

### Description:

This Disposable Heel Grounder is ideal for flooring/footwear personnel grounding of visitors in ESD protected areas. The black conductive strip is bordered by bright yellow colour material providing excellent visibility, assisting in enforcing an ESD control programme. The conductive non-woven nylon strip is held to the heel of the shoe by pressure sensitive adhesive.

### To Attach:

1. Strip release paper from pressure sensitive adhesive.
2. Insert the non-adhesive end of the disposable heel grounder inside the shoe under the foot so that the black dot is in the center of the heel area, facing upwards.
3. Wrap the tape snugly around the outside of the shoe so that the adhesive area adheres to the underside of the heel of the shoe.
4. Step firmly onto pressure-sensitive adhesive and tear off excess material at serration.
5. Check for proper ground connection with the Vermason Dual Independent Footwear and Wrist Strap Tester or other tester.
6. One heel grounder should be used on each foot.

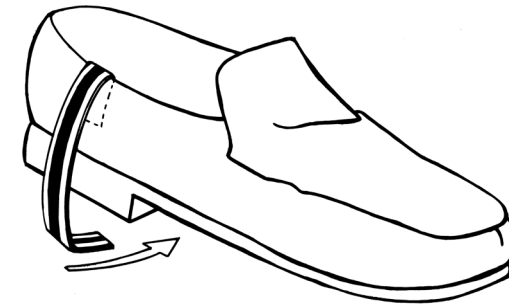
### Electrical Performance:

The tab to cup resistance is  $5 \times 10^4$  to  $8 \times 10^5$  ohms per IEC 61340-5-1 Clause A.2.

ITEM NO.	DESCRIPTION	LENGTH	UNIT
<a href="#">249200</a>	Disposable Heel Grounder	298mm	50
<a href="#">249205</a>	Disposable Heel Grounder	298mm	100

**Caution:** The heelgrounder is for ESD control. It will not reduce or increase your risk of receiving electric shock when using or working on electrical equipment.

<b>Material:</b>	Yellow non-woven fibrous material
<b>Conductor:</b>	Carbon black
<b>Width:</b>	14mm
<b>Electrical Resistance Rp (end-to-end):</b>	$5 \times 10^4$ to $8 \times 10^5$ ohms



### Note:

"Alternative grounding method is through the foot and footwear to ESD control flooring or mats. There are a wide variety of footwear grounding devices available." [CLC/TR 61340-5-2:2008 User guide clause 4.7.4 Footwear]

"Heel and toe grounders should be worn on each foot. If worn improperly, heel and toe grounders become ineffective. ... It is important that the conductive ribbon has good electrical contact with the person's skin or by connection through the person's socks." [CLC/TR 61340-5-2:2008 User guide Footwear clause 4.7.4.2.1 Heel and toe grounders]

Vermason recommends the use of [222611](#) foot ground tester. Download Technical Bulletin [TB-7533](#).

### Disposable Heel Grounder Dispenser

Designed to be mounted on a wall. Printed with instructions for use of Disposable Heel Grounder. Treated with antistatic coating.

Size: 315 x 200 x 55mm, tray is 105mm deep

[249220](#) - Tray, wall mounted



Specifications and procedures subject to change without notice.

# Vermason

## Disposable Heel Grounder

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Drawing Number  
**249200**

DATE:  
September  
2012

## Foot Grounders Grounding, Testing and Maintenance



### Description


Vermason's complete line of foot grounders has been created to provide a continuous ground path between the operator and a properly grounded ESD safe flooring. Foot grounders are designed for use in applications where user mobility is required, such as wave solder, kitting, and quality control. Foot grounders quickly and effectively drain the static charges which collect on personnel during normal, everyday activities.

### General Guidelines

1. It is recommended that foot grounders be worn on both feet, in order to assure that a continuous path to ground is maintained.

2. Contact strips should be tucked inside the shoe with as much contact area as possible to the bottom of the stocking foot. Foot grounders rely upon the perspiration layer inside of the shoe to make contact through the stocking.

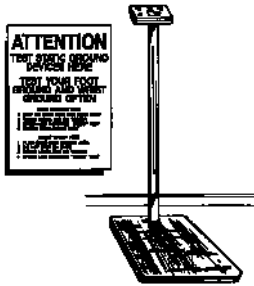
3. Foot grounders should be used in conjunction with floor surfaces which have a surface resistivity of less than  $10E10$  ohms.

4. A current limiting one megohm resistor in series with the contact strip is recommended but not required. Models with resistors are listed. 

### Testing Your Foot Grounders

Proper testing of your foot grounders involve testing the individual foot grounder, the contact strip and the interface between the contact strip and the wearer's perspiration layer.

Vermason has a tester designed to properly test foot grounders. For more detailed information on this tester, ask for technical bulletin TB-7533.



If you obtain a fail reading from the tester you should stop working and test the foot ground and contact strip individually to find out which item has failed. Replace the foot grounder or replace the bad component if possible. Retest the system before beginning work.

### Cleaning

Foot grounders are to ground static charges, while dirt generally provides an insulative layer adversely affecting reliability. For proper operation, the foot grounder and its conductive strip must be kept clean.

