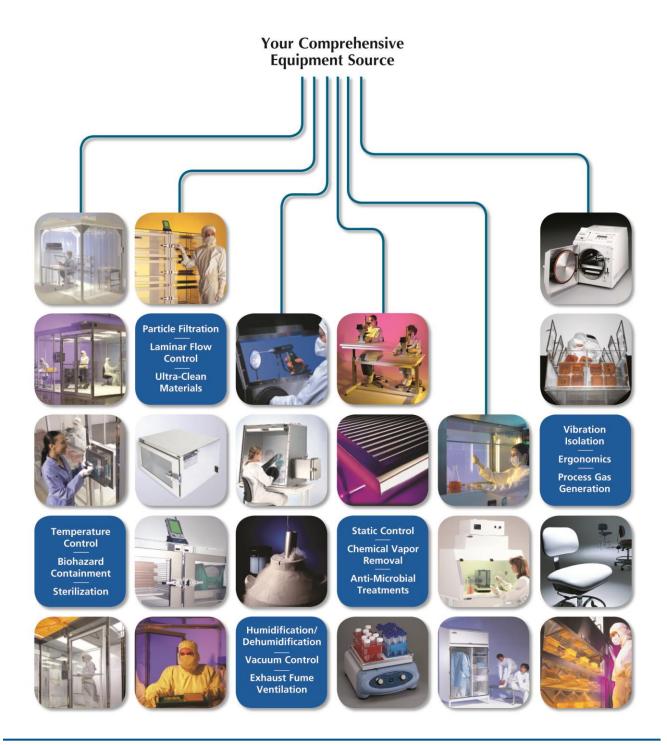


Installation Guide

Document N0. 1800-09

# **Cleanroom Mirrors**

© Copyright 2016 Terra Universal Inc. All rights reserved. • Revised November 2016





## **Cleanroom Mirrors**

© Copyright 2016 Terra Universal Inc. All rights reserved. • Revised November 2016 • Document No. 1800-09

#### Proprietary Notice

This manual pertains to proprietary devices manufactured by Terra Universal, Inc. Neither this document nor any portion of it may be reproduced in any way without prior written permission from Terra Universal.

Installation Guide

#### **Safety Notice**

A thorough familiarity with all operating guidelines is essential to safe operation of the product. Failure to observe safety precautions could result in poor performance, damage to the system or other property, or serious bodily injury or death.

The following symbols are intended to call your attention to two levels of hazard involved in operation:

The information presented here is subject to change without notice.

## **1.0 Description**

Terra Universal's Cleanroom Mirrors are offered in three configurations:

- Dual-sided free-standing
- Framed wall-mount
- Frameless wall-mount

The Dual-Sided Free-Standing mirror is attached to a stainless steel stand with sloped sides to reduce particle buildup. This design offers more options for positioning and division of space.

The Framed Wall-Mount mirror features a distortion-free glass mirror mounted to an ultra-smooth, mirror-finish 304 stainless steel frame with powder-coated steel backing for easy cleaning and cleanroom compatibility. The beveled top also minimizes particle accumulation.

The Frameless Cleanroom Mirror is Terra's cleanest design, eliminating all horizontal and sloped surfaces. Installation is fast and the edges can be sealed to the wall with cleanroom-appropriate caulking.

Because of the weight of the mirror, it should be mounted only according to the instructions below. Safe installation requires two people, a level, a drill and mounting fasteners appropriate to your wall construction.

Terra Universal makes no warranties applying to information contained in this manual or its suitability for any implied or inferred purpose. Terra Universal shall not be held liable for any errors this manual contains or for any damages that result from its use.



WARNING

Cautions are used when failure to observe instructions could result in significant damage to equipment.

Warnings are used when failure to observe instructions or precautions could result in injury or death.



