



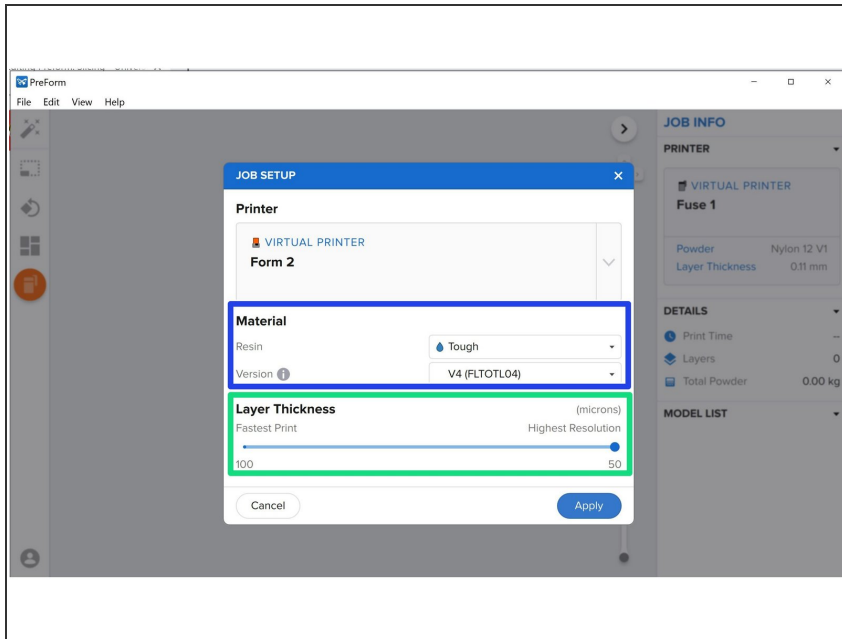
# Preform: Slicing

Guide for how to slice for the Form2 in Preform

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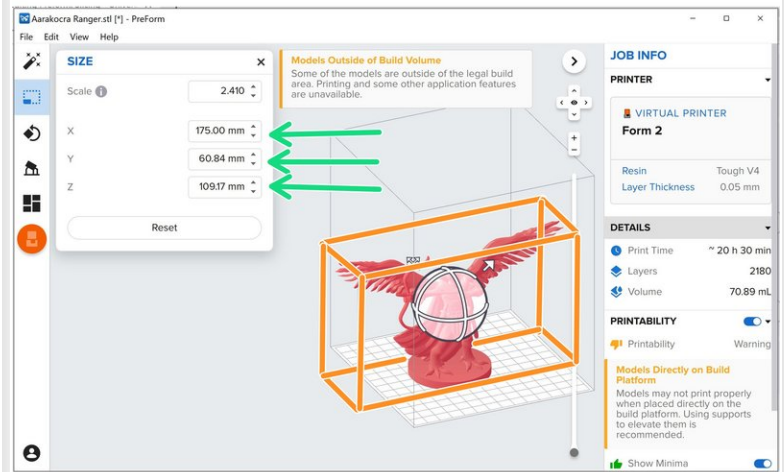
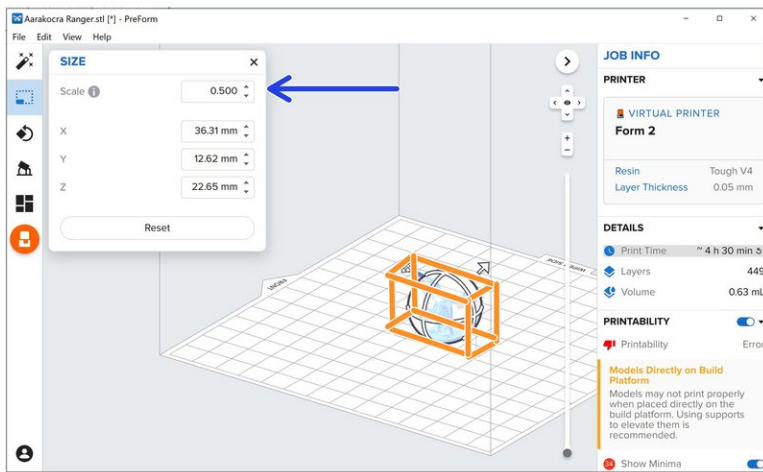