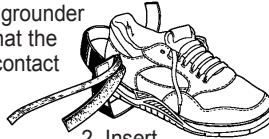
The rubber portion of the foot grounder should be cleaned using Vermason's Reztore™ Antistatic Surface & Mat Cleaner or "Static-Wipes" wipers. An alternative would be to clean using isopropyl alcohol. The Vermason cleaning products are specially formulated for cleaning ESD control components and are silicone free. This is critical as silicone is an insulator. Vermason ESD cleaners should not be used to clean the nylon polyester grounding tab.

Foot Grounders can be safely hand or machine washed on gentle cycle. Mild detergents, such as Woolite® or a liquid dish washing product and warm water are recommended. However, care must be taken to ensure that these detergents are silicone free.

### Installation

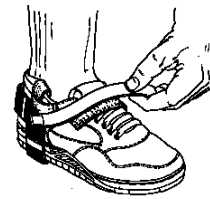
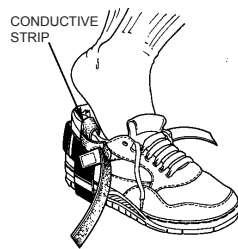
**HEEL GROUNDERS WITH VELCRO STRAPS**  
These heel grounders are designed for use on standard shoes and can be easily adjusted to fit the individual wearer.

1. Place the foot grounder on the shoe so that the lining is making contact with the shoe.



2. Insert the contact strip inside of the shoe and under the foot. Make sure that a solid contact is made between the sock and body. Cut contact strip to desired length.

3. Fasten hook and



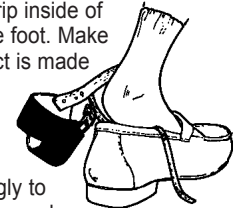
loop straps together, securing foot grounder firmly on shoe.

4. Test each foot grounder to confirm proper installation.

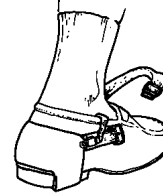
### HEEL GROUNDERS WITH ELASTIC STRAPS AND CLIP FASTENERS

These heel grounders are equipped with a clip fasteners, a quick release fastening system.

1. Insert the contact strip inside of the shoe and under the foot. Make sure that a solid contact is made between the sock and body. Cut contact strip to desired length.



2. Fit the heel cup snugly to shoe and connect the Snap-Loc fastener together. Adjust elastic strap for comfortable fit. Tuck excess elastic strap behind itself.

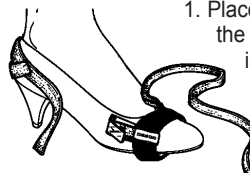


3. Test each heel grounder to confirm proper installation.

### TOE GROUNDERS WITH STRETCHABLE VELCRO

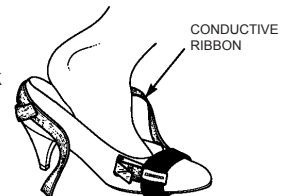
Toe grounders are designed for use on heeled shoes and can be easily adjusted to fit the individual wearer.

1. Place the toe grounder on the shoe so that the lining is making contact with the shoe.



2. Insert the contact strip inside of the

shoe and under the foot. Make sure that a solid contact is made between the sock and body. Cut contact strip to desired length.



3. Pull fabric strap through cam and lock in place. This will secure toe grounder firmly on shoe.

4. Test each toe ground to confirm proper installation.

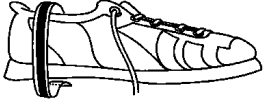
### DISPOSABLE FOOT GROUNDERS

The Vermason disposable foot grounders are

designed for applications where the use of permanent foot grounders is not economical or practical. They are constructed so that it may be used once and then discarded.

1. Remove shoe. Wipe any excess dirt from underside of heel. Remove release paper from heel grounder.

2. Apply the adhesive end to underside of heel of the shoe. Wrap the tape snugly around the outside of the shoe.



3. Insert the non-adhesive end of the heel grounder inside the shoe so that the black dot is well over the middle of the heel area facing upwards.



4. Put the shoe on.

5. Test each foot grounder to confirm proper installation.

**NOTE:** This product is not recommended for use on equipment with operating voltage

exceeding 250 VAC.

**CAUTION:** The ESD Series is for electrostatic control. It will not reduce or increase your risk of receiving electric shock when using or working on electrical equipment. Follow the same precautions you would use without wrist straps, including:

- Make certain that equipment having a grounding type plug is properly grounded.
- Make certain that you are not in contact with grounded objects other than through the ESD Series.

#### Limited Warranty

Vermason expressly warrants that for a period of one (1) year from the date of purchase, Vermason Foot Grounders will be free of defects in material (parts) and workmanship (labour). Within the warranty period, a unit will be tested, repaired or replaced at Vermason's option, free of charge. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and for proper shipping instructions and address. Any unit under warranty should be shipped prepaid to the Vermason factory. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, Vermason will quote repair charges necessary to bring your unit to factory standards. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and proper shipping instructions and address.

#### Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

#### Limit of liability

In no event will Vermason or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.