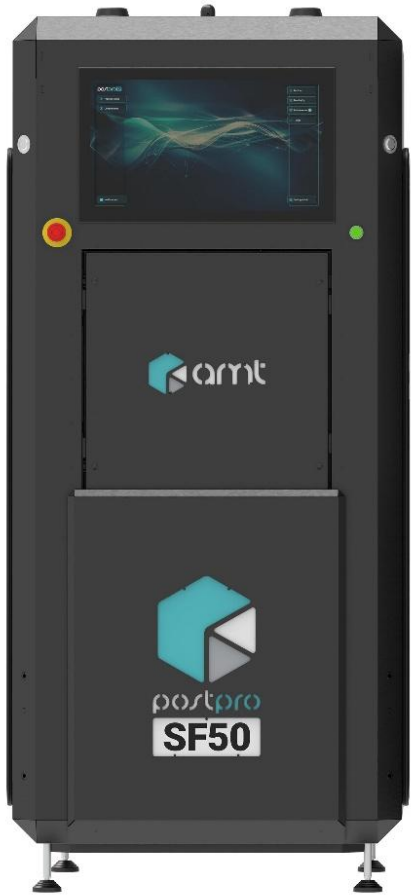
amt postpro®

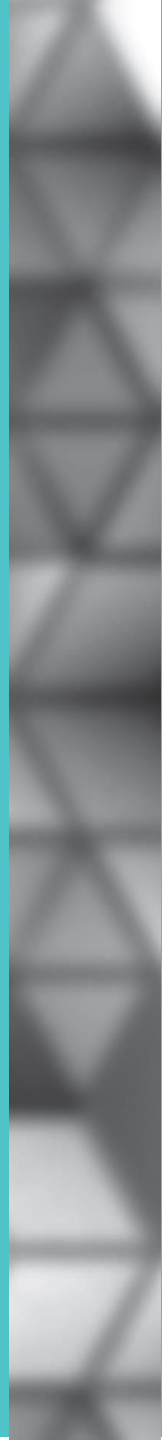



postpro SF GEN2

# SITE PREPARATION GUIDE

AMT PostPro SF50 – FA326

**October 2026 // V2.7**



DOCUMENT IS CONFIDENTIAL

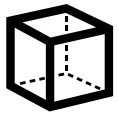
Data supplied in this document shall not be duplicated, used or disclosed in whole, or in part, for any purpose other than evaluation.

The contents will not be passed in any form, verbal, paper, or electronic to any other company or individual without the express permission of Additive Manufacturing Technologies Limited.

# 1 // Contents



Customer Responsibility


Equipment Description


Shipment & Delivery


Electrical Requirements


Ventilation & Environmental


Room & Connection Layout


Health & Safety


Network Connectivity


Consumables


Waste Disposal


De-commissioning


Pre-Install Checklist

# 2 // Customer Responsibility

1. Ensure a safe working environment for operators and installation engineers.

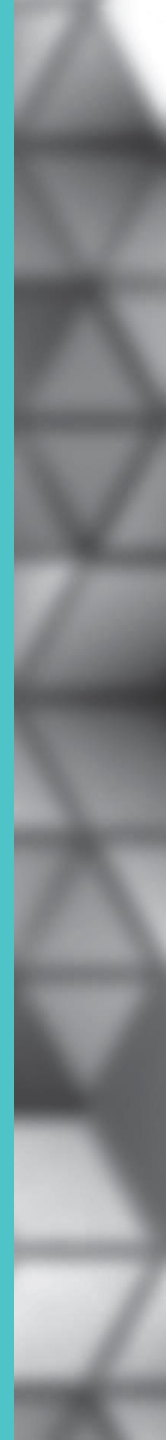
2. Ensure the installation site is fully prepared in accordance with this document before the installation date.

3. Unload the machine and ancillary items from the transport vehicle to the installation site and remove all transportation packaging.

4. Ensure the required electrical supply is in place prior to installation. Depending on preference, this may require additional plugs or hardwired connections and must be carried out by a qualified electrician.

