IMPORTANT SAFETY INSTRUCTIONS
READ AND SAVE THESE INSTRUCTIONS

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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.

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manual contains or for any damages
that result from its use.

The information presented here is subject to change without notice.

1.0 Introduction
This manual provides information on installing and operating Terra Universal’s Explosion-
Proof Fan/Filter Unit. By studying this document carefully, you can be assured of a long,
efficient service life from the unit.

The Fan/Filter unit provides a steady laminar flow stream of HEPA filtered air to
the area below the mounted unit.

2.0 Operation
The unit consists of a ¼ HP, explosion-proof motor driving a forward-curved centrifugal
blower. Air is drawn into the unit through a pleated pre-filter and in turn to an insulated
chamber where it is then directed to an exit HEPA filter with a built-in diffuser.

3.0 Installation
The Fan/Filter unit is designed to fit on top of a standard 2’x4’ clean room ceiling grid. It includes a threaded fixture at each corner to accommodate four eye-bolts (not provided) that can be used to assist in positioning the unit.

WARNING:
To reduce the risk of fire, electric shock, or injury to persons, do not use this fan with any solid-state speed control device, and observe the following:

A) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

B) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

C) When the removal/disconnection of either filter is required due to service or component replacement, they are to be remounted as previously installed.

D) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

E) When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.

4.0 Start up
WARNING:
Keep unit disconnected from power supply during inspection

Prior to providing power to the unit, check that no damage has occurred
during shipping. This can be accomplished via a visual check to make sure there are no
visible dents or penetrations. If the unit is intact, remove the pre-filter and manually rotate
the fan wheel to make sure it is not in contact with any stationary parts and that there are
no visible loose screws or bolts obstructing the wheel’s rotation. Once visual inspection is
completed, have a professional perform the installation who is familiar with Class I, Groups C & D and Class II, Groups F & G hazardous location requirements. After
installation, with power applied, the fan will rotate, and filtered air will exit the HEPA filter.

5.0 Cleaning and Maintenance
WARNING:
Disconnect from power supply before servicing unit. When servicing
or replacing either filter, the new filter is to be installed in the same
manner as the filter it replaces.

The scheduled maintenance of the unit depends on the installed location and consists of
cleaning or changing the pre-filter and the HEPA filter. It is recommended that the pre-
filter be inspected and cleaned every three months or sooner depending on the
cleanliness of the external environment. The HEPA filter cannot be cleaned and must be
replaced when the laminar flow rate falls below 70 feet/min.

Changing the HEPA filter requires removal of the unit to be removed from the ceiling grid.
Place the unit on a flat work surface and remove the 10 sheet metal screws that hold the
HEPA filter to the case. Replace the filter with a new one and secure it to the case with
the same screws before placing it back onto the ceiling grid.

6.0 Specifications

Dimensions: 23.625"x 47.625"x 20.2"H (600 mm x 1210 mm x 513 mm)
Housing: Stainless steel
HEPA Filter: 99.99% efficient on removal of particles 0.3 microns and larger
Pre-Filter: 20" x 20" x 1" - 30% efficient ASHRAE rated
Blower: Forward-curved centrifugal type factory balanced. Entire motor/blower
assembly is removable from top of housing for service
Motor: 1/4 HP Direct drive, Explosion-proof, 1 Phase
Electrical: Motor wiring should only be connected to an appropriate control unit. All
wiring should be housed by UL-listed rigid conduit
Power Cord: None supplied
Face Grill: Perforated anodized aluminum
Noise Level: 50 dBA (measured at 30” from filter face)
Weight: 76 lbs. (35.5 kg) shipping weight
Support: Threaded screw receptacles provided for insertion of optional eyebolts
Power Options: ½ HP motor with voltage of 115/160Hz, 208-230/160Hz

Power Specifications: for 2 ft. x 4 ft. HEPA, 115VAC (Model No. 6601-24HE)

Full Load Amps 6.8
Watts 190

7.0 Warranty
See next page.
Limited 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.

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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.

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Thank you for ordering from Terra Universal!