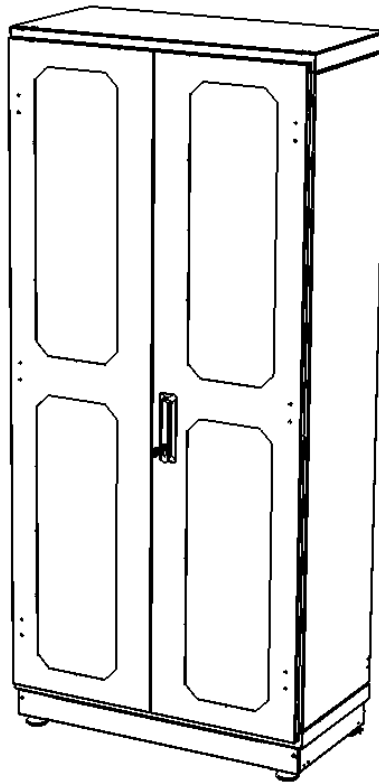


KENDALL HOWARD ®

ESD CABINET

Owner's Manual

Part Number ESDC-7836-1000 & ESDC-7836-2000



For Your Safety

Read and understand the entire manual before use

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Support

Support is available through the following methods:

By Phone from 8:00 AM to 5:00 PM CST. 651.213.1333

By Email customerservice@kendallhoward.com

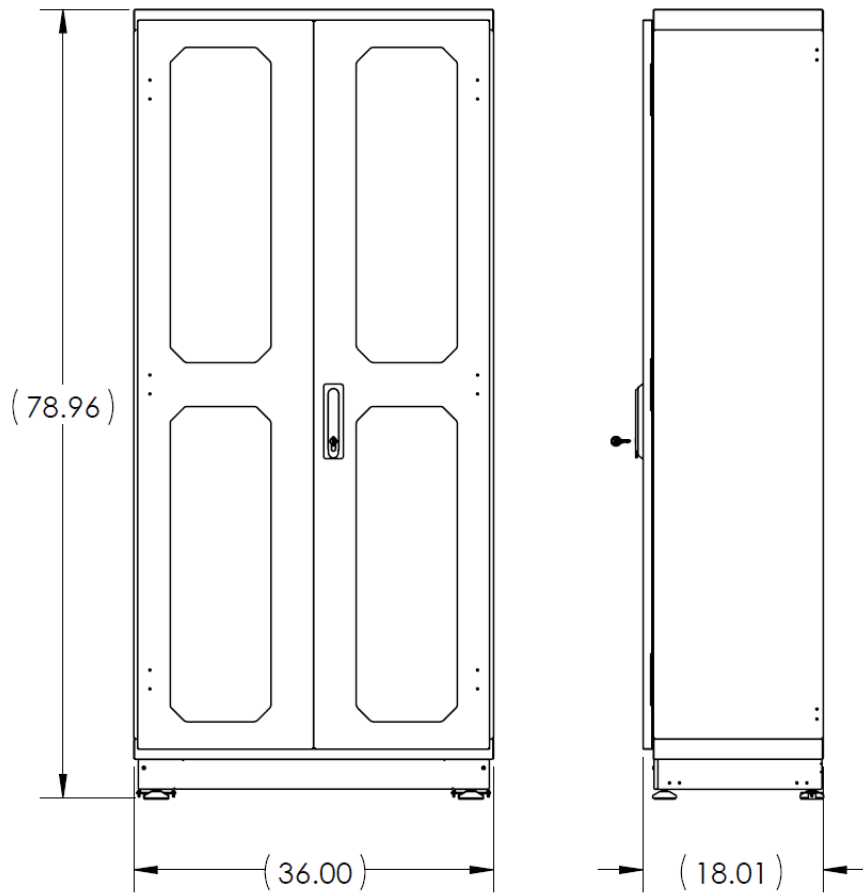
By Mail 10152 Liberty Lane, Chisago City, MN 55013

By Web www.kendallhoward.com

Disclaimer

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Dimensional Drawing



Specifications

Dimensions	Height 78" x Width 36" x Depth 18"
Weight (ESDC-7836-1000)	270 lbs (122 kg)
Weight (ESDC-7836-2000)	341 Lbs (155 kg)
Color	Gloss Black Powder Coat

Individual Replacement Components

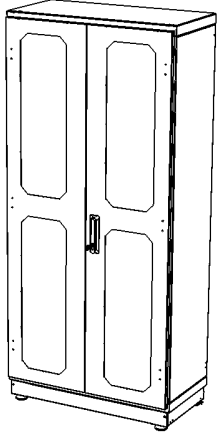
Description	Part Number
Cabinet Top ESD Mat	A-2523
Leg Leveler	CP-1549
Grounding Boot	A-2543
Right Locking Door	A-2533
Left Non-Locking Door	A-2531

Component Identification

What's included (ESDC-7836-1000)?

