

Printing Area Requirements

July 25, 2022

1 Printing Area Recommendations

The recommendations from suppliers and manufacturers are outlined for each component of the proposed 3D printing infrastructure in the sections below.

1.1 Printing System

- large table preferably constructed of non or minimally flammable materials, minimum dimensions of 550x715 [mm], and minimum clearance on one side of 250 [mm]
- class C fire extinguisher
- spot exhaust, enclosure filter capable of min. 1 [L/s], or lab space capable of min. 6 [ACH]

1.2 VarioShore/Caverna Filament

- dry storage cabinet with minimum dimensions of 300x300x50 [mm], capable of maintaining <10% humidity
- hand/eye wash facility
- ventilated print system as noted above

2 Procurement

2.1 Printing System

- Prusa MK3s+
- Prusa standard enclosure or equivalent
- filter/exhaust components per selected ventilation recommendation

2.2 Filament

- min. 1x 700g or 2000g VarioShore filament
- optional 1x 500g Caverna PP filament (curious to evaluate both filaments)

2.3 Other

- any items outlined within recommendations not present in space already