5. Ensure adequate ventilation and extraction connections are in place so that waste air can be managed correctly.

6. Ensure the room and environmental conditions meet the specifications outlined in this document.



# 2 // Customer Responsibility

Ensure a safe working environment for both operators and installation engineers.
Ensure the installation site is fully prepared in accordance with this document before the installation date.
Unload the machine and ancillary items from the transport vehicle to the installation site and remove all transportation packaging.
Ensure the required electrical supply is in place prior to installation. Depending on preference, this may require additional plugs or hardwired connections and must be carried out by a qualified electrician.
Ensure adequate ventilation and extraction connections are in place so that waste air can be managed correctly.
Ensure the room and environmental conditions meet the specifications outlined in this document.

# 3 // Equipment Description

## 3.1 // Overview

The PostPro SF50 offers a controllable surface finish which reduces surface roughness (Ra values) of 3D printed polymers without the loss of detail and definition. In addition, the smoothing process naturally seals the surface of the 3D printed part, which significantly enhances the water-protective properties of the material.

The machine has been successfully tested with a range of polymers including:

- Polyamide (PA)-12,
- PA-11,
- PA-6,
- Thermoplastic Polyurethane (TPU),
- TPE elastomer and many more.

It can process Multi Jet Fusion (MJF), Selective Laser Sintered (SLS), High Speed Sintered (HSS) and Fused Deposition Modelling (FDM) 3D printed parts to the desired surface roughness.

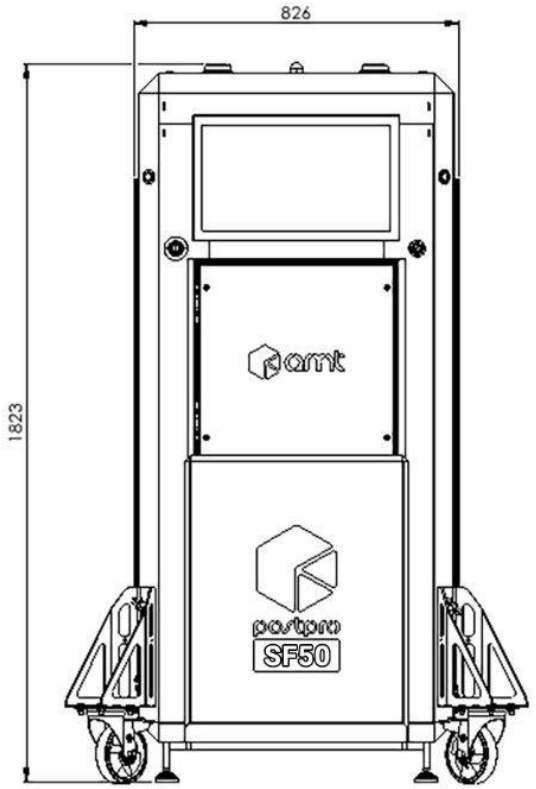
## 3.2 // PostPro SF50 Dimensions

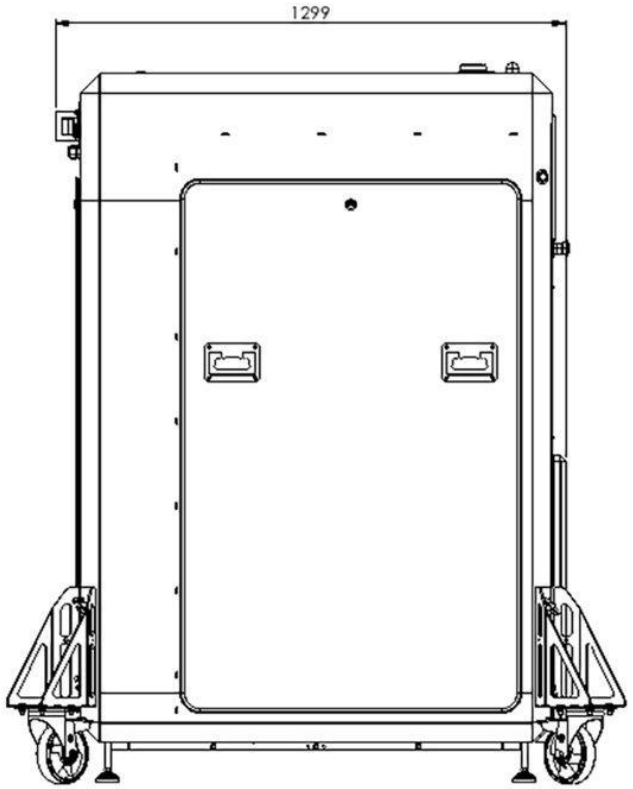
| | mm / Kg | In / lbs |
|---|---|---|
| Width | 826 mm | 32.5 in |
| Depth | 1,299 mm | 51.1 in |
| Height | 1,823 mm | 72 in |
| Weight | 540 Kg | 1,190 lbs |