Figure 1: Frameless wall-mount cleanroom mirror



## 2.0 Installation (Wall-Mounted Models)

#### Framed Wall-Mount Installation

The Framed Wall-Mount mirror is shipped fully assembled and includes a mounting plate to simplify installation. The mounting plate will have to be detached from the mirror to begin installation.

1. Two pegs hold the mounting plate in the mirror assembly. Remove the mounting plate by gently lifting outward from the bottom edge and then pulling down to release the pegs.

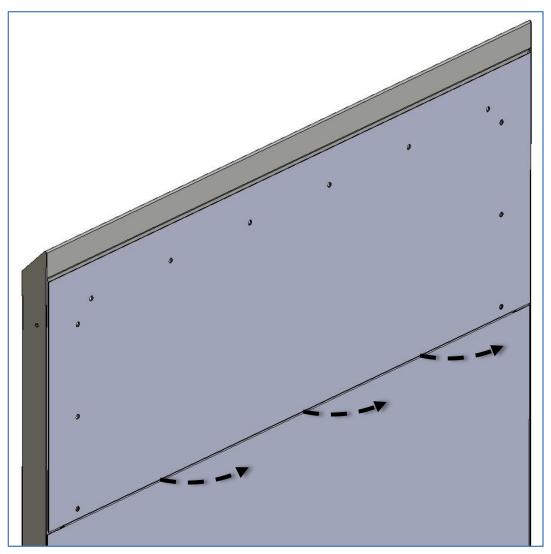
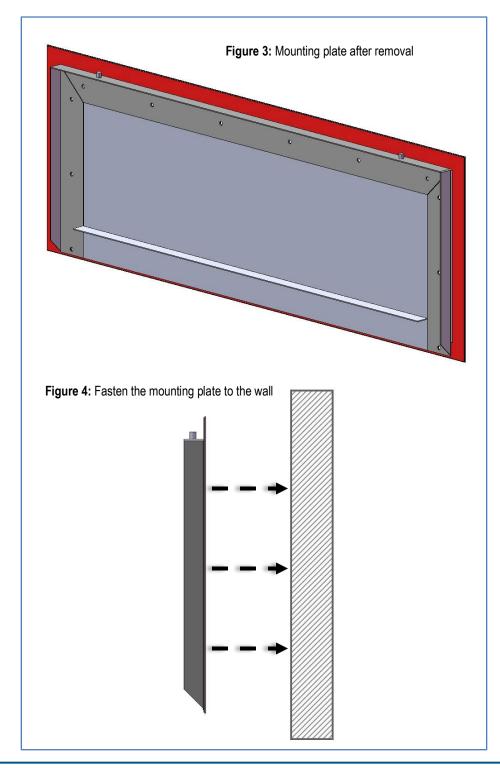


Figure 2: Pull outward and then downward from the bottom edge to release the mounting plate



 Mount the plate to the wall in the desired location. Make sure that the plate is mounted level and sufficiently high above the floor to accommodate the height of your mirror. Due to the weight of the mirror, the plate should be attached using all available mounting holes and positioned so that at least two pairs of fasteners attach to wall studs.





3. Carefully lift the mirror above the mounting plate and slowly lower it until the two pegs on the mounting plate engage the corresponding holes in the mirror support frame.

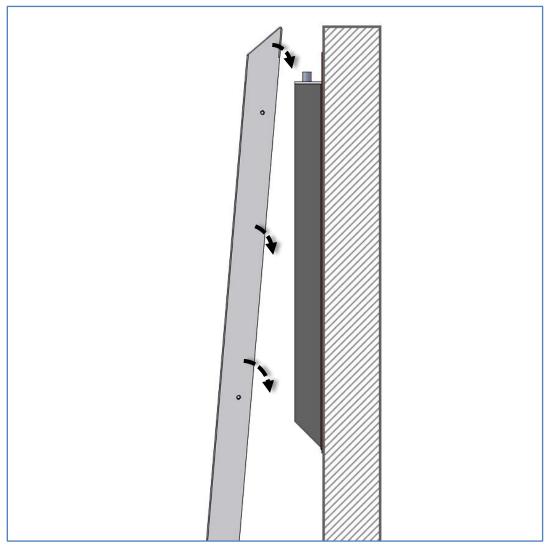


Figure 5: Hook the mirror assembly onto the mounting plate, making sure to engage the pegs in the holes



