

BLP 3D Printing Guide

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+The Process Using Makerware

1. Go to www.thingiverse.com
2. Download an item off of thingiverse.
3. Put the file on a flash drive.
4. Open with Makerware.
5. Print!

+The Process Using Software

1. Brainstorm
2. Download items off thingiverse.com or find a software to use.
3. Make it.
4. Put it on a flash drive.
5. Print!

+Dimensions

+Inches

1. 11.2 in. (Length) x 6 in. (Width) x 6.1 in. (Height)

+Centimeters

2. 28.5 cm. (Length) x 15.3 cm. (Width) x 15.5 cm. (Height)

+Millimeters

3. 284.48 mm. (Length) x 152.4 mm. (Width) x 154.94 mm. (Height)

+File Format

1. .STL
2. .OBJ
3. .THING

Software Guide

- 1. Tinkercad:** A new and faster way of creating designs for your 3D printer. With only three basic tools you can create a wide range of useful things.
- 2. Google SketchUp:** This Google SketchUp is fun, free, and known for being easy to use. To build models in SketchUp, you draw edges and faces using a few simple tools that you can learn in a short time. With the push/pull tool, you can extrude any flat surface into a 3D form.
- 3. MeshLab:** A software download that helps you to identify and troubleshoot 3D modeling problems.
- 4. 3DCrafter:** 3DCrafter is a real-time 3D modeling and animation tool that incorporates an intuitive drag-and-drop approach to 3D modeling. The standard version of 3DCrafter is freeware.
- 5. 3Dtin:** The simplest 3D software. You can draw directly from your browser.
- 6. BRL-CAD:** A powerful cross-platform open source solid modeling system that includes interactive geometry editing, high-performance ray-tracing for rendering and geometric analysis, image and signal-processing tools, a system performance analysis benchmark suite, libraries for robust geometric representation.
- 7. FreeCAD:** A general purpose Open Source 3D CAD/MCAD/CAX/CAE/PLM modeler, aimed directly at mechanical engineering and product design but also fits in architecture or other engineering specialties.
- 8. LeoCAD:** A CAD program that can be used to create virtual LEGO models. It has an easy to use interface and currently features over 3000 different types of pieces created by the LDaw community.
- 9. K-3D:** A free-as-in-freedom 3D modeling and animation software. K-3D excels at polygonal modeling, and includes basic tools for NURBS, patches, curves, and animation.
- 10. OpenSCAD:** A software for creating solid 3D CAD objects. It's free software and available for Linux/UNIX, MS Windows and Mac OS X. It focuses on the CAD aspects of 3D modeling, instead of on the artistic aspects.

