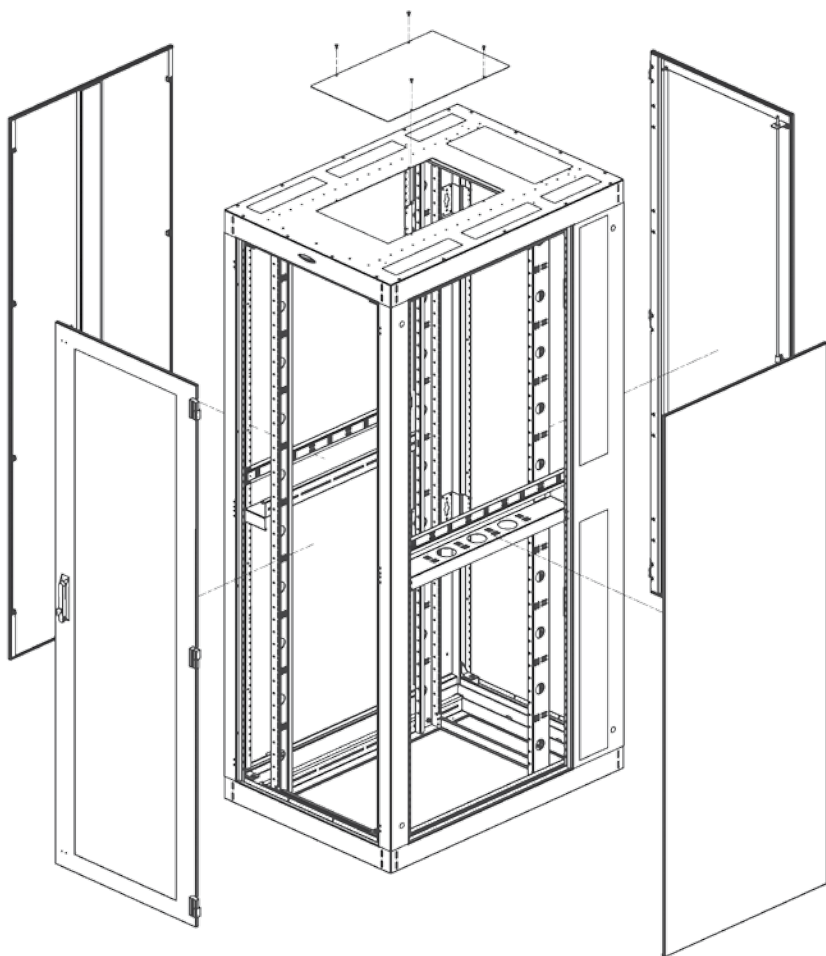




## **EZ Seismic Enclosure Installation Instructions**



GL840EZ-3042 (Custom sizes available)

[WeRackYourWorld.com](http://WeRackYourWorld.com)

**1-866-TRY-GLCC (879-4522)**

## **PREFACE**

This manual is provided to prevent service personnel from committing an act that results in the risk of fire, electric shock, or injury to persons. Only trained service personnel should receive, unpack, and assemble the EZ Enclosure. In addition, only trained service personnel should install equipment in enclosures.

### **SAFETY SYMBOLS USED IN THIS MANUAL**

This manual provides general safety guidelines to be observed during installation, operation, and maintenance of the EZ Enclosure.



**WARNING:** Failure to follow directions in the warning could result in injury to persons or loss of life.



**CAUTION:** Failure to follow directions in the caution could result in damage to equipment or storage data.

### **SAFETY CONSIDERATIONS**



**WARNING:** Improper handling and use of the EZ Enclosure could result in equipment damage, serious injury, or possible death.

Only trained service personnel should be used to remove the enclosure from the pallet. Also, be sure you have a sufficient number of service personnel. Do not attempt to move enclosures by yourself.

Only UL® Listed ITE (Information Technology Equipment) units should be installed inside the EZ Enclosure.

Be sure to read and follow all individual manufacturer equipment manuals for safety and installation instructions.

Proper spacing is required when installing electrical equipment to avoid electrical shock. Maintain minimum spacing between the accessories and components and the computer enclosure assembly for safe operation of the equipment when installed in accordance with the National Electric Code ANSI/NFPA 70-1999.

The ambient temperature operating range for the EZ Enclosure and accessories is +50 to +95° F (+10 to +35° C).

The non-operating temperature is -4 to +140° F (-20 to +60° C).

# SERVICE

The EZ Enclosure should be repaired by personnel trained by Great Lakes, or returned to Great Lakes for repair or replacement. Contact Great Lakes Technical Support at 814.734.7303 or at [werackyourworld.com](http://werackyourworld.com)

# WHAT'S INCLUDED

- EZ unit (assembled)
- Keys
- (50) M6 cage nuts (3/8" square)
- This user's manual
- Seismic Anchor Kit with Installation Instructions

**This user's manual applies to the following Great Lakes enclosure:**

Part No.	H	W	D	RMU
GL840EZ-3042	84	30	42	45*

EZ weight capacity: 1000 lbs.  
EZ Non-Seismic Weight capacity: 3000 lbs.  
\* Other sizes available upon request

# INSTALLATION

## Receiving, Unpacking, and Removing the EZ Enclosure from the Pallet

Inspect and report any damage before receiving. Unpack the enclosure by carefully removing the corrugated carton and corners. Avoid damaging the enclosure when removing packaging.