#### Frameless Wall-Mount Installation

The Frameless design is supplied with one large mounting bracket and one small mounting bracket. These mounting brackets will be fastened to the wall prior to hanging the mirror. The back of the mirror has two recessed slots that hook onto the mounting brackets.

1. Using the recommended distances in the chart below, measure and mark the mounting heights for the two brackets. Use a level to mark the horizontal alignment and then mark the center-line for the two brackets.

Recommended Distance Separating the Mounting Brackets	
5252-58B	65-1/4"
5252-59B	65-1/4"
5252-60B	17-3/8"
5252-61B	29-5/16"
5252-62B	29-5/16"
5252-63B	41-1/4"
5252-71	53-1/4"



The distances in the table above are measured from the bottom edge of the upper bracket to the bottom edge of the lower bracket (see Figure 6).

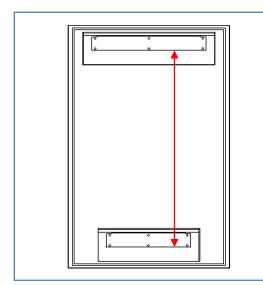


Figure 6: Measure out the mounting bracket locations from bottom edge to bottom edge



**Figure 7:** Mounting bracket installed on wall (fasten center holes if wall studs are unavailable)



2. Use the predrilled holes to fasten the mounting brackets to the wall studs at the marked heights. Align the center holes on the brackets with the center-line drawn in Step 1. Be sure to level the brackets before fully fastening.



The predrilled holes in the center of the bracket are to be used if wall studs are not used for support. Use wall anchors where appropriate.

- 3. With two people working together, lift the mirror assembly and position it up against the wall, guiding the mounting brackets into the cut-outs on the back of the mirror.
- 4. Once the back of the mirror is flush with the wall, slide the mirror downward until it catches on the mounting brackets. Carefully apply firm downward force to ensure that the mirror is completely hooked onto both mounting brackets.

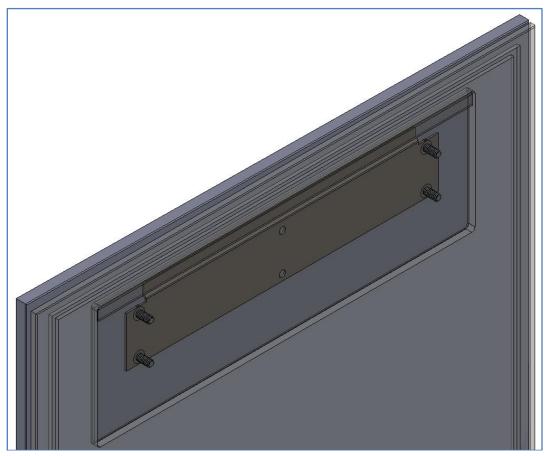


Figure 8: Hook the recessed slots (on the back of the mirror) to the mounting brackets, as shown above.

5. If desired, seal the edges of the installed mirror with an appropriate caulking.



## 3.0 Cleaning

Periodically, clean the mirror and mirror frame using a clean, non-linting cloth (polyester is recommended for cleanroom environments) and alcohol or a mild detergent. Avoid circular motion while cleaning. Instead, wipe along the mirror from one edge to the other, and fold the cloth after each pass to contain particles.

