

Powder Printing Guide:

-Powder Printing uses fine gypsum powder that is hardened either with clear or colored binders, making full colored prints possible. After printing, objects are sealed / hardened with cyanoacrylate.

-Place your design into the 'Powder Printing' template file found on either:

-Juno server: \\juno\Public\DigitalFabrication\Powder Printing-Template-Tutorials)

-UPenn Box fileshare folder: grp-sod-shop > CNC 3D File Submission > Templates
(<https://upenn.app.box.com/folder/122455942707>)

-The black outlined bounding box in the template is the maximum printable size (14"x9"x7"). You may have multiple objects floating within this box.

-Assign all objects to the 'geometry 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 powder printing. Anything under 0.125 inches printed in powder has a potential to break. Objects with parts that taper to a zero point have a high risk of breaking.

-Full color printing may 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.

-You may print objects that are at risk of failure, however you must sign an acknowledgment form in order to proceed.

-Material costs will be calculated before printing.