## 3.3 // Extractor Dimensions

| | mm / Kg | In / lbs |
|---|---|---|
| Width | 547 mm | 24.5 in |
| Depth | 626 mm | 24.6 in |
| Height | 995 mm | 39.2 in |
| Weight | 71 Kg | 157 lbs |

# PostPro SF50 Machine Diagram



## 3.4 // PostPro SF50 Packaged Dimensions

| | mm / Kg | In / lbs |
|---|---|---|
| Width | 1,600 mm | 63 in |
| Depth | 1,100 mm | 44 in |
| Height | 2,100 mm | 81 in |
| Weight | 650 Kg | 1,433 lbs |

# 4 // Shipment and Delivery

## 1. // Overview

Additive Manufacturing Technologies can help arrange shipment and customs clearance to the client's facility, please contact support@amtechnologies for more information. The client is responsible for transporting the crates from point of delivery to the installation site based on the following shipment information.

## 2. // Items Supplied

- PostPro SF50
- Extractor
- Extraction Duct & Clips
- Processing Racks
- Preparation Stand
- Storage Stand
- Panel Keys
- Consumable Canisters will be Supplied Separately
- Diffuser Plate
- Transport Wheels

## 4.3 // Shipping Crate

The PostPro SF50 machine will arrive at the client's facility packed in a crate. The crate will have the dimensions and weights outlined in Table 3.4.

Once the PostPro SF50 and accessories have been unloaded, the client will need to store the crate on-site in the unlikely event that the machine needs to be returned to AMT.

## 4.4 // Unloading the Crate

It is the responsibility of the client to unload the crate from the delivery vehicle and position the crate in a suitable location for unpacking.

Unloading can occur at or near the installation site if there is sufficient clearance for the PostPro SF50.

The crate should be inspected for damage, and the shipping tilt/impact indicators should be reviewed. If any damage has occurred during transit, then this should be noted and logged with the shipping company at the point of receipt.

## 4.5 // Safety Measures for Unloading

Unloading procedures must be performed by trained personnel in accordance with occupational health and safety measures enforced at the installation country or state. Prior to unloading ensure the immediate area is:

- Clear of other traffic, pedestrians and people not involved in loading or unloading.
- Clear of overhead electric cables so there is no chance of touching them, or of electricity jumping to ‘earth’ through machinery, loads or people.
- Clear of obstacles and/or debris that could inhibit the movement of the machine.

## 4.6 // Machine Unboxing

It is the responsibility of the client to unbox the PostPro SF50 from the shipping crate in which it is supplied. For instructions on how to do this please refer to the **PostPro SF Unboxing Guide.**

# 5 // Electrical Requirements

⚠ The client is responsible for connecting all supplied equipment to the building's power supply prior to the installation date.

## 5.1 // PostPro SF50

The PostPro SF50 is available in multiple electrical configurations to suit different facility electrical supplies. The electrical configuration must be specified at the point of sale. The table below shows the electrical supply specifications for each configuration.

**Always check the machine plate before connection.**

| Specification | Option 1 | | Option 2 |
|---|---|---|---|
| Phases | Three Phase | | Three Phase |
| Voltage | 3 x 400V | | 3 x 480V |
| Frequency | 50/60Hz | or | 50/60Hz |
| Mains Fuse Protection | C16A | | C16A |
| Connection | L1 + L2 + L3 + N + PE | | L1 + L2 + L3 + PE |
| Maximum Power Consumption | 11.0 Kw | | 11.0 Kw |
| Average Power Usage (Cold Start) | 1.7 Kwh | | 1.7 Kwh |
| Average Power Usage (Preheated) | 0.70 Kwh | | 0.70 Kwh |

**For additional information contact AMT Support:** support@amtechnologies.com

## 5.2 // Extraction Unit

The BOFA Extraction Unit can operate at 110 or 240 Volts to suit European and USA different facility electrical supplies. The table below shows the electrical supply specifications.

