



# Fortus 400mc: Preparing to Build a Job

The necessary steps to perform before starting a print on the Fortus.

**Written By: Andrew John Oliver**

## Introduction

This guide includes all the the necessary steps that must be taken before starting a print on the Fortus.

## Step 1 — Prepare File(s) for Printing



- If you are using the Insight/Control Center combination, see [this guide](#) for slicing instructions and [this guide](#) for print management instructions
- If you are using GrabCAD Print, see [this guide](#) for instructions

## Step 2 — Turn on the Machine



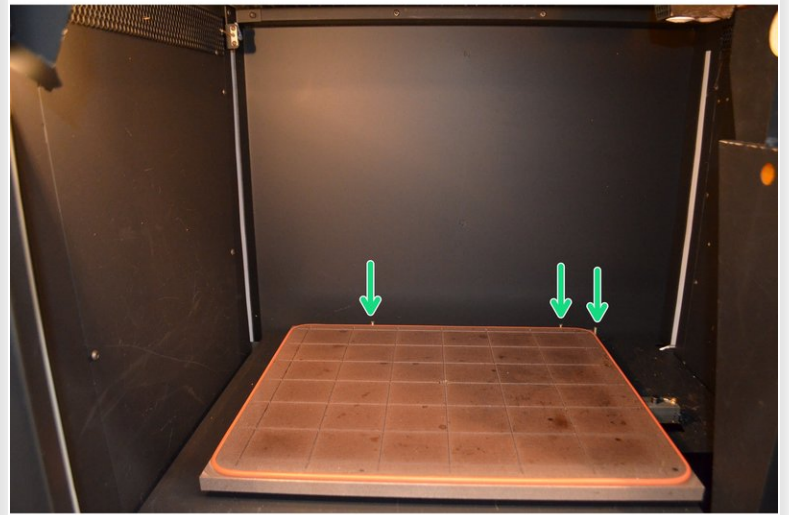
- If the Fortus is off, power it on by pressing the flashing green button on the control panel
- Once the machine is on, select *AutoHome XYZ* from the startup dialog
- Verify that the air pressure gauge reads 36-40 psi

## Step 3 — Verify Material Status



- Check that the model and support materials that are loaded match what you set in the print file
  - If necessary, see [this guide](#) for instructions on changing material
- If the materials are correct, use the estimates from the print file to ensure there is enough material currently loaded
  - If necessary, see [this guide](#) for instructions on loading material

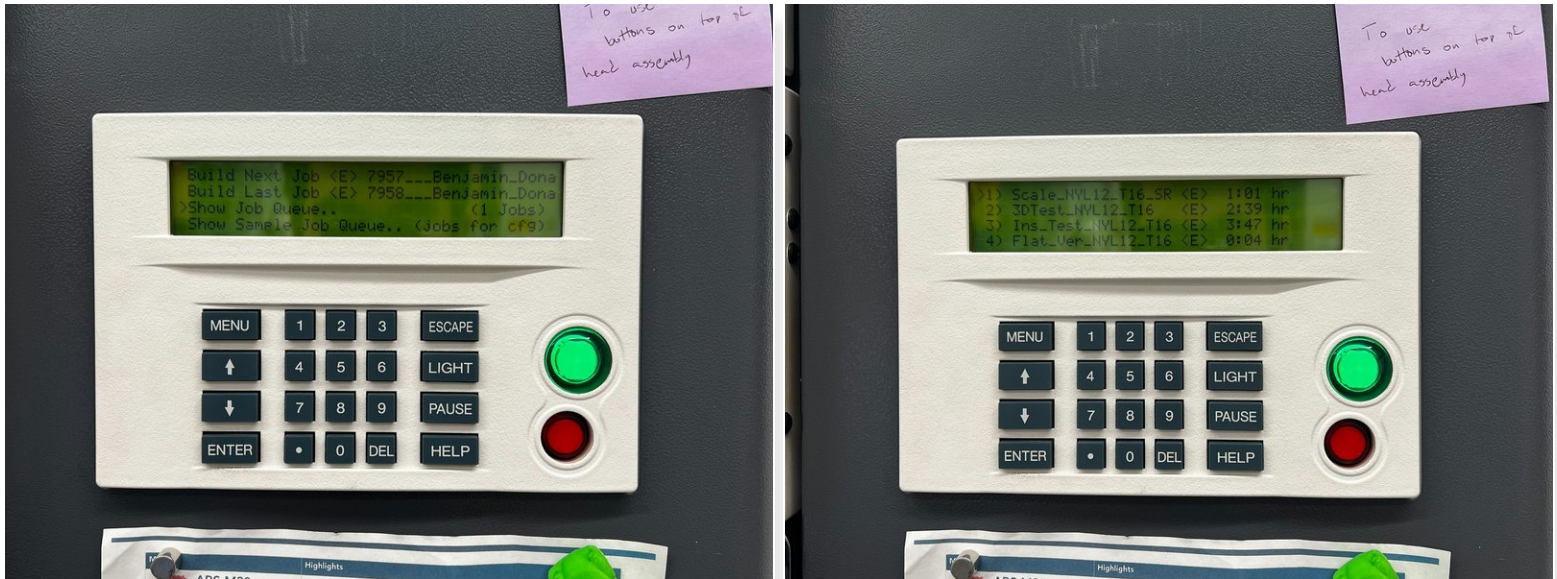
## Step 4 — Add a Build Sheet



- Place the appropriate build sheet on the platen and wait for a vacuum to be achieved. The vacuum gauge should read -15 inHg or greater (more negative)
- ① Amber-colored sheets are for Ultem and PPSF. Green-tinted sheets are for Nylon 12. Clear sheets are for all other materials (ABS, ASA, PC, etc.)
- ① Note that the sheets are not square, so they have a specific orientation. Amber build sheets must be placed with the glossy side against the platen
- ① The build sheet will need to heat up before it can create a seal with the platen o-ring. Place the sheet down on the platen, close the door, and wait several minutes before making adjustments
- ⚠ If the machine was just changed from a high temperature material to a lower temperature material, allow the oven to cool before trying to put the sheet in
- Use the locating pins on the far side of the platen to help with positioning the sheet
- If the build sheet refuses to seal, check the platen for debris and inspect the o-ring for damage



## Step 5 — Start the Print



- With the oven door closed, select *Build Job* from the main menu on the control panel
- Select the appropriate option from the menu, either *Build Next Job*, *Build Last Job*, or *Show Job Queue* to choose a specific job in the print queue
- ⓘ If one model canister bay and/or one support canister bay is empty, a warning will appear. As long as you have checked that there is enough material to complete the job, select *Continue* to bypass this
- If desired, you can select *Locate Part Start* and jog the head to the point you want to define as the front left corner of the print bounding box
- Select *Continue* to begin the build sequence