



**stratasys**<sup>®</sup>

CLEANSTATION CSIP  
SITE PREPARATION GUIDE

# Copyright

Copyright © 2015 Stratasys Ltd. All rights reserved.

The specifications on which this document is based are subject to change without notice.

No part of this document may be reproduced in any form or by any means, nor stored in a database or retrieval system, without prior permission in writing from Stratasys Ltd.

If this document is distributed as a PDF file, you may print it for internal use.

Dec. 2015

DOC-03202 Rev. A

# Trademarks

All names of products and services cited in this book are trademarks or registered trademarks of their respective companies.

# Contents

<b>1 Introduction</b> .....	<b>4</b>
1.1 About this Guide .....	4
<b>2 Shipment and Delivery</b> .....	<b>5</b>
2.1 Shipping Information and Responsibility .....	5
2.2 Shipping Size and Weight .....	5
2.3 Lifting Equipment .....	5
2.4 Unloading .....	5
<b>3 Physical Description</b> .....	<b>6</b>
3.1 Size and Weight .....	6
3.2 Tank Capacity .....	6
<b>4 Site Requirements</b> .....	<b>7</b>
4.1 Positioning / Clearance .....	7
4.2 Water and Drain Connections .....	7
4.3 Floor .....	7
4.4 Power .....	8
4.5 Grounding .....	8
4.6 Residual Current Device (RCD) .....	8
4.7 Electrical Connection .....	8
<b>5 Environmental Requirements</b> .....	<b>9</b>
5.1 Temperature and Humidity .....	9
5.2 Ventilation .....	9
<b>6 Checklist</b> .....	<b>10</b>
6.1 Customer Information .....	10
6.2 Checklist .....	10

# 1 Introduction

Use the CleanStation<sup>®</sup> CSIIP<sup>™</sup> for removing Support material from models printed on Stratasys 3D printers.

## 1.1 About this Guide

The information and requirements provided in this document ensure proper installation and operation of the CSIIP Support removal system, manufactured by PM Technologies. The customer is responsible for preparing the site as described in this document.

If you have any questions about the information in this document, contact your Stratasys representative.

All site requirements must be met before the installation date. The Site Preparation Checklist should be sent to your Stratasys representative. Shipping will be arranged after the signed checklist is received by Stratasys.

Non-compliance with requirements specified in this document might result in additional installation charges.

## 2 Shipment and Delivery

### 2.1 Shipping Information and Responsibility

Stratasys Ltd. will arrange shipment to the customer's facility, as indicated in the "ship to" section of the invoice. It is the customer's responsibility to provide Stratasys with detailed delivery instructions. The customer is also responsible for transporting the system to a suitably prepared installation location.

Upon request, customer support engineers will provide advice regarding these matters.



Equipment should be unpacked and installed in the presence of authorized Stratasys representatives.

### 2.2 Shipping Size and Weight

The CSIIP is shipped in a shipping box on a wooden pallet. The following table provides the approximate size and weight as shipped:

Table 1 CSIIP shipping size and weight

W x H x D (cm)	W x H x D (in)	Weight
109 x 127 x 94	43 x 50 x 37	156.5 kg / 345 lbs

### 2.3 Lifting Equipment

A forklift or hand pallet truck with the following specifications is required:

- Lifting capacity of 200 kg (440 lb)
- 90-centimeter (36-inch) extension

### 2.4 Unloading

It is the customer's responsibility to determine what type of truck is required to deliver the CSIIP, based on whether or not there is a loading dock at the site.

The unloading area should be a level surface.

- A receiving area of 10 m<sup>2</sup> (108 sq ft) is required for the forklift to remove the CSIIP from the delivery truck.
- A clearance of 180 cm (6 ft) from all sides of the packaging is required for unloading the CSIIP from the pallet.
- The installation location must be accessible from the unloading area. The customer is responsible for unloading the CSIIP from the truck and transferring it to the installation location.