**Always check the machine plate before connection.**

| Specification | |
|---|---|
| Phases | Single Phase |
| Voltage | 100 – 240V |
| Frequency | 50/60Hz |
| Mains Fuse Protection | 12.5A |
| Connection | L + N + PE |

# 6 // Ventilation and Environmental Requirements

⚠ PostPro SF50 should not be installed in a potentially explosive atmosphere.

## 6.1 // Extraction Requirements

The PostPro SF50 is connected to the external extractor (supplied). The waste air from the extractor must be exhausted out of the working room to the outside atmosphere. The client should consult their local legislation regarding requirements for exhaust emissions.

It is the responsibility of the Client to connect the waste air output from the extractor to the facility extraction system.

The building extraction connection must comply with the following:

| | Specification | Comments |
|---|---|---|
| Duct Diameter | 75 mm / 3 in | |
| Duct Maximum Length | 10 m / 33 ft | This length should be decreased by 0.75 meters (2.5 feet) for every 45-degree bend the duct makes and 1.5 meters (5 feet) for every 90-degree bend the duct makes |
| Air Flow | 370 $m^3$/hr / 210 CFM | This is the maximum air flow exhausted from the extractor. This should be considered when installing the air extraction system. |

## 6.2 // Temperature Control

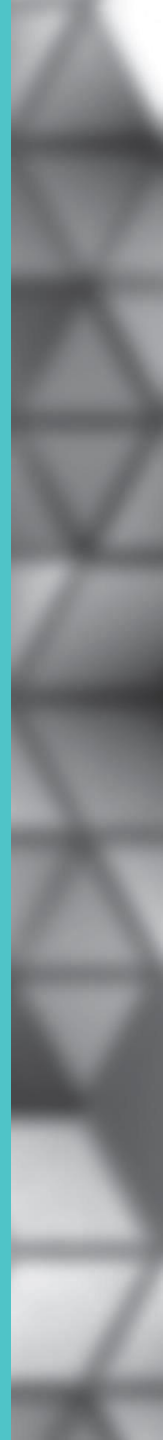
Temperature control within the working room is very important to ensure consistent and repeatable results. Fluctuations in temperature will impact the performance of the machine.

The installation and operation room must have:

- Heating, Ventilation and Air Conditioning (HVAC) to ensure a constant and stable ambient temperature and humidity.
- Temperature control: 18°C (59°F) - 22°C (72°F).
- Humidity control: 18 - 22°C (59 -72°F) at 30-40 % relative atmospheric humidity.

Working temperatures and humidity outside these ranges can be accommodated only after discussion with AMT. Best results are achieved when the room temperature is stable. Please contact AMT support for further guidance.

If the operation room cannot be kept at a stable temperature and humidity, parts to be processed should be stored in a controlled chamber (or similar) to improve processing performance.



## 6.3 // Other Considerations

- The room should be free of dust and particulate matter.
- There should be no single-sided local heating or cooling of the machine, such as from a radiator or air-conditioner, solar irradiation through a window or loading door, or irregular flow of air.
- A minimum of 10 ACH (Air Changes per Hour) is required.

# 7 // Room and Connection Layout

## 7.1 // Room Layout

The following diagrams show the recommended minimum processing room size and working area required for operating the PostPro SF50.