## Step 1 — Job Set-Up



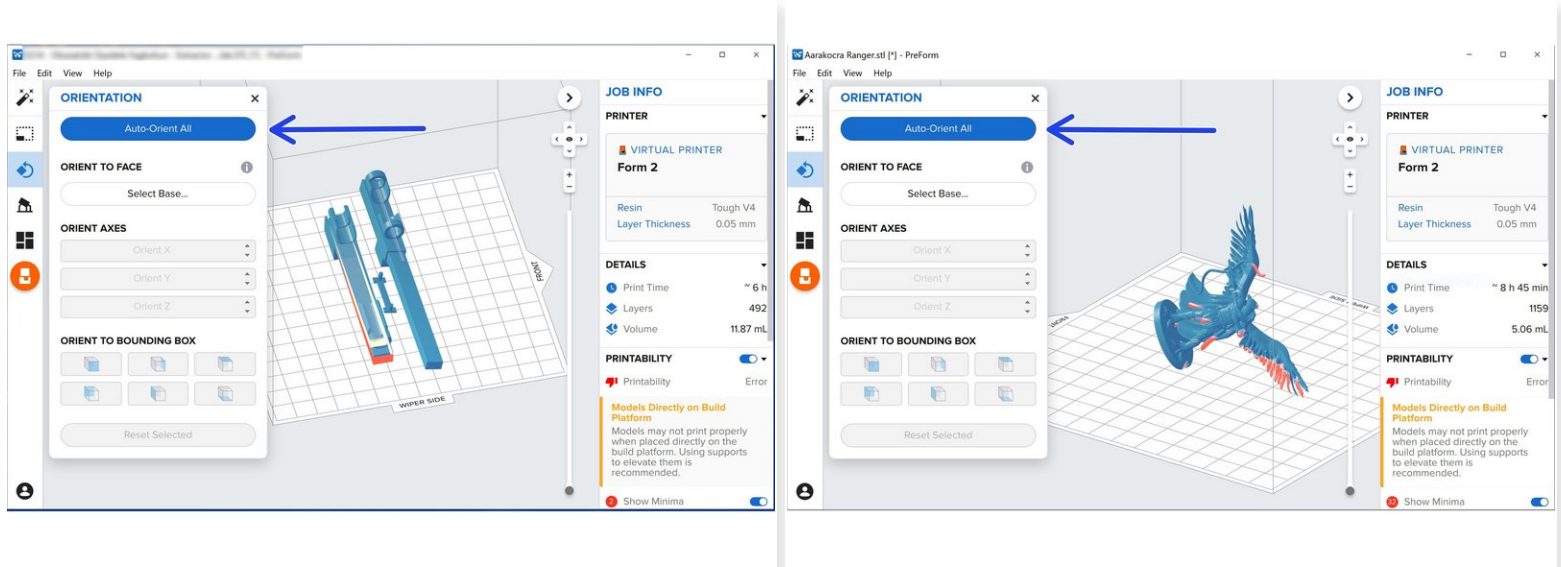
- Select the Material you would like to print in here
- *i* If you are connected to the printer the material info will automatically update to what is loaded in the printer
- Use the slider to match the Layer Thickness to the request

## Step 2 — Scaling



- You can change the size of the part by scaling it from it's original size
  - Preform displays a bounding box with the maximum exterior dimensions of the part. It is normally a light blue, but is outlined in orange here for visibility
  - You can also set an exact dimension for one of the dimensions of the bounding box
- ⚠ Part size always scales proportionally, even when the bounding box dimension is altered, i.e. changing X will also change Y and Z proportionally
- ℹ Preform will alert you if your part extends beyond the printers workspace