## 4.0 Specifications



Framed, Wall-Mount Cleanroom Mirror		
Construction		
Mirror	0.25"-thick distortion-free plate glass	
Support Frame	Welded CR steel square tubes and sheet metal backing with powder-coat finish	
Frame Finish	Mirror-finished 304 stainless steel	
Gasket	Santoprene (between glass and mirror-finish frame)	

Frameless, Wall-Mount Cleanroom Mirror	
Construction	
Mirror	0.25"-thick distortion-free plate glass
Backing	Acrylic



### 5.0 Warranty

**Products Manufactured by Terra:** Terra Universal, Inc., warrants products that it manufactures to be free from defects for a period of 12 months for parts and 90 days for labor, commencing from the date of shipment. Terra's sole responsibility is to repair or replace, at its option, any part of the product that proves defective or malfunctioning during this time limit. In some cases, components incorporated in Terra Universal products are covered by additional warranties from component manufacturers; obtain specific information from Terra sales representatives. This warranty is void if the equipment is abused or modified by the customer, is operated outside Terra's operating instructions or specifications, or is used in any application other than that for which it is specified. This warranty does not include routine maintenance or service procedures, breakage of quartz baths after 60 days, shipping damage, nor damage from misuse, intentional or unintentional abuse, neglect, natural disasters, or acts of God.

**Products Manufactured by Others:** Terra Universal, Inc., warrants that, to the best of its ability, Terra's representations of products that are manufactured by others reflect the manufacturer's representations, subject to change without notice. Sole warranty for these products is the original manufacturer's warranty that is passed forward to the purchaser and constitutes the customer's sole remedy for these products. Detailed warranties for distributed products are available through Terra sales representatives.

**Freight Shortage or Damage:** Upon receipt of any equipment from Terra Universal, Inc., customer shall immediately unpack and inspect for damage or shortage. The customer shall not accept a damaged package or a short shipment until the carrier makes a "damage or shortage" notation on both the carrier's and customer's copy of the freight bill or delivery receipt. Service title passes when the shipment is loaded, so customer is responsible for filing and collecting a freight claim. Any replacement products must be ordered and paid for separately. For Terra's "Policy and Procedures for Returning Goods," see Terra's Internet site: www.TerraUniversal.com.

Generally, customers can improve the chance of collecting on a freight claim by following these procedures: 1) formally requesting that the carrier inspect the shipment immediately upon suspecting damage or shortage to verify condition; 2) notifying the carrier upon discovery of concealed damage and requesting an inspection within 15 days of receipt, both in person or phone and following up via mail; 3) keeping the shipment as intact as possible, including retaining original packaging materials and keeping the product as close to the original receiving location as possible; 4) holding salvage for disposition by the carrier.

All Claims: Terra Universal expressly disclaims all other warranties, expressed or implied or implied by statute, including the warranties of merchantability or fitness for intended use. Terra Universal is not responsible for consequential or incidental damages arising out of the purchase or use of the products supplied by Terra Universal. Terra Universal is not liable for damage to facilities, other equipment, products, property or personnel of others, or of their agents, suppliers, or affiliated parties, which is caused or alleged to have been caused by products supplied by Terra Universal. In any event or series of events, Terra Universal's total liability for any and all damages whatsoever is limited to the lesser of the actual damages or the original invoice cost of the items alleged to have caused the damage. The customer's sole and exclusive remedy for any cause of action whatsoever is repair or replacement of the non-conforming products or refund of the actual purchase price, at the sole option of Terra Universal. All claims must be made in writing within 90 days of the date the product was shipped. Any claims not made within this time limit shall be deemed waived by the customer. Terra Universal is not responsible for any additional costs of repair caused by poor packaging or in-shipment damage during return.

**Warranty Returns:** All warranty returns must be authorized in advance by Terra Universal and approved under an RMA. Unless approved in advance for good reason, all returns must be in original condition, including all manuals, and must be packaged in original packaging materials. All returned goods are to be shipped to Terra Universal, freight prepaid at customer's expense. See Terra's "Policy and Procedure for Returned Goods."

Thank you for ordering from Terra Universal!