**WARNING:** Only trained service personnel should be used to remove the enclosure from the pallet. Also, be sure you have a sufficient number of service personnel. Do not attempt to move enclosures by yourself.



**WARNING:** Be careful when moving enclosures before installation. Sudden stops and starts, excessive force, obstructed routes, and uneven floor surfaces may cause the enclosure to topple over.

## Loading Equipment



**WARNING:** Only install equipment after the EZ Enclosure has been properly secured. Do not move the EZ Enclosure assembly while loaded.

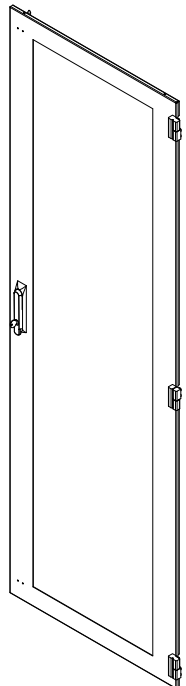
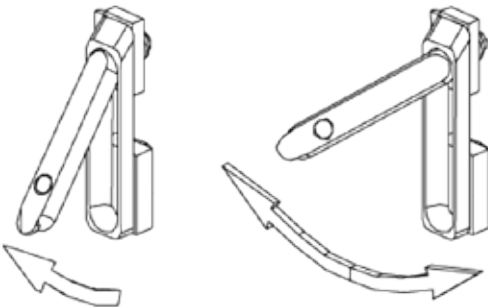
Rated or maximum load capacity for the EZ Enclosure is 1000 lbs. (3000 lb. non-seismic weight capacity). Enclosure must be secured to floor using the included AK101 Seismic Anchor Bolts.

To maintain a uniform distribution of the mechanical load in the EZ Enclosure, load the heaviest equipment first, at the bottom of the EZ Enclosure and load the lighter units at the top.

## OPERATING DOOR HANDLE

The door swing handles have been installed at the manufacturer. No additional assembly is required. The EZ doors have a three point latching system. To operate the swing handle, lift up at the bottom of the handle then swing the handle to the right to open. The handle must be kept in this position to close the door. Return the handle to the initial position and use the key provided to lock the handle.

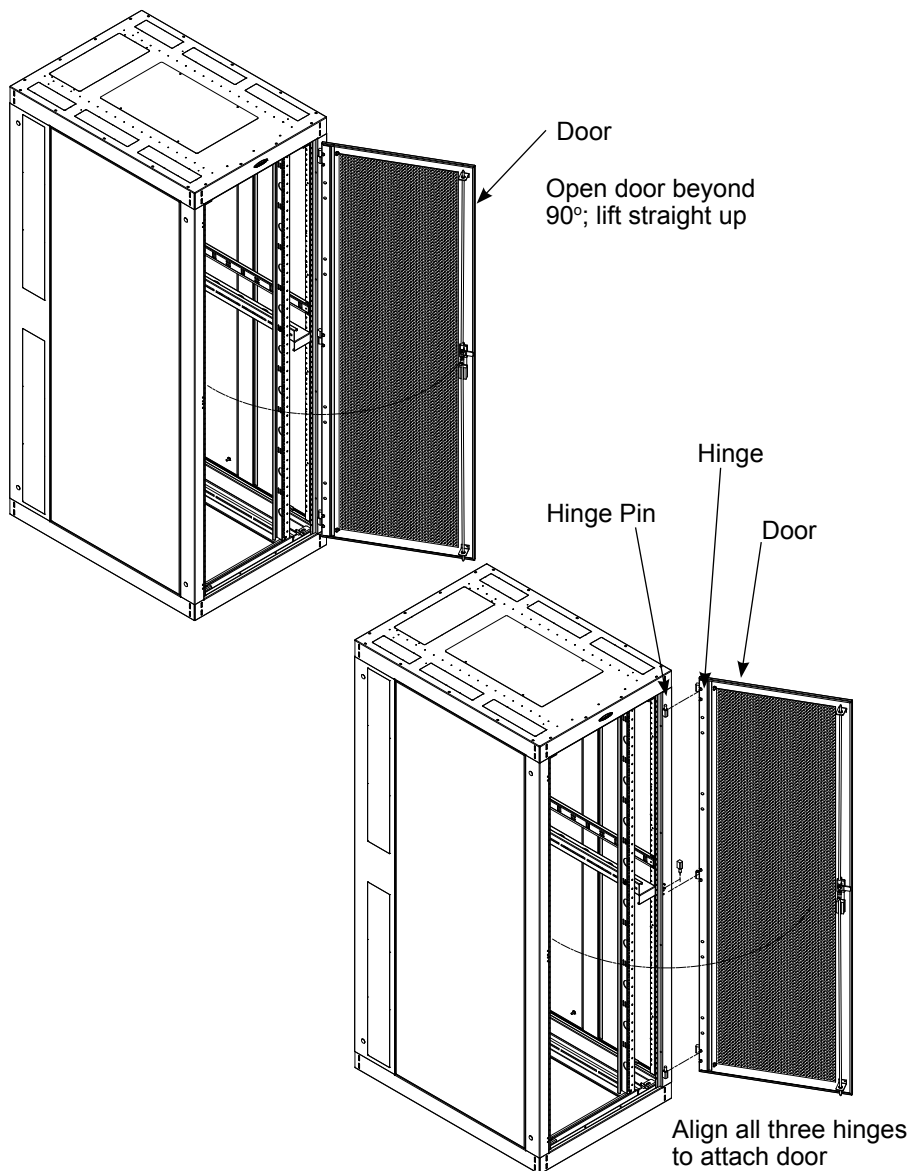
*Important note: Doors are reversible, but require an additional hinge kit. Please contact your distributor/Great Lakes representative for the EZ Hinge Kit.*