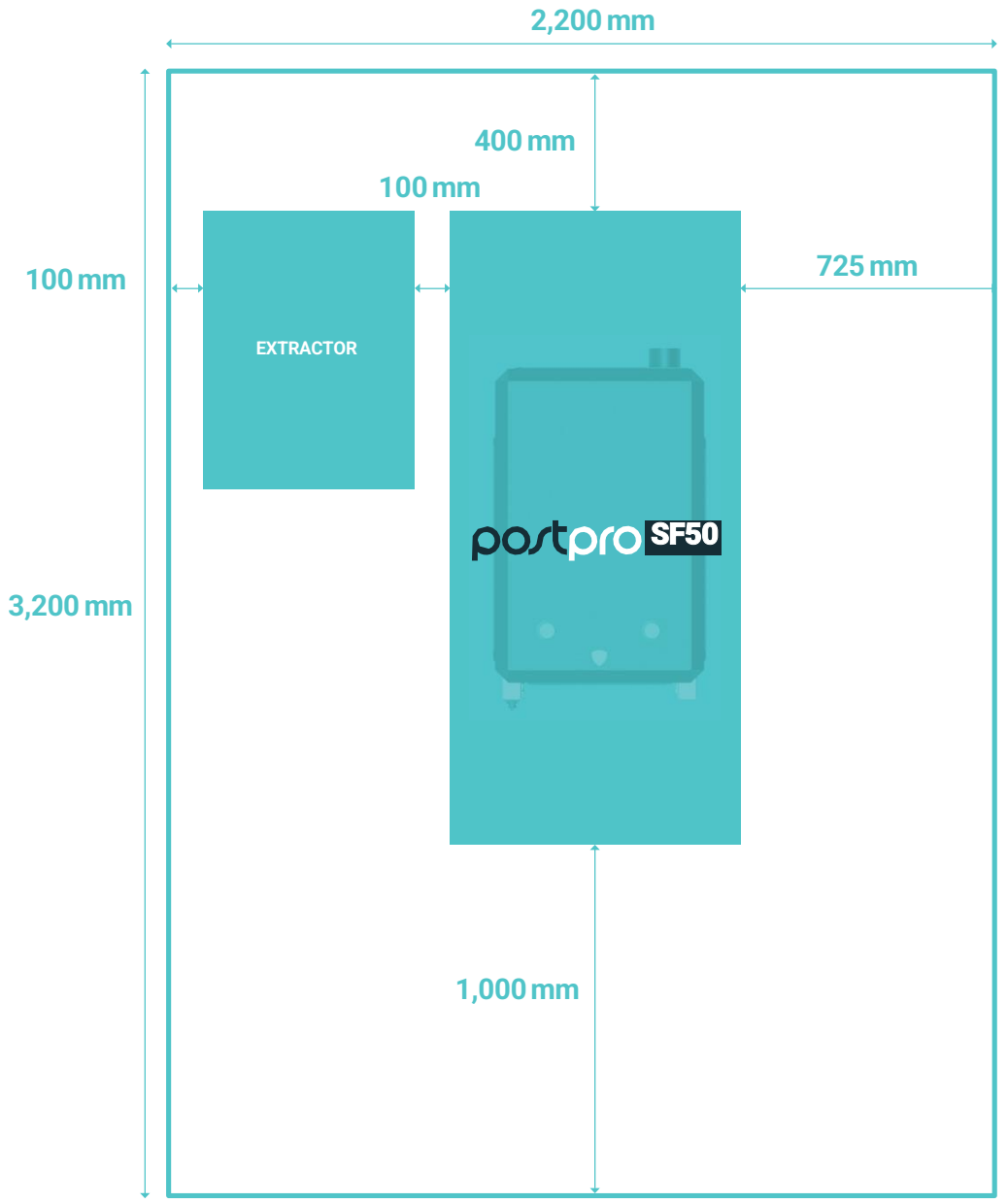
The recommended operating area of the PostPro SF50 and accessories is at least 2200 mm (7.7 feet) in width and 3200 mm (10.5 feet) in depth. Smaller working spaces can be accommodated following discussion with AMT or your authorized reseller.

The installation and operation room must be ready in advance of delivery.

