. It involves a resin jetting process with a system of nozzles to lay material and support that is then cured with a UV light. Very high resolution color prints are possible.

-Place your design into the '**J55 Resin Printer Template**' file found on:

-**Fab Lab Website:** <https://www.design.upenn.edu/fab-lab/downloads>

-**Juno Server:** \\juno\Public\DigitalFabrication\3D-Printing-Templates-Tutorials

-The black circular outline in the template is the area available to print, however you may not have any object intersecting the marked center cylinder. **The maximum rectangular printable size is 5.5 x 7.8 x 7.5 inches, however if your object fits within the black circular outline without touching the center cylinder, it may be printed.**

-You may have multiple objects floating within the circular outline.

-Assign your objects to the '**Closed Form**' layer. Delete any extra layers or data from your template file. **Files must be reduced to 64MB or smaller.**

-Be sure that your object is closed. Any open parts to your object will result in a failed print. **Use the Rhino command 'Showedges' on your object.** Any highlighted **naked** or **non-manifold** edges can lead to printing errors.

-**The smallest recommended object thickness is 0.125 inches for resin printing.** Thinner parts and objects that taper to a zero point have a high risk of breaking.

-Full color printing must be done by assigning solid colors or texture images to components of your design **by object, not by layer**, in Rhino. All texture image files must be submitted with your 3D print file. A total of 5 texture maps is the maximum per print submission.

-**Material costs will always be calculated before printing.** You may print objects that are at risk of failure, however you must sign an acknowledgment form in order to proceed.