## DOOR REMOVAL AND ATTACHMENT

Open the door beyond 90 degrees. Use a Phillips head screw driver and remove the middle captive hinge from the door. (Make sure to keep the hinge and hardware for re-installation) The handle should be placed in the closed position and the door can be removed by lifting straight up. To re-install, reverse the above procedure.

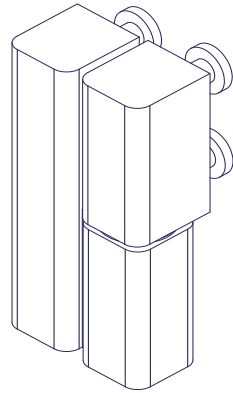
EZ enclosure front and rear doors come hinged on the right side. Because these doors are installed with a captive middle hinge, it will require the EZ Hinge Kit to reverse door to a left hand swing.



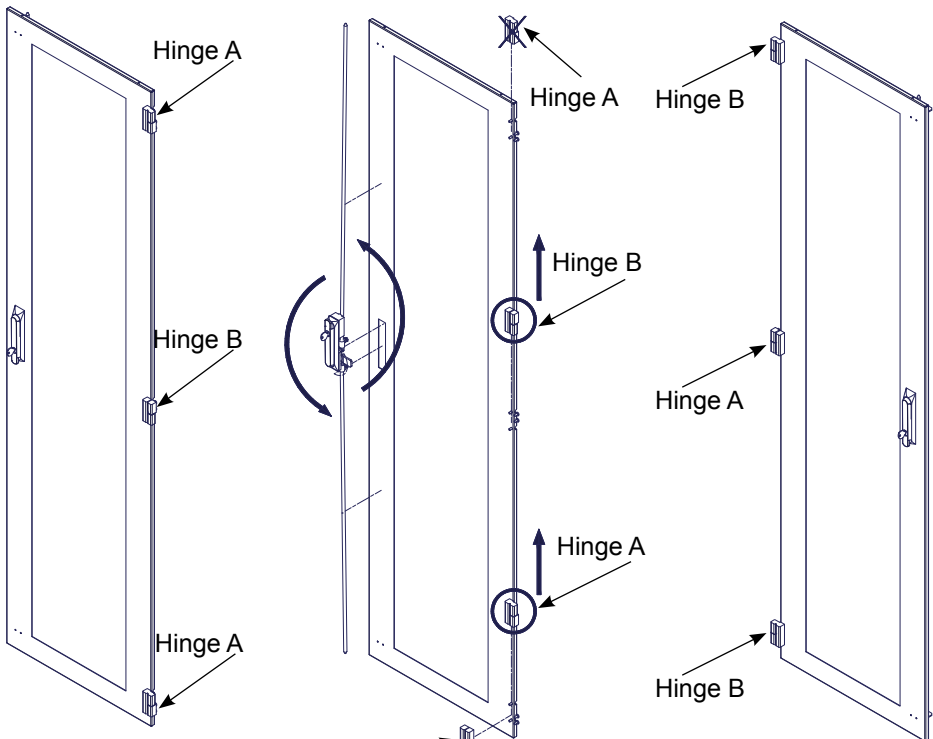
# EZ Hinge Kit (Optional)

To reverse a door to left hand swing, you will need to purchase an EZ Hinge Kit.

1. Uninstall top portion of center hinge and lift door assembly off enclosure.
2. With door laying face down, uninstall rods from handle; uninstall handle from the door and rotate entire assembly 180°. Reassemble completely.
3. Remove each hinge assembly from door and move (orientated in the same direction) up one set of holes; dispose of top hinge (A).
4. Install hinge from kit to bottom set of holes; this is the new hinge B.
5. Move top and bottom male portion of hinge (on enclosure) to opposite side. Drop door onto hinges in new orientation.
6. Install male portion in center hinge to make door captive.



