# **GENERAL 3D PRINTER GUIDELINES**

#### **Specifications**

• Check your printer.

#### Materials needed for operation:

- Filament.
- Ilsopropyl alcohol (>90%).
- Spatulas, forceps, cutting tools and tools to dislodge filament.
- Cleaning wipes

### **Personal Protective Equipment**

- Depending on the material being printed you may need:
  - Respirator
  - Apron
  - Gloves

### **Operation sequence**

- Unload filament if a new one is to be used.
- Load filament and
- Purge the remaining filament
- Slice stl file and according to your application adjust for:
  - Vertical and horizontal walls
  - o Infil,
  - Material,
  - Nozzles size,
  - $\circ$  Temperature
  - Supports
  - Etc..
- Make sure it fits on the plate!
- Check your sliced object to make sure there are not problems
- Keep an eye from time to time on the printer
- Collect your print and clean the area.

## **Operation Precautions (People):**

- Be aware of the characteristics and safety guidelines of the materials you are using.
- Use filaments that correspond to the printer settings and if possible use ones that have lower emissions.
- Operate the printer in a well ventilated place.
- Avoid standing close to the printer for long periods of time.
- Be careful if you use alcohol to clean the printer's plate as it is highly flammable.
- Avoid touching heated platforms or hot nozzles.
- Wash your hands after/before utilizing the printer
- Disconnect the printer if changin/repairing printer pieces to avoid electric shock.

### **Operation Precautions (Machines):**

- Clean the machine's plate with alcohol after each print in order to avoid grease build up.
- Use appropriate filaments with their correct settings.
- Avoid build up of dust as this increases.
- If you change a nozzle make sure you update your slicer settings.
- Let the model print cool down before removing it from the printer's platforms.
- Clean the work area thoroughly when finished.
- Dispose residual filament appropriately.