## 3 Physical Description



Figure 1 CleanStation CSIIP

### 3.1 Size and Weight

The following table shows the size and weight of CSIIP.

Table 2 CSIIP Size and Weight

	W x H x D (cm)	W x H x D (in)	Weight (empty)
Outside dimensions	92 x 102 x 75	36.2 x 40.2 x 29.5	143 kg / 315 lbs
Inside tank dimensions	41 x 45.7 x 36	16.2 x 18 x 14.2	

### 3.2 Tank Capacity

The liquid capacity of CSIIP is 60 liters (15.8 gallons).

## 4 Site Requirements

The following factors should be considered when choosing a suitable location for the CSIIP:

- Clearance around and above the CSIIP to enable convenient access and servicing
- Proximity to a water outlet and drain

To avoid water damage to CSIIP, install CSIIP in another room or at least 5 meters (16.5 feet) away from the CSIIP.

- Proximity to an area where models can dry after CSIIP treatment

### 4.1 Positioning / Clearance

For proper ventilation, place the CSIIP in a location with a minimum of 40 cm (16 inches) around the CSIIP at all times.

To enable easy access, allow approximately 1.5 meters (59 in) in front of the CSIIP.

### 4.2 Water and Drain Connections

The CSIIP is supplied with a water inlet hose that is 1.8 m (6 ft) long, with a 19 mm (3/4 inch) connector for connecting to a water supply tap. It is the customer's responsibility to ensure that there is a water tap near the CSIIP installation location.

The waste water/solution from the unit should empty into the building's drainage system. The customer must prepare a suitable drain near the unit. It is recommended that you locate the drain pipe behind the CSIIP.



Dispose of the waste water/solution according to local regulations. Prepare the waste disposal system accordingly.

The drain hose supplied with the CSIIP is 19 mm (3/4 inch) inner diameter (25 mm/1 inch outer diameter) and 1.8 m (6 ft) long. The CSIIP can drain the waste water/solution via gravity or a built-in pump. If using the pump, the customer must verify that the drain hose is secured to the drain.

### 4.3 Floor

The customer must verify that the floor is stable and able to bear the load of the CSIIP filled with water/solution and the models.

Water is likely to drip from the models after cleaning. Therefore, it is recommended that the floor around the CSIIP have a non-slip surface.

## 4.4 Power

The customer must verify that an electrical outlet with the proper power specifications is available near the CSIIP. It is recommended that the electrical outlet be installed in back of the unit and higher than it, to reduce the chances of water spraying on the outlet.

The following table describes the power requirements for the electrical outlet according to the available local voltage.

Table 3 Power ranges for different regions

Voltage	Power Consumption	Circuit Breaker
90–120 VAC 50/60 Hz	1010 W	15 A
220–240 VAC 50/60 Hz	1010 W	15 A

## 4.5 Grounding

The CSIIP is grounded through the AC plug. The customer must verify that the ground connector in the electrical wall outlet is properly grounded, in accordance with your local electrical codes.

## 4.6 Residual Current Device (RCD)

The customer must verify that the electrical outlet for the CSIIP is connected to a residual current device (RCD)—also known as a ground current-leakage detector—that protects the circuit from a current leakage of more than 30 mA.

## 4.7 Electrical Connection

The CSIIP is shipped with one of the following:

- **for 90-120 VAC:** a power cable, including a NEMA 5-15 (Type B) plug suitable for the USA. For regions with this voltage that use a different type of plug, the customer must provide a plug that meets local requirements and have it installed by personnel qualified by local authorities.
- **for 220-240 VAC:** a 14 AWG power cable, with no plug attached. For these areas, the customer must provide a plug that meets local requirements and have it installed by personnel qualified by local authorities.

# 5 Environmental Requirements

## 5.1 Temperature and Humidity

The temperature and relative humidity around the CSIIP must be within certain limits. Peak conditions occur when the CSIIP draws maximum electrical power, resulting in the heat dissipation of 1010 Watts (3446 BTU/hr).