EZ Hinge Kit



Original Assembly

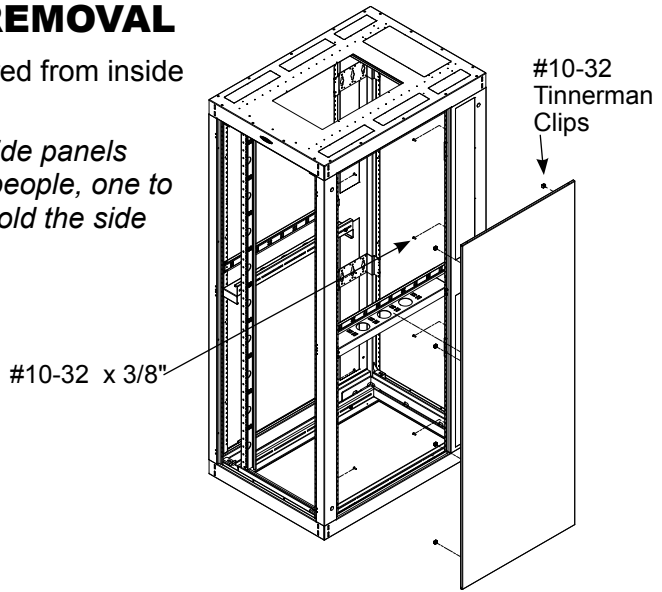
New Hinge from EZ Kit

New Reversed Assembly

## SIDE PANEL REMOVAL

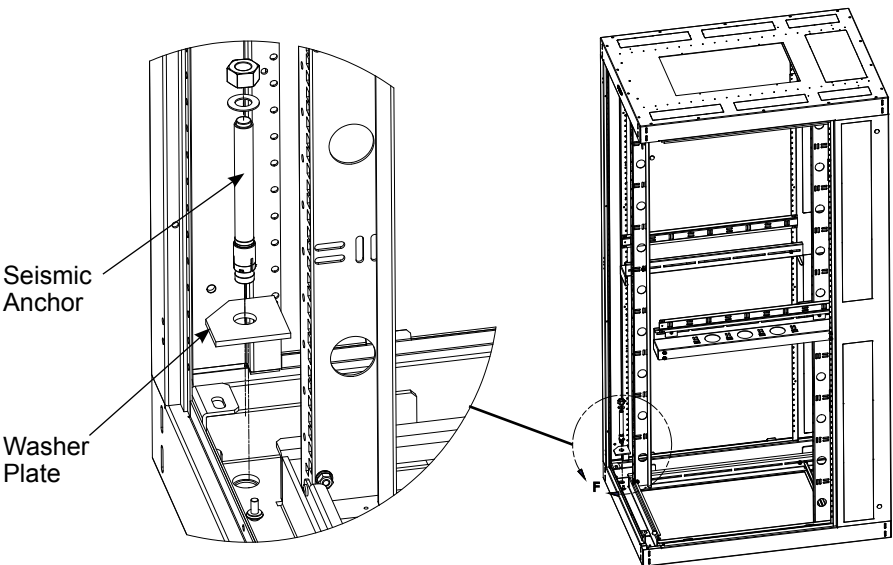
Side panels are secured from inside the enclosure.

*Caution: removal of side panels requires at least two people, one to unscrew and one to hold the side panel once loosened.*



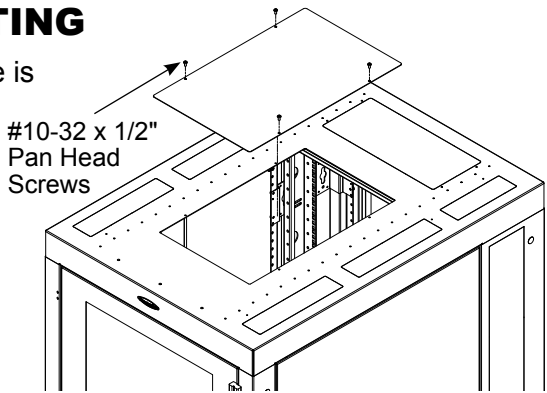
## SEISMIC ANCHOR KIT

The EZ seismic enclosure will need to be secured to the floor with the included AK101 seismic anchoring bolts. Please see the AK101 instructions (included in the orange bag) for additional details. Each enclosure comes with 4 seismic washer plates. These will have to be placed before securing the AK101 bolts.

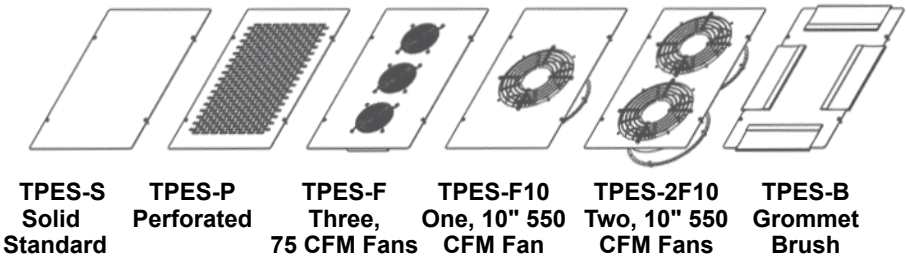


# TOP PANEL MOUNTING

The top panel of the enclosure is installed at the manufacturer. Removing the top panel can be done by removing the four #10-32 x 1/2" lg screws. Then simply lift the top panel out or off.