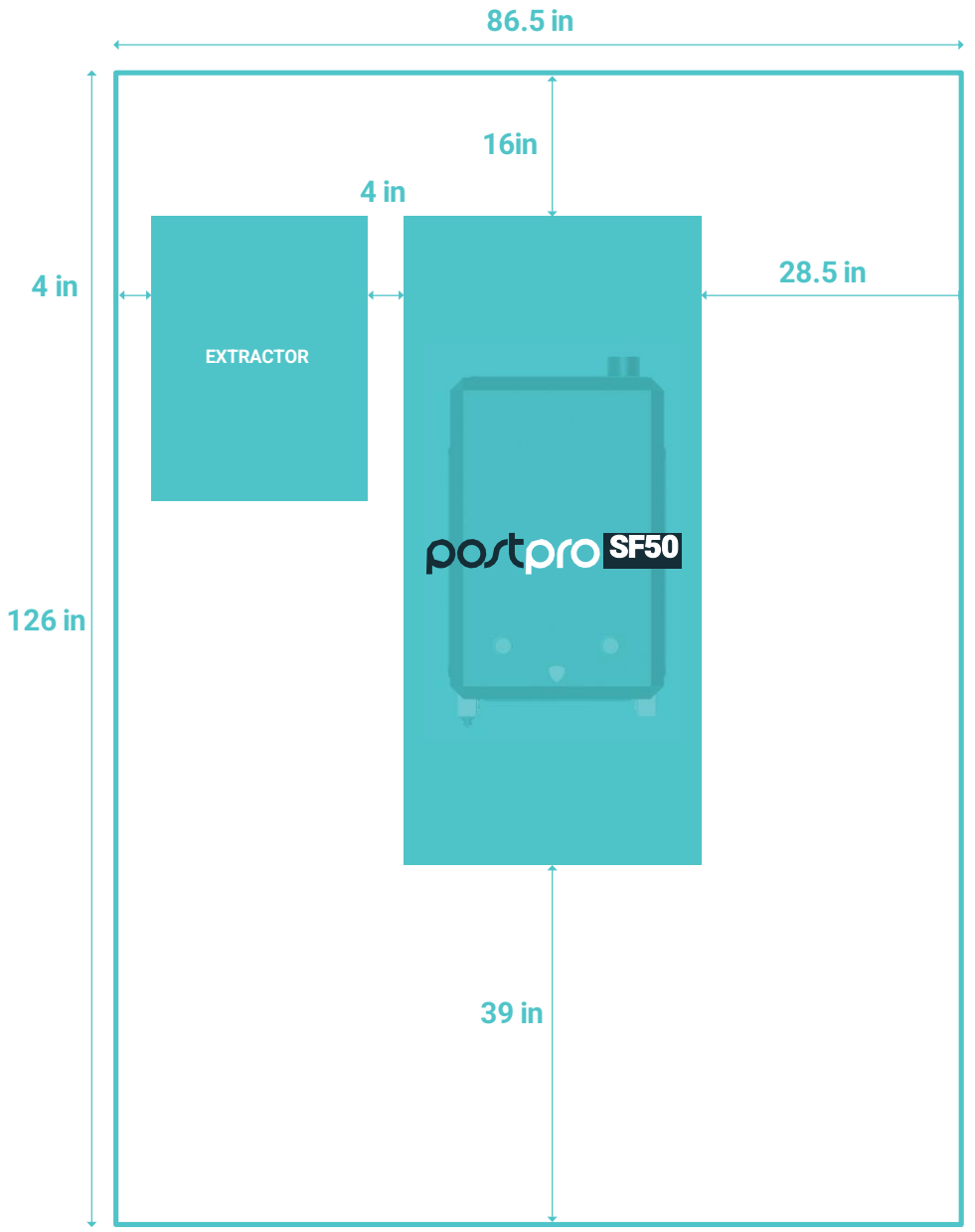
The client is responsible for unpacking the crate and positioning the equipment in the designated installation room. Mishandling of the PostPro SF50 and its accessories during installation may damage the machine, requiring it to be returned to AMT.

Free access must be ensured around the machine for installation and maintenance procedures.

## 7.2 // Recommended Operating Room Dimensions and Space Requirements (mm)



## 7.3 // Recommended Operating Room Dimensions and Space Requirements (in)



# 7.4 // Connection Layout



## 7.5 // Other Considerations

AMT requires the client to prepare the PostPro SF50 room prior to installation and ensure that the room conforms to the minimum dimensions shown in Sections 7.2 and 7.3. The PostPro SF50 must be positioned in such a way to ensure access to the power outlet and switches, including emergency shutoff switches.

The following conditions are required for access to and within the working area:

- Level, hard flooring (no carpet) that can handle a machine weight in accordance with Tables 3.2 and 3.3.
- The floor must be hard, flat, and level. Unevenness of the floor beneath the machine should be less than 5 mm/m² (0.0182 inches/square foot)
- The floor in the PostPro SF50 machine room shall be easy to clean and chemically resistant.

## 7.5. // Other Considerations

The following conditions are required for access to and within the working area:

- 400 mm (16 in) of clearance should be provided from the back of the machine to plug in power, extraction and Ethernet cords, as shown in the drawing in Section 7.4.
- The ceiling height should be at least 1000 mm (3.25 feet) above the top of the PostPro SF50.
- PostPro SF50 should be installed in a vibration free area and should not be located near machinery or equipment that causes high vibration levels.
- When possible, the PostPro SF50 should be installed and operated in a closed room.
- Access to the PostPro SF50 machine room shall be level and without steps.
- Machine should not be installed near other equipment that generates or radiates heat or temperature variation.