## Step 3 — Automatic orientation

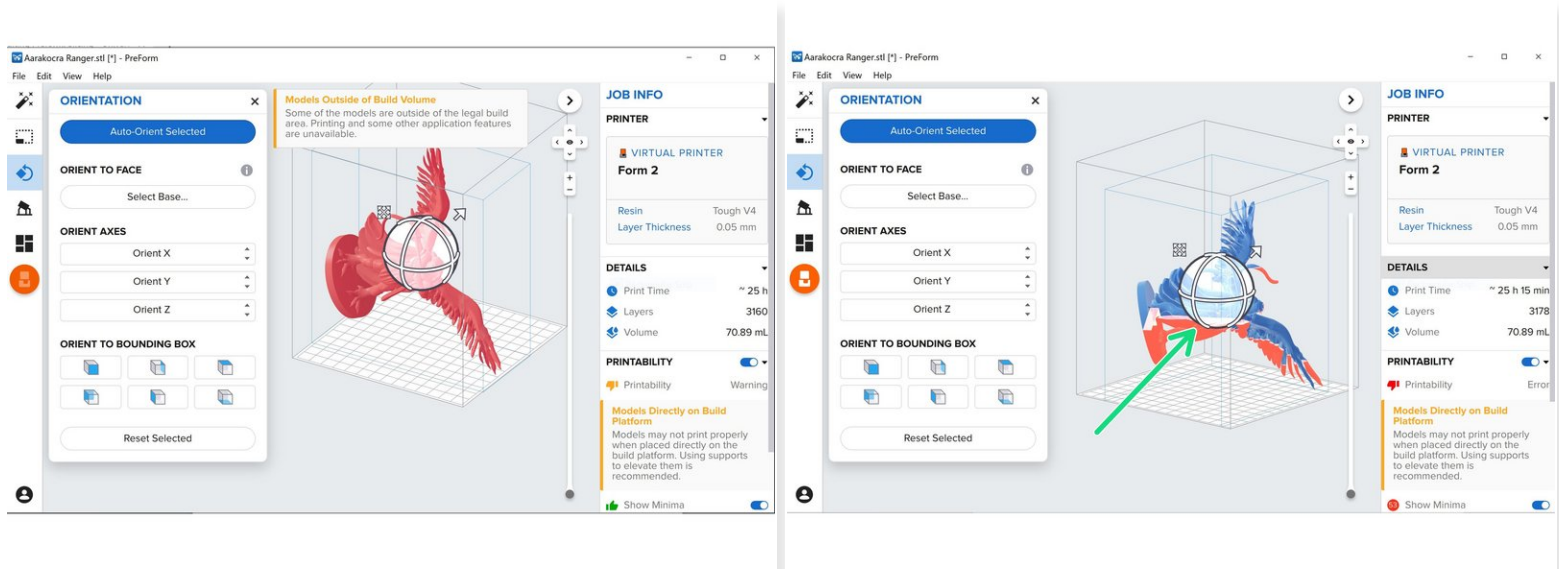



**i** All Formlabs prints require support, and Preform optimizes the orientation for printing support

- Click Auto-Orient All under orientation to automatically orient all parts on the build tray

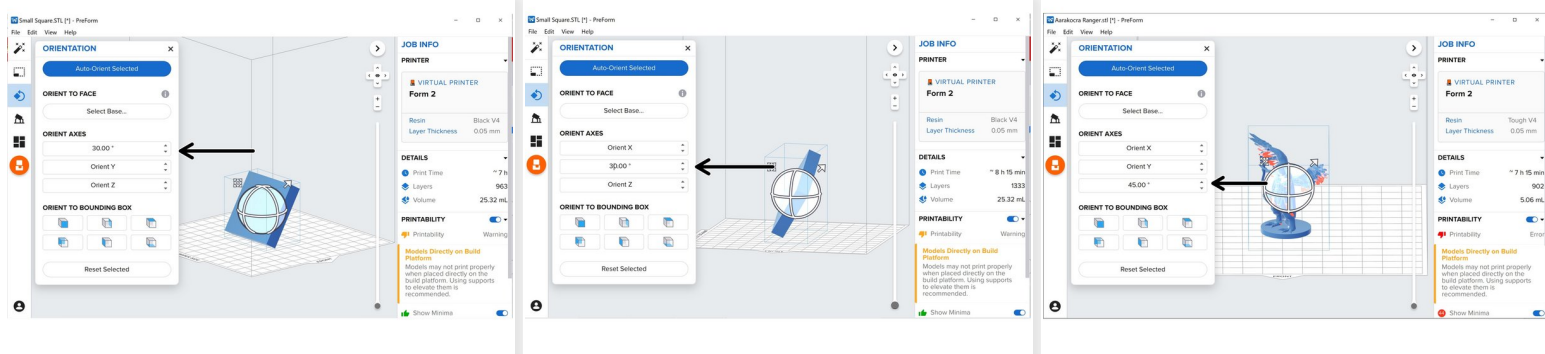
**!** Avoid having flat surfaces parallel to the build plate to avoid bubbles in layers and other errors