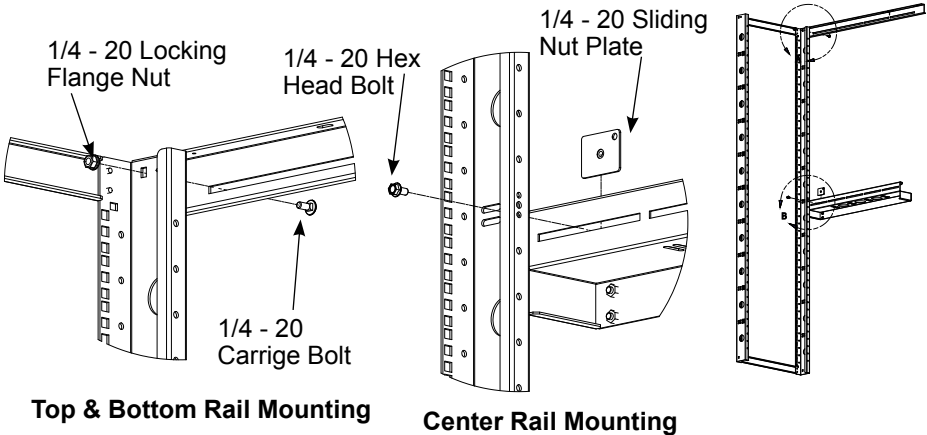


There are 6 top panel options (The TPES-S Solid Top Panel is standard) for the EZ Enclosure:



# RAIL ADJUSTMENT

The EZ enclosure comes standard with 19" 310-E compliant, 3/8" SQ hole mounting rails. These rails are fully adjustable front to back. To adjust rails, loosen the 1/4-20 hardware using a 3/8" socket and slide them to the desired position. (There are "tabs" in the horizontal mounting brackets – if adjustment is required past these tabs, loosen and remove the hardware then reinstall)

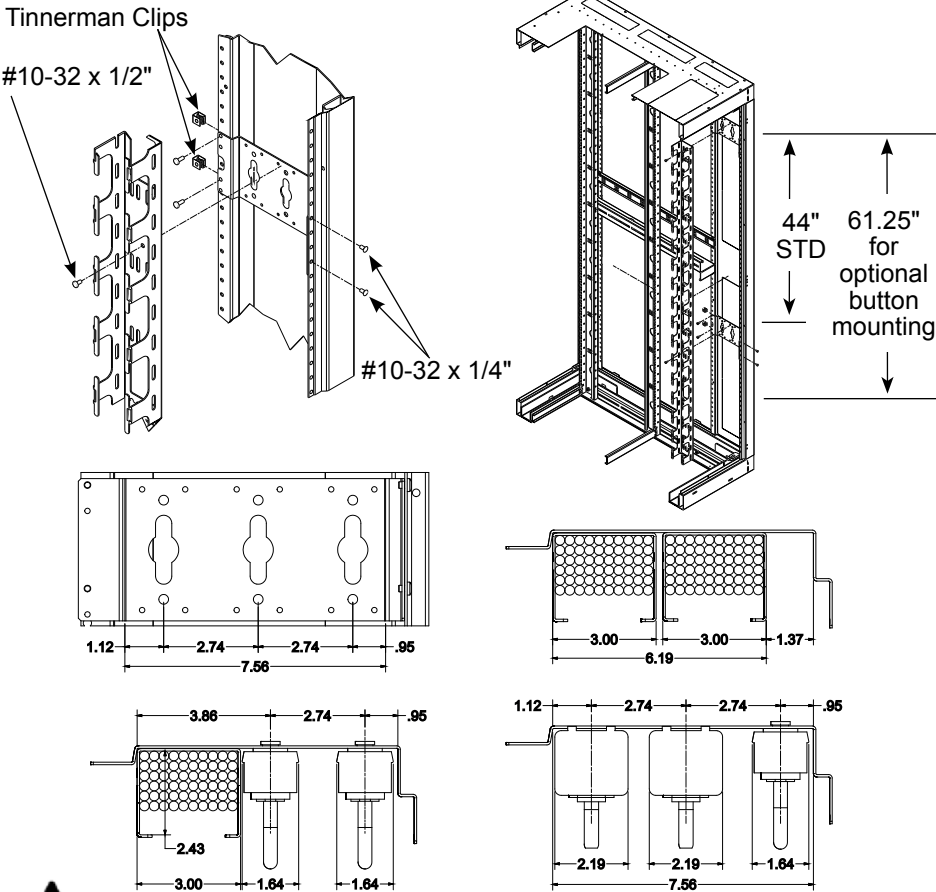




# OPTIONAL ACCESSORIES

## VERTICAL CABLE TROUGH & PDU MOUNTING

The EZ enclosure comes with a universal power strip bracket set in both rear corners. These bracket sets will accept a wide range of Power Distribution Units (PDUs) and will also accept Vertical Cable Troughs (VCT-84). Brackets are vertically adjustable to accomodate different size PDUs. Measure the required mounting distance top to bottom, install bracket, then install power strip. 44.00" standard distance for GLCC power strips; 61.250" industry standard power strips.