## 7.6 // Workstation area

The client is responsible for supplying a workbench next to the PostPro SF50 machine for pre-preparation and unloading of process racks.

The client should have enough space for:

- One bench

Shelves and cabinets should be near the PostPro SF50 to allow convenient and safe storage of tools, accessories, consumables, training manuals, etc.

## 7.7 // Chemical Storage

AMT recommends that the client store the chemicals safely and to a standard that is in accordance with regulations, fire department and insurance requirements, and in accordance with Section 7 of the relevant chemical MSDS.

## 7.8 // Safety Eye Wash and Shower

Before starting to use the PostPro SF50 the client should establish at least one working eye-wash station near the machine and have a safety shower available.

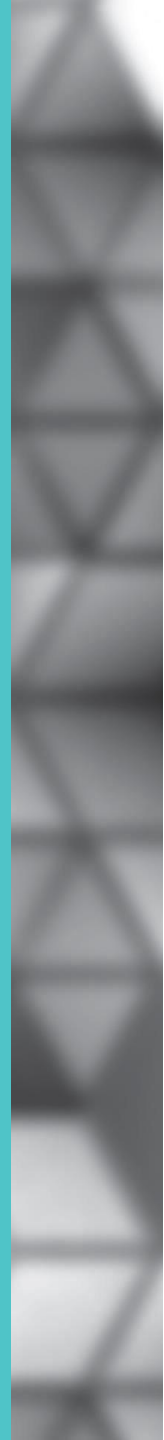
## 7.9 // Chemical Spills

AMT recommends that before installing the PostPro SF50, the client establishes a procedure on how to handle chemical spills.The PostPro SF50 is designed to prevent spills or leakages as the chemicals used are within sealed units. However, a spill may occur if the equipment is damaged or mistreated in some way. All spills should be reported to the client's safety officer and to AMT.

## 7.10 // Precautions in the Event of Fire

AMT recommend that before installing the PostPro SF50 the client should establish a procedure on how to handle fires in or near the PostPro SF50 machine room, just as the client will have done with any other machinery that has been installed. These procedures should focus on fighting fires where high voltages are being used, and the potential by-products produced from combusted polymers and processing chemicals forming toxic gases and fluids.

Please consult the MSDS of the chemicals used for further information.



# 8 // Health & Safety

## 8.1 // Personal Protective Equipment PPE

⚠ It is the responsibility of the customer to ensure the PPE being worn is compliant with the company, local and national safety regulations.

Additive Manufacturing Technologies recommends the following minimum Personal Protective Equipment (PPE) be worn when operating the PostPro SF50:

- Disposable nitrile gloves
- Closed toe safety shoes
- Laboratory spill resistant coat
- Close fitting chemical eye protection
- Half face mask with AX-P3 type filters.

## 8.2 // Additional Precautions

The Client should also ensure the following safety equipment and information is available in the room of operation:

- MSDS safety sheets displayed in a prominent position
- Safety shower
- Eye wash station
- Spill clean-up kit

# 9 // Network Connectivity

The PostPro SF50 machine is a networked device. It communicates with AMT Servers securely via the inbuilt 4G modem. The SF50 must be connected to AMT Servers to operate. In exceptional circumstances, the machines can be installed ‘offline’. Please consult AMT or your authorized reseller for additional information.

## 9.1 // Connectivity Requirements

The PostPro SF50 process control computer is permanently connected to the internet via a 4G modem, however, in the event no 4G network is accessible, clients are required to establish an internet connection via ethernet.

The PostPro SF50 machine requires a wired ethernet connection to a network that offers un-interrupted access to the Internet. “Guest networks” that require regular renewal of credentials are not sufficient in this regard. No power must be transmitted through the Ethernet cable. (NO POE)
PostPro SF50 also supports Wireless Network (Wi-FI) connections.

Please contact AMT for further information if connection restrictions are in place at your facility.