## Step 4 — Manual orientation



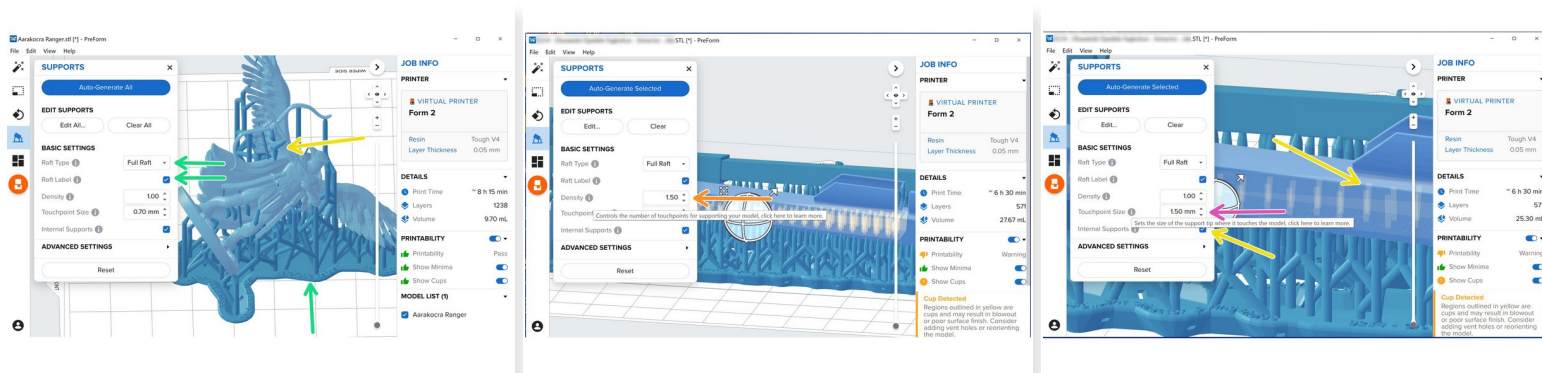
- For some larger parts, the optimized orientation results in the bounding box extending outside the workspace
- You are able to rotate parts about the X, Y, and Z axes of the bounding box using the circles surrounding them, allowing some larger parts to fit
-  Using the optimized orientation is recommended if possible

## Step 5 — Exact orientation



- You can rotate the model an exact amount about the X, Y, and Z axes by typing a value where it says "Orient \_"


## Step 6 — Support



- Click "Auto-Generate All" or "Auto-Generate Selected" to generate supports

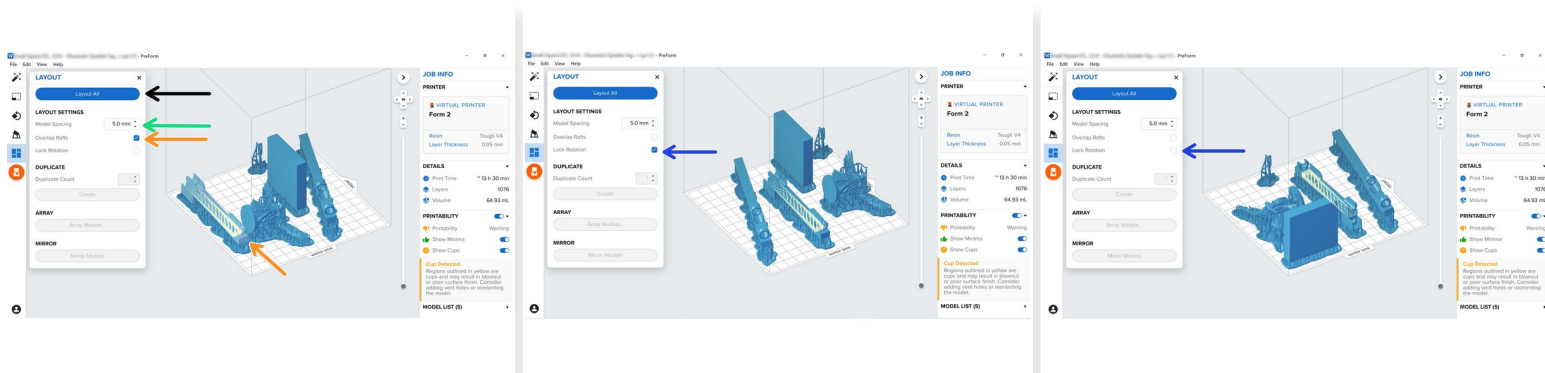
 You can hover your mouse above the gray "i" for a brief description