### POWER

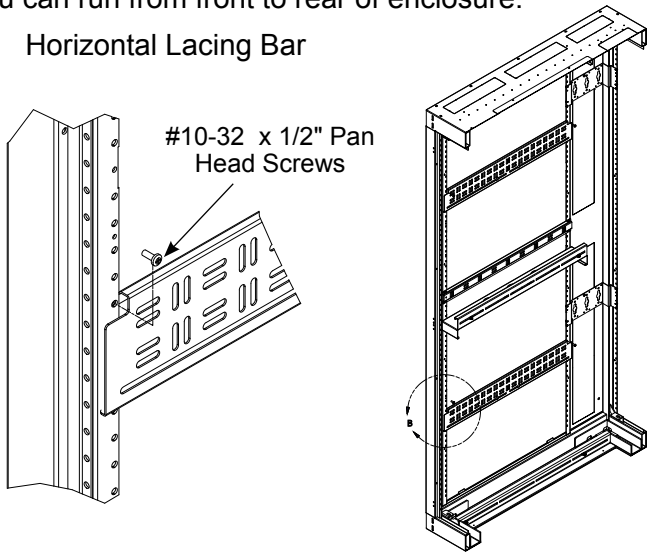
When using power distribution units (PDUs), each PDU should be connected to a committed branch circuit that is rated for the continuous load of all the equipment connected. When not using a PDU, each piece of equipment should be connected to a dedicated branch circuit.

# OPTIONAL ACCESSORIES

## HORIZONTAL LACING BARS

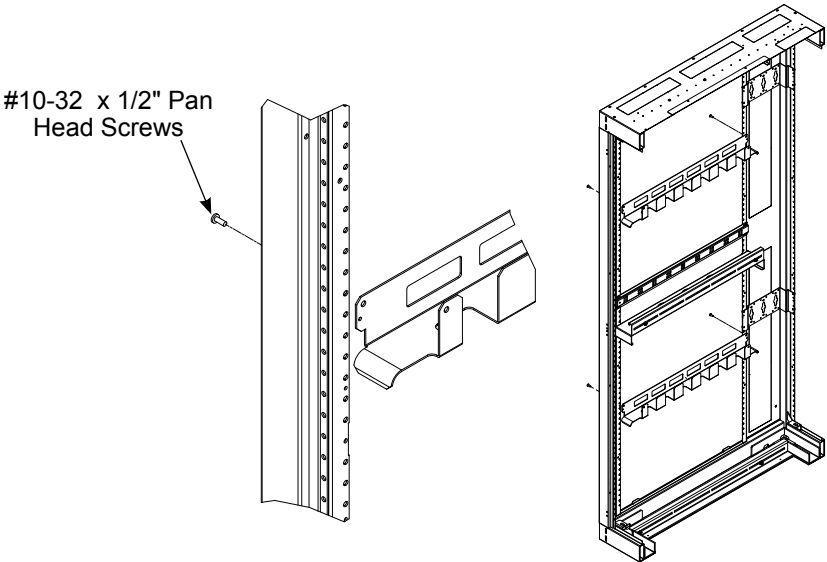
Lacing Bars feature double rows of vertical and horizontal slots that allow you to use velcro straps or cable ties to secure your cables, which you can run from front to rear of enclosure.

HLB-36     Horizontal Lacing Bar



## HORIZONTAL CABLE ORGANIZER

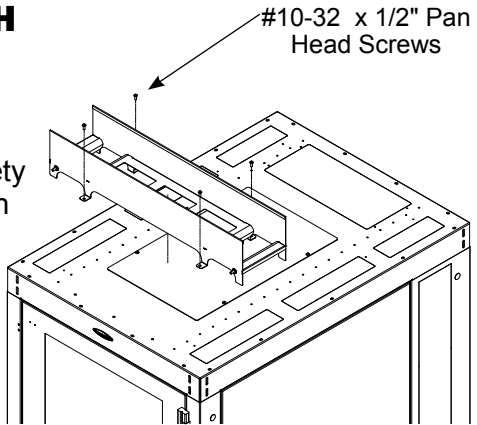
The Horizontal Cable Organizer (HCM-D36) can be mounted in the 30" wide EZ enclosure. If these parts are ordered with the enclosure, they will have been pre-installed. The side panel has to be removed for these to be installed. Make sure you have access to the side panel screws.