ESD Cabinet

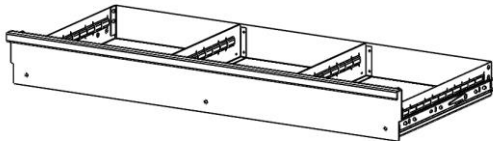
Part Number ESDC-7836-1000



What's included (ESDC-7836-2000)?

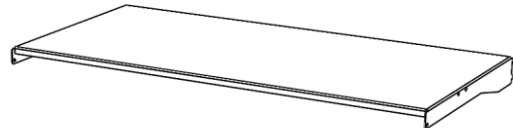
Drawer Assembly (2)

Part Number ESDC-7836-1200



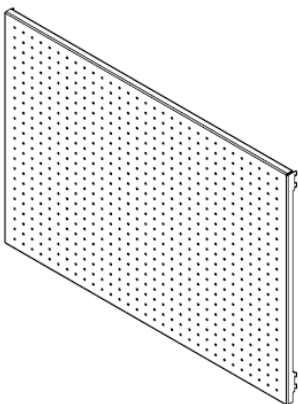
ESD Shelf (2)

Part Number ESDC-7836-1204



23" x 32" Pegboard (1)

Part Number ESDC-7836-1201



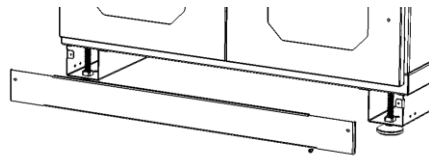
Installation and Setup

Step 1:

Cut and remove the two plastic banding and any shrink wrap material. Remove the cardboard packaging. Remove accessories boxes from cabinet. Lift the Cabinet out of the packaging.

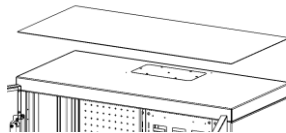
Step 2:

Place the Cabinet on the preinstalled leg levelers. Adjust the levelers so they are level to the mounting surface, both vertically and horizontally. Note that the leg levelers can be adjusted from inside the cabinet using a $\frac{1}{4}$ " hex wrench. Maximum leveler height is 1.15". If the leg levelers exceed 1.15", the floor anchor kit cannot be installed. Install the front kick plate with the two provided 8-32 pan head screws.



Step 3:

Locate the top ESD mat. Ensure the top is clean and clear of any debris. Remove adhesive backer and attach the ESD mat to the top of the cabinet. Apply slight pressure to ensure adhesion.

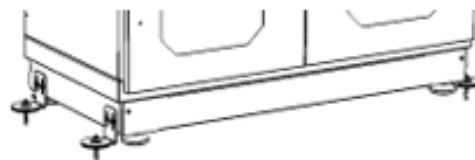
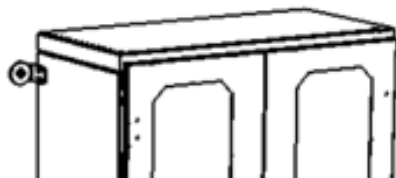


Step 4:

Determine a grounding method. The cabinet is designed to establish a ground through the rear leg levelers which are equipped with grounding boots. This grounding method assumes that the cabinet is installed on static-dissipative or ESD safe flooring. If this is not the case a secondary method can be used. This involves connecting the 10' equipment ground (supplied) cable and to one of the ESD boots mounted to the leg levelers. The other end will connect to a suitable grounding point.

Step 5:

Mount the Cabinet to the floor or the wall using the provided anchor kit. Level the cabinet to the floor. Note that the distance from the wall must be .50" to 1.75" in order to use the wall anchoring kit. Note that the distance from the base of the cabinet base must be .85" to 1.50" in order to use the floor anchoring kit.