- Make sure "Full Raft" is chosen and "Raft Label" is selected to print a label with the model name around the edge of the raft
- Density is the number of points where the supports are in contact with the model
- Touchpoint size is the size of the support at the point of contact

 Increasing density or touchpoint size provides more support, but makes the model harder to clean and creates more/larger surface imperfections

- Internal supports create supports with both ends touching the model. This can be two outside surfaces in the first photo, or the inside of the hollow structure in the third

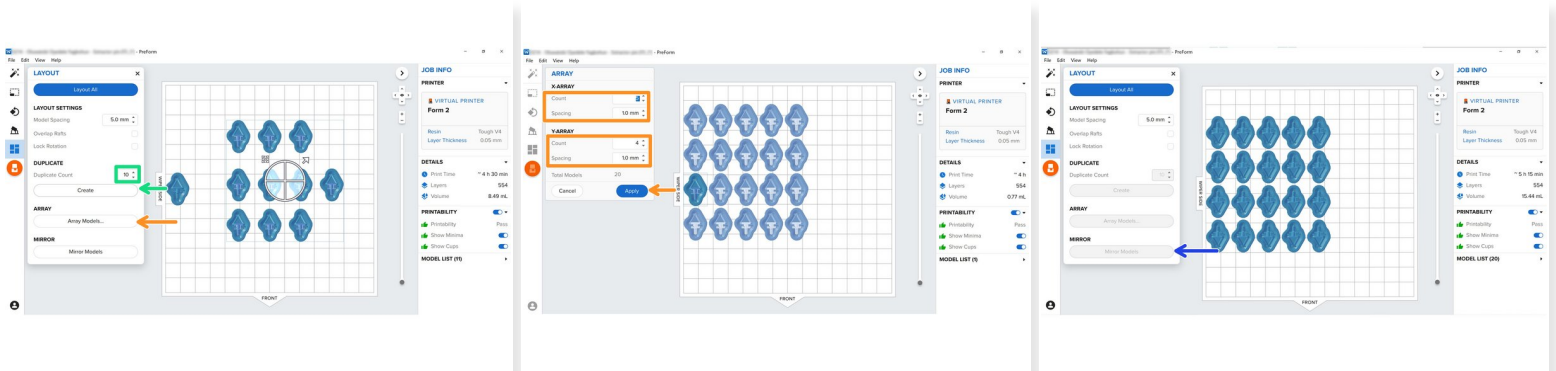
## Step 7 — Layout: Layout Settings



- "Layout All" will organize the models on the tray automatically based on the Layout Settings
- "Model Spacing" is the distance between the models
- If "Overlap Rafts" is selected the program will allow rafts to overlap with one another
- "Lock Rotation" translates the models without changing their orientation