# OPTIONAL ACCESSORIES

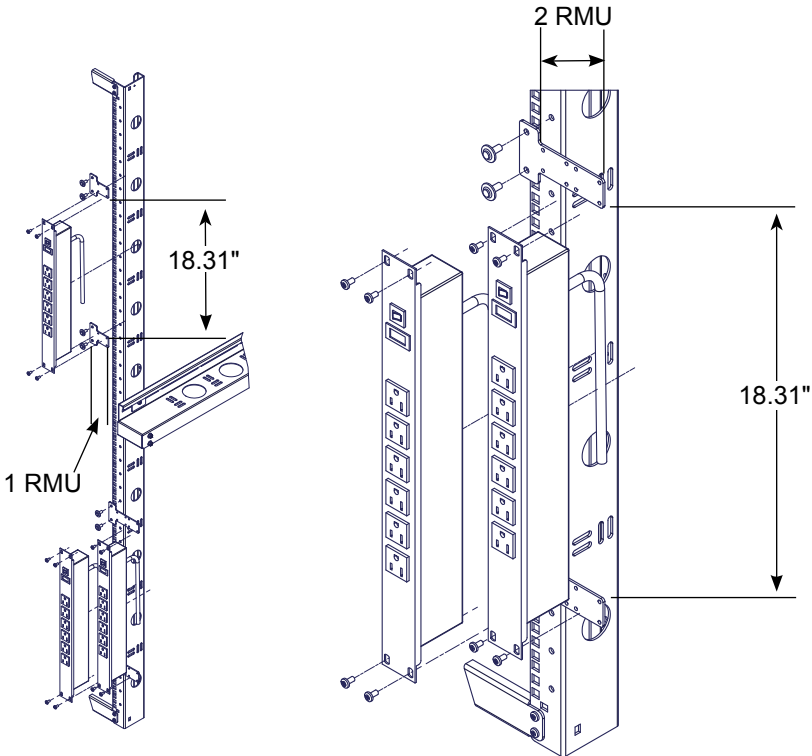
## OVERHEAD CABLE TROUGH

When ordered with the enclosure, the overhead cable trough ships assembled, but not installed. The top of the EZ enclosure has a variety of mounting holes. Place the trough where you require cable routing.



## ZERO RMU MOUNTING, ZR1 & ZR2

Both ZR bracket kits (ZR1 and ZR2) fit on the EZ enclosure. These allow for "0" RMU mounting of 19" rack mount power strip units or other 1 or 2 RMU equipment (such as patch panels). Install the bracket onto the rail or post toward the side panel. It is important to ensure you have 18.31" between the inner holes for 19" mounting.



# EXHAUST CHIMNEY & FAN TRAY - ES SERIES

## INSTALLATION OF ADJUSTABLE EXHAUST CHIMNEY

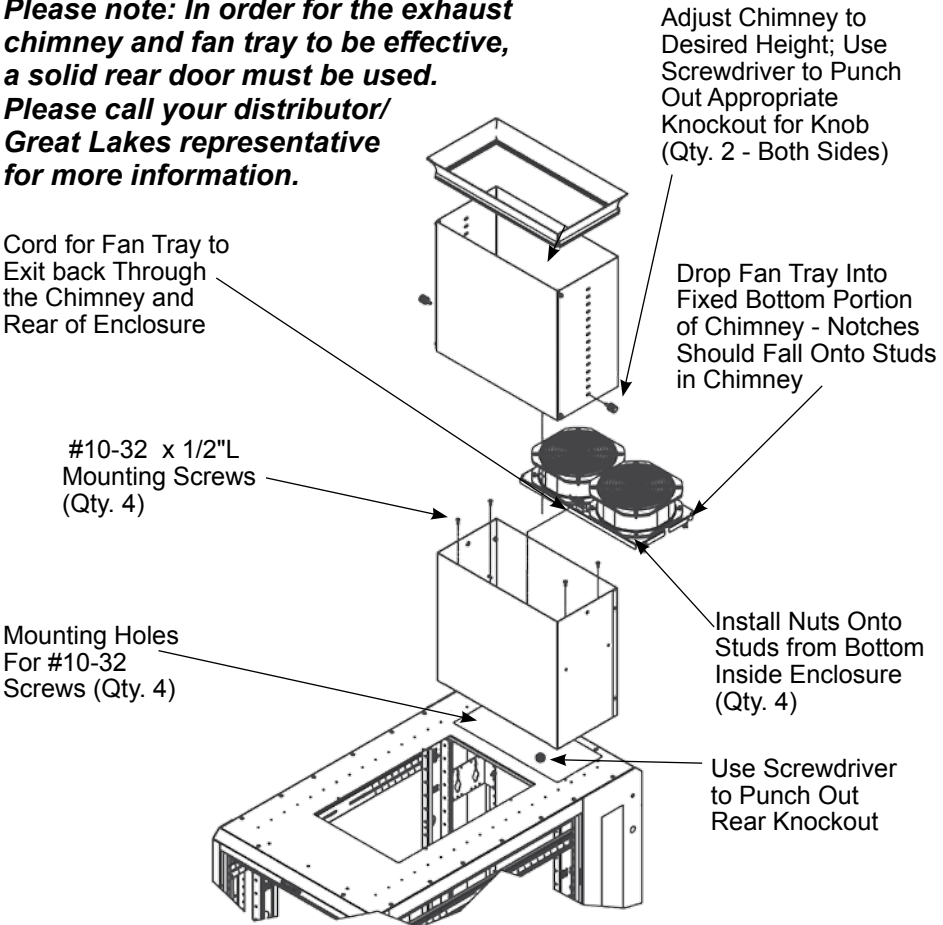
Before installation, remove the rear, top knockout from the enclosure. Place assembled chimney on top and attach from the inside using #10-32 screws. Raise the outer section so the seal touches the ceiling.