Cabinet Use

ESD Control

The ESD 2-layer vinyl mats are required for proper ESD protection when using this ESD Cabinet. This unit provides a RTT value of $< 1 \times 10^9$ ohms for each shelf. This unit provides a RTG value of $1 \times 10^5 < 1 \times 10^9$ ohms from each drawer, pegboard, conductive bins, or Cabinet top to the grounding boots.

The Electrical circuit for ESD protection is as follows:

ESD Cabinet

The cabinet is insulated from any residual grounding. The rear leg levelers connect to an internal common ground point. This connection contains a 1MEG ohm resistor providing the ESD protection. The common ground is wired to each louvered panel or grounding backplane. This establishes the grounding to the accessories. A separate wire runs from the common ground to the cabinet top.

ESD Shelf

The ESD Shelf is connected to the Cabinet using the louvered panels and two support screws. The shelf is then grounded through the louvered panel and to the common ground point.

ESD Pegboard

The ESD Pegboard is locked into place using slots in the louvered panels. The Pegboard is then grounded through the louvered panel and to the common ground point.

ESD Drawer

The ESD Drawer is connected to the Cabinet using the louvered panels and six support screws. The Drawer is then grounded through the louvered panel and to the common ground point.

Care and Cleaning

Painted Surfaces

All painted surfaces can be cleaned with a non-abrasive, non-ammonia or non-bleached based cleaner. Do not use soap or detergents on exposed metal surfaces of the sliding drawer, fixed shelf, or pegboard. The soap may leave a residue that will insulate the mat from ESD grounding. Wipe down all cleaned surfaces with a lint free soft cloth.

ESD Mats

Clean only with approved cleaners. Wipe down all cleaned surfaces with a lint free soft cloth.

Leg Levelers

The front leg levelers are adjustable and non-conductive. The rear leg levelers are adjustable and have pre-installed ground boots. They can be cleaned with any non-ammonia or bleached based cleaner.

Approved cleaning solutions for ESD surfaces

- Desco 10446 Reztore Surface & Mat Cleaner
- 3M 8001 Antistatic Mat & Table Top Cleaner

NOTE: Do not use petroleum-based solvents or alcohol to clean any surfaces on this ESD Cabinet.

Troubleshooting

ESD non-compliant on Shelves, Drawers and Mats

- Verify that the flooring has a RTT value of $10^5 < 10^9$. If not use the provided equipment ground wire and connect from one of the grounding boots to define a ground.
- Verify that the ESD mat has a RTT value of $10^5 < 10^9$. If it does not, clean mat and repeat test. If it still does not pass then the mat will need to be replaced.
- Verify that that the resistance from the mat to each conductive leg leveler with grounding boot has a RTG value of $10^5 < 10^9$ ohms. If this RTG value fails proceed to the next step.
- Remove the ESD mat. Check the RTG value of $10^5 < 10^9$ from the metal surface to each conductive leg leveler ground boot. If this test passes, replace the ESD mat. If this RTG value fails proceed to the next step.

ESD non-compliant on Louvered panels

- Check ground wire connection from the common ground to the leg leveler grounding boot (this is visible on the internal bottom shelf). Replace if damaged. Retest the RTG value. Note that this wire will have a 1MEG ohm resistor installed, if not ESD protection will not be available.
- None of the accessories is reading an acceptable ground value. Check common ground wiring to each louvered panel (ground plane). Replace if damaged. Retest the RTG value.
- Top of Cabinet is not reading an acceptable ground value. Check common ground wire from common ground to Cabinet top. Replace if damaged. Retest the RTG value.

Glossary:

- RTT = Resistance point to point
- RTG = Resistance to ground

Warranty

GENERAL: Kendall Howard offers all users of our products the following Limited Warranty against defects in material and workmanship. Please read your Warranty carefully. This Warranty sets forth our responsibilities in the unlikely event of defect and tells you how to obtain resolution.

TERMS OF WARRANTY: Kendall Howard products are warranted to be free of defects in material and workmanship. If any part or portion of the Kendall Howard product fails to conform to the Warranty, Kendall Howard, at its option, will furnish new or factory remanufactured products for repair or replacement of that part.

