

File Submission Guidelines

Accepted File Types

2D: DXF, Ai (Illustrator)

3D: STL

Tools Offered

ShopBot:

Sizes

- 1/2 or 0.5"
- 3/8 or 0.625"
- 1/4 or 0.25"
- 1/8 or 0.125"

Types

- Down
- Up
- Ball
- Up Long
- Ball Long

Roland:

Sizes

- 1/4 or 0.25"
- 1/8 or 0.125"
- 1/16 or 0.0625"

Types

- Flat
- Ball

Material Size Limitations

ShopBot:

MAX Dimensions

- 96" x 48" x 2"

MIN Dimensions

- 2" x 2" x 1/4"

Roland:

MAX Dimensions

- Rectangular stock: 8" x 5" x 1.75"
- Square stock: 8" x 2.5" x 2.5"
- Cylindrical stock: 8" x 4"

MIN Dimensions

- Rectangular stock: 5" x 2" x 1/4"
- Cylindrical stock: 5" x 3/4"

Design/Material Preparation

If using the 4×8, your file MUST include a **1" border** to secure your material to the bed.
If using the Roland, your file MUST have an **additional 4" of material** (3" on one end, 1" on the other) to properly be secured to the machine.

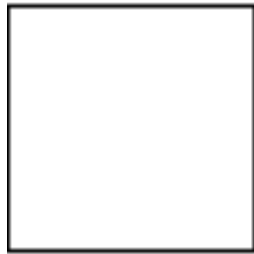
Softwood and hardwood MUST be **planed**. If it's not planed, we will not process your file. The planer can be found at the E4 Wood Shop.

Machining Limitations

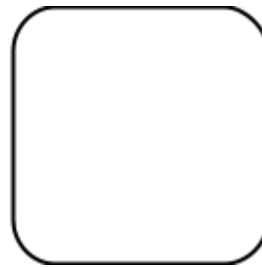
While creating your design, consider the following:

If your file contains any **undercuts**, it will not be machined and will leave a 90° cut instead.

Interior corners will not cut 90° corners. They will have a radius of whatever tool is used.

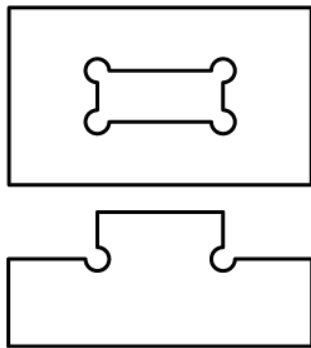


Original design

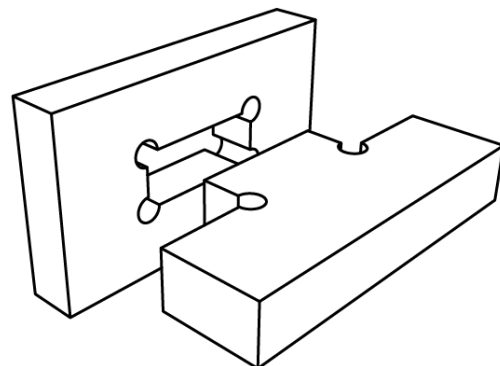


Final cut

If you're designing slot-fitting parts, you'll need to add **dog bones** or **T-bones** to your design. This is a technique that creates clearance in internal corners to allow slotted pieces to fit together. They can be added in Aspire.



2D vectors



Final cutout

Depending on how you want your slotted pieces to fit together, you will need to add a **tolerance** to your design. This involves offsetting your design a certain distance. We have an offset test sample in our shop for your reference.