## 9.2 // PC Requirements

For machines operating with network connectivity via Ethernet or WiFi, access to the endpoints listed below must be permitted through the client's firewall over the specified TCP ports.

| Address | Port(s) | Purpose | Remarks |
|---|---|---|---|
| Windows Update | | Access to Windows Update is Microsoft Intune are required to keep the Windows OS on the PC up to date. | Microsoft does not provide an exact and official list of IP addresses or ranges for either of these services. Please see the following for more information and address ranges: https://learn.microsoft.com/en-us/mem/intune/fundamentals/intune-endpoints https://learn.microsoft.com/en-us/troubleshoot/windows-client/deployment/windows-update-issues-troubleshooting |
| amt.beyondtrustcloud.com | 80, 443 | BeyondTrust support software. This is required in order that AMT engineers could provide remote assistance and perform troubleshooting. | BeyondTrust is a vendor of privileged identity and access management software. |
| sfvpn.ppesds.com | 11319 | VPN connection to AMT's servers. This connection is required for the SF machine to report hardware troubleshooting information to AMT, and to receive updates from AMT to its control software and kiosk UI. | This is not essential for the operation of the machine, but it is recommended. |
| sf2dashboard.ppesds.com | 443 | Access to this server is required to connect to AMT servers, collect operational logs from the machine and perform updates to the software installed on the system. Furthermore, this connection is essential for the machine to validate solvent and filter codes. | We can provide an offline code in specific cases, please note that this may involve an additional charge. |

# 10 // Consumables

The PostPro SF50 must only be re-supplied with consumables by an individual who has been trained on how to operate the machine.

The client must not attempt to open or re-fill the canisters.

All consumables are supplied with a 12-digit code. In the event that this is lost, please contact support@amtechnologies.com.

Do not use any consumables other than those supplied by AMT. Failure to comply with this will void the Manufacturer's warranty of the machine.

The consumables are supplied in canisters, which remain the property of AMT.

# 11 // Waste Disposal

AMT manages the consumable supply chain so all used canisters and filters must be returned. Contact AMT for more information.

The client must follow its facility's procedures and all federal, state, and local regulations describing the disposal of hazardous waste.

The PostPro SF50 is a closed-loop system, as a result of this, there is no liquid or solid hazardous waste to dispose of. Once the recovery canister has been filled and/or the virgin canister has been emptied, AMT will arrange for the collection of the canisters to be returned to an AMT facility for processing.

Any other solid non-hazardous waste should be disposed of in a general lab waste container in accordance with local regulations. It is the client's responsibility to have a liquid and solid waste management process in place.

# 12 // De-Commissioning

Upon request AMT can decommission the PostPro SF50. Contact AMT technical support for details and arrangements.

## 12.1 // WEEE Compliance

AMT is a registered member of WEEE compliance schemes throughout Europe. As such AMT will be responsible for the decommissioning and disposal of the equipment and packaging once it has reached end of life. For further information please contact AMT Support.

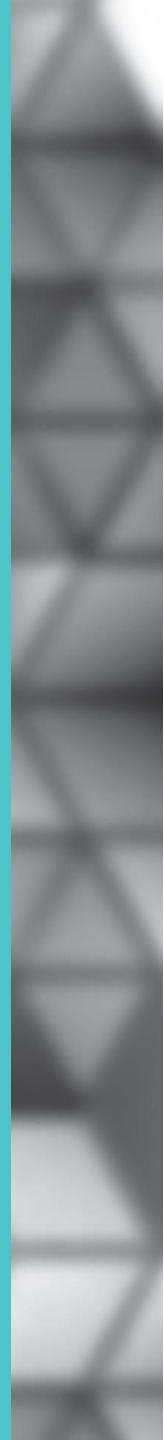
# 13 // Pre-Installation Checklist

Should you have any questions or concerns regarding the Site Preparation Checklist, please do not hesitate to contact AMT for assistance. Please note that AMT reserves the right to reschedule the installation depending on the readiness of your facility.

If your site is not ready for any reason, please contact AMT as soon as possible to rearrange any scheduled services.

Please be aware that AMT will not proceed with scheduling the installation until the Site Preparation Checklist has been fully completed and approved.

**Important Notice:** If the installation is conducted by AMT and it is determined upon arrival at the client's facility that the conditions outlined in the Site Preparation Checklist have not been met, the facility is not ready, or the workspace is deemed unsafe, AMT reserves the right to refuse the installation. In such cases, the client will be liable for any lost time and travel expenses incurred.



# Thank You!

For more information contact AMT.


**E-mail**
**support@amtechnologies.com**

**Support**
**amtechnologies.com/support**

**US**
**+1 737 600 0959**

**EU & ROW**
**+44 114 697 4025**