WARRANTY EXTENDS TO FIRST PURCHASER FOR USE, NON-TRANSFERABLE: This Warranty is extended to the first person, firm, association, or corporation for whom the Kendall Howard product specified herein is originally sold for use in the United States (the "User"). This Warranty is not transferable or assignable without the prior written permission of Kendall Howard.

ASSIGNMENT OF WARRANTIES: Kendall Howard assigns to User any warranties which are made by manufacturers and suppliers of components of the Kendall Howard product and which are assignable, but Kendall Howard makes NO REPRESENTATIONS as to the effectiveness or extent of such warranties, assumes NO RESPONSIBILITY for any matters which may be warranted by such manufacturers or suppliers and extends no coverage under this Warranty to such components.

DRAWINGS, DESCRIPTIONS: Kendall Howard warrants for the period and on the terms of the Warranty set forth herein that the Kendall Howard product will conform to the descriptions contained in Kendall Howard final invoices, orders, proposals (as modified) and other Kendall Howard descriptive documents ("Descriptions"). Kendall Howard does not control the use of any Kendall Howard product. Accordingly, it is understood that the Descriptions are NOT WARRANTIES OF PERFORMANCE and NOT WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

WARRANTY CLAIMS PROCEDURE: Within a reasonable time, but in no case to exceed thirty (30) days, after User's discovery of a defect, User shall contact Kendall Howard. Subject to the limitations specified herein, a Kendall Howard customer service representative will repair or replace the non-conforming Kendall Howard product warranted hereunder, without charge for materials. User will not be charged for labor if performed within thirty (30) days of product purchase. In all other instances, User will be charged for labor performed at Kendall Howard's then current rates. Kendall Howard shall assume shipping costs for replacement products and return of the defective product to Kendall Howard. Warranty coverage will be extended only after Kendall Howard inspection determines there is a defect as claimed and shows no signs of treatment or use which would void the coverage of this Warranty.

WARRANTY PERFORMANCE OF COMPONENT MANUFACTURERS: It is Kendall Howard's practice, consistent with its desire to remedy Warranty defects in the most prompt and effective manner possible, to cooperate with and utilize the services of component manufacturers and their authorized representatives in the performance of work to correct defects in Kendall Howard components. Accordingly, Kendall Howard may utilize third parties in the performance of Warranty work, including repair or replacement hereunder, where, in Kendall Howard's opinion, such work can be performed in less time, and with less expense.

ITEMS NOT COVERED BY WARRANTY: THIS WARRANTY DOES NOT COVER DAMAGE OR DEFECT CAUSED BY misuse, improper application, wrong or inadequate electrical current or connection, negligence, inappropriate on site operating conditions, repair by non-Kendall Howard designated personnel, accident in transit, tampering, alterations, a change in location or operating use, exposure to the elements, Acts of God, theft or installation contrary to Kendall Howard's recommendations or specifications, or in any event if the Kendall Howard serial number has been altered, defaced, or removed. THIS WARRANTY DOES NOT COVER installation costs, external circuit breaker resetting or maintenance or service items and further, except as may be specifically provided for herein, does NOT include labor or shipping costs arising from the repair or replacement of the Kendall Howard product, or any part thereof, or charges to remove same from any premises of User. THIS WARRANTY IS VOID if User alters the product in any way.

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MISCELLANEOUS: NO SALESPERSON, EMPLOYEE OR AGENT OF KENDALL HOWARD IS AUTHORIZED TO ADD TO OR VARY THE TERMS OF THIS WARRANTY. Warranty terms may be modified, if at all, only in writing signed by a Kendall Howard officer. This Warranty is effective as of the date of Kendall Howard receipt of full payment and supersedes all previous warranties Kendall Howard reserves the right to supplement or change the terms of this Warranty in any subsequent warranty offering to User or others. If any provision of this Warranty should be or becomes invalid and/or unenforceable during the warranty period, the remaining terms and provisions shall continue in full force and effect. User must complete the attached User Information Card and forward it to Kendall Howard within thirty (30) days of receipt of the Kendall Howard product. This Warranty is given in and performance hereunder is to be construed under the laws of the State of Nebraska. This Warranty represents the entire agreement between Kendall Howard and User with respect to the subject matter herein and supersedes all prior or contemporaneous oral or written communications, representations, understandings, or agreements relating to this subject.