The environmental control system in the room should ensure that the room temperature and relative humidity do not exceed the limits listed in the table below.

Table 4 Room temperature and relative humidity

	Range
Temperature	18°C–25°C (64°F–77°F)
Relative humidity	30%–70% (non-condensing), optimal = 55%



If the room temperature and humidity are outside of the specifications provided above, the Support removal process might be prolonged.

## 5.2 Ventilation

To ensure optimal air quality around the CSIIP, the room ventilation system should change the air at least four times every hour.

# 6 Checklist

Dear customer,

After preparing your site for the installation of the CleanStation CSIIP Site Preparation Guide, please complete the customer information and the checklist below, and fax it to your Stratasys representative.

Consult with your representative if you have any questions related to site preparation and the checklist.

This form must be received and approved before installation and training are scheduled, and before Stratasys service personnel are sent to your site.

## 6.1 Customer Information

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

E -mail: \_\_\_\_\_

## 6.2 Checklist

Item	Completed as Required?		Notes
	Yes	No	
Positioning (Section 4.1 )	<input type="checkbox"/>	<input type="checkbox"/>	
Water and Drain (Section 4.2 )	<input type="checkbox"/>	<input type="checkbox"/>	
Floor (Section 4.3 )	<input type="checkbox"/>	<input type="checkbox"/>	
Power (Section 4.4 )	<input type="checkbox"/>	<input type="checkbox"/>	
Grounding (Section 4.5 )	<input type="checkbox"/>	<input type="checkbox"/>	
Residual Current Device (RCD) (Section 4.6 )	<input type="checkbox"/>	<input type="checkbox"/>	
Electrical Connector and Connection (Section 4.7 )	<input type="checkbox"/>	<input type="checkbox"/>	
Temperature (Section 5.1 )	<input type="checkbox"/>	<input type="checkbox"/>	
Ventilation (Section 5.2 )	<input type="checkbox"/>	<input type="checkbox"/>	



[c-support@stratasys.com](mailto:c-support@stratasys.com)  
STRATASYS.COM

---

#### HEADQUARTERS

7665 Commerce Way, Eden Prairie, MN 55344  
+1 888 480 3548 (US Toll Free)  
+1 952 937 3000 (Intl)  
+1 952 937 0070 (Fax)

2 Holtzman St., Science Park, PO Box 3496  
Rehovot 76124, Israel  
+972 74 745 4000  
+972 74 745 5000 (Fax)

# stratasys®

THE 3D PRINTING SOLUTIONS COMPANY

ISO 9001:2008 Certified

©(Undefined variable: variablesmaster.Year) Stratasys Inc. All rights reserved. Stratasys, Stratasys logo, PolyJet, Objet, Objet24, Objet30, Objet30 Pro, Objet30 Prime, Eden, Objet Eden260V, Objet Eden260VS, Objet Eden350V, Objet Eden500V, Connex, Objet260 Connex1, Objet260 Connex2, Objet260 Connex3, Objet350 Connex1, Objet350 Connex2, Objet350 Connex3, Objet500 Connex1, Objet500 Connex2, Objet500 Connex3, Durus, Endur, Vero, VeroBlue, VeroBlackPlus, VeroClear, VeroCyan, VeroDent, VeroDentPlus, VeroGlaze, VeroGray, VeroMagenta, VeroWhitePlus, VeroYellow, Tango, TangoBlack, TangoBlackPlus, TangoGray, TangoPlus, Digital ABS and Digital ABS2 are trademarks or registered trademarks of Stratasys Inc., registered in the United States and other countries. ULTEM is a registered trademark of SABIC or affiliates. All other trademarks belong to their respective owners. Product specifications subject to change without notice. For more information about Stratasys systems, materials and applications, call 888.480.3548 or visit [www.stratasys.com](http://www.stratasys.com)