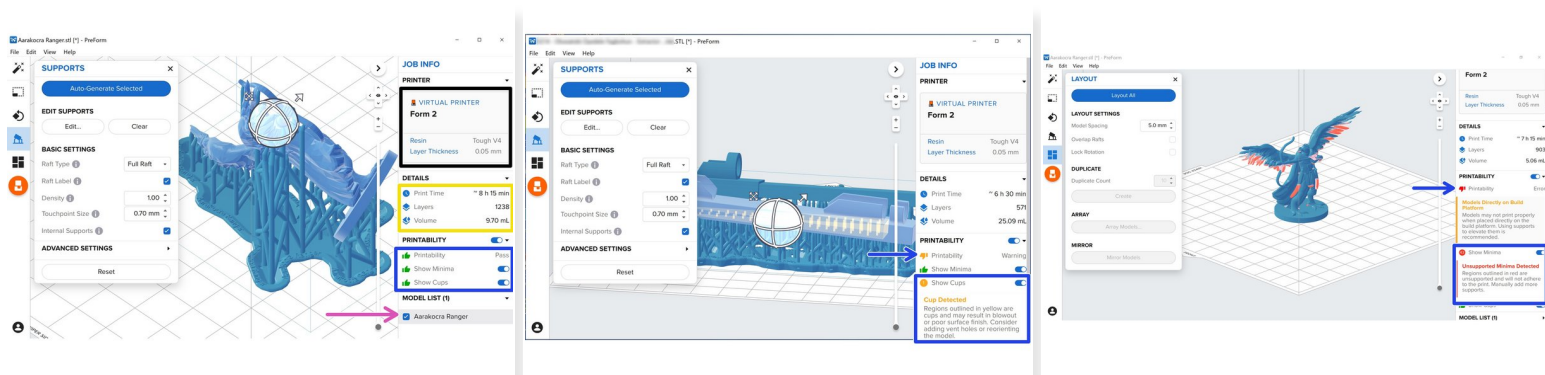


## Step 8 — Layout: Other Features



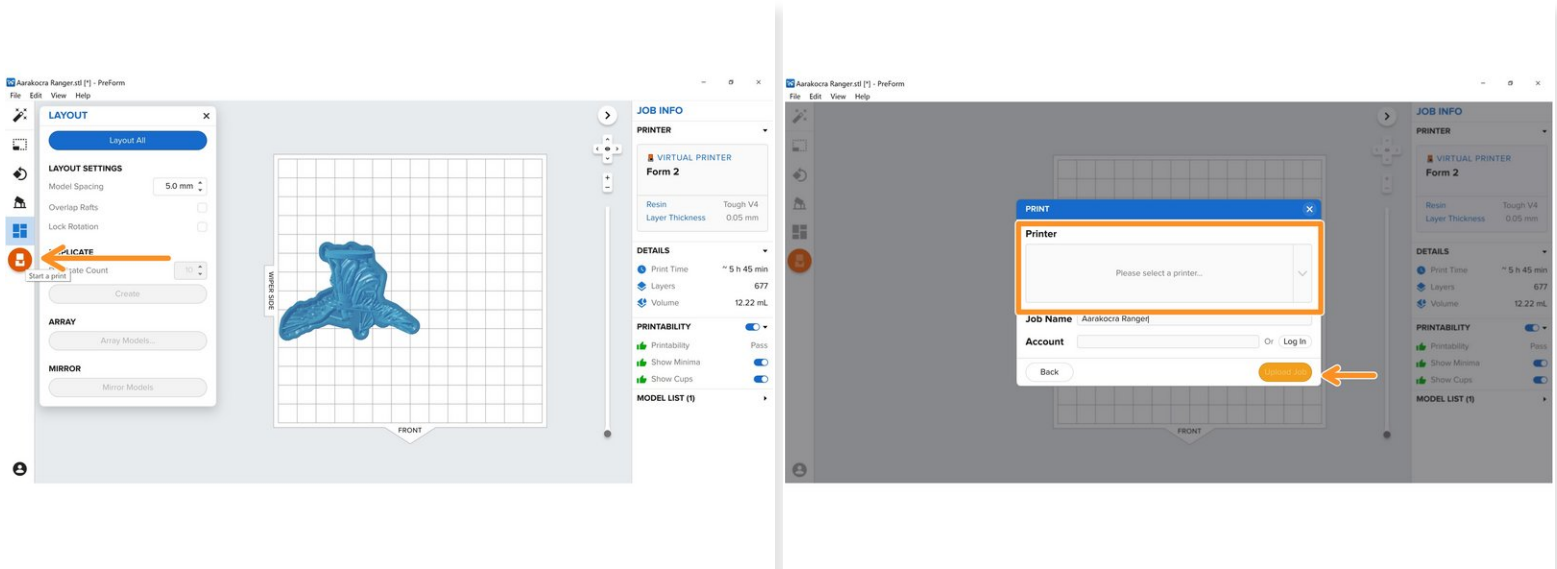
- You can make copies of a model by inputting the desired amount of copies in "Duplicate Count" the clicking "Create"
- Clicking "Array Models" will take you to a menu where you can set the X and Y counts and spacing in the array, and click "Apply" to create the array
- By click "Mirror Models" you can quickly flip the orientation of all models on the build plate

## Step 9 — Job Info



- You can view the name of the printer (if you are connected to one), the selected resin, and layer thickness under "Printer"
- You can view a print time estimate, number of layers, and print volume under "Detail"
- "Printability" detects and explains any problems with the print. Green means no problem, Orange is smaller problems, and Red is a serious issue that will result in print failure.
- You can view the parts on the build plate under "Model List"

## Step 10 — Sending Job to Printer



- To upload to a printer, select the orange Formlabs button, select a printer you are connected to, and click upload