## INSTALLATION OF FAN TRAY

Place fan tray onto fixed portion of the chimney, ensuring cord is hanging through the chimney and into the enclosure. The fan will rest on four studs. Secure the fan with #10-32 nuts from the inside of the enclosure. Available Chimney and Fan Trays include:

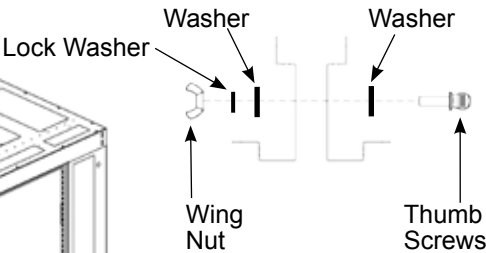
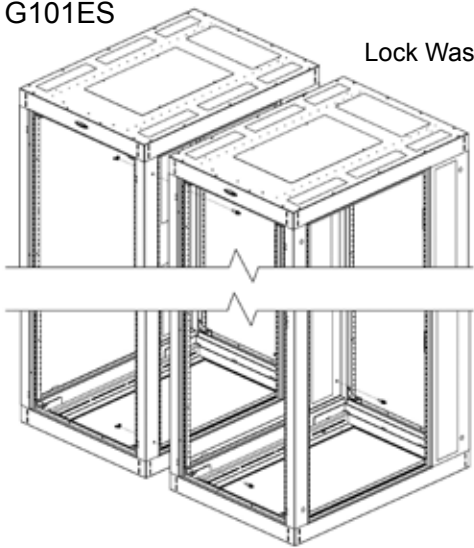
GL-EC-42-1832	Chimney for 42"D enclosure with an adjustable range of 18" to 32"
GL-EC-42-3246	Chimney for 42"D enclosure with an adjustable range of 32" to 46"
GL-ECFT42	Fan Tray for 42"D enclosure, 1200 CFM

***Please note: In order for the exhaust chimney and fan tray to be effective, a solid rear door must be used. Please call your distributor/ Great Lakes representative for more information.***



# NETWORKING/ GANGING

Enclosures can be networked using the G101ES



No Tools Required!

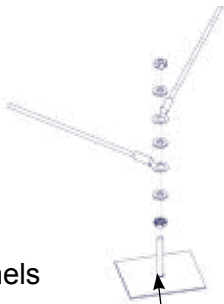


# GROUNDING

## GROUNDING KIT, GR101

Grounding studs in our EZ Enclosure provide a point to which the doors may be grounded to the enclosure and from which the enclosure may be connected to the facility's common ground.

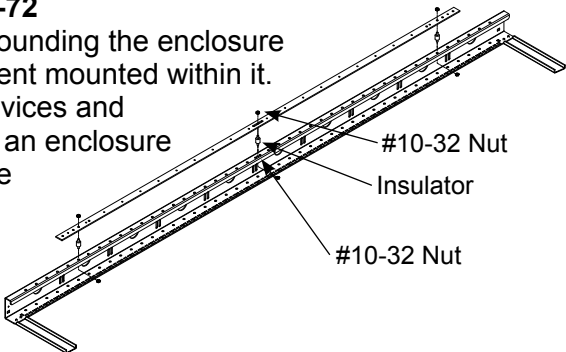
Using the grounding straps supplied, connect one end of the strap to copper ground stud on the side panels and/or doors and the other end to copper ground stud on the frame of the enclosure. Once all straps have been connected to a copper frame stud, have at least one frame stud connected to the common building ground.



Ground Stud:  
#10-32 x 1 7/8 LG  
or M6 x 50mm LG

## COPPER BUS BARS, CBB-72

It is important to note that grounding the enclosure does not ground the equipment mounted within it. In order for any individual devices and components mounted within an enclosure to be grounded, they must be connected to a copper bus bar.



## **PROTECTIVE GROUNDING**

Protective grounding studs are provided along with grounding jumper wires that electrically bond the enclosure doors to the enclosure frame.



**WARNING:** To avoid injury to persons or loss of life, ground each enclosure individually to the dedicated branch circuit ground.

### **CONNECTING MAIN PROTECTIVE GROUNDING STUD TO THE DEDICATED BRANCH CIRCUIT GROUND**

Connect the dedicated branch circuit ground connector to the main protective grounding stud located inside at the bottom rear of the enclosure frame using a listed ring or closed-loop terminal.

### **CONNECTING MAIN PROTECTIVE GROUNDING STUD TO THE PROTECTIVE BONDING CONDUCTORS**

Connect the rear doors to the main protective grounding studs located inside at the bottom and top rear of the enclosure chassis using a listed ring or closed-loop terminal. Connect the front door to the grounding stud located inside at the bottom front of the enclosure frame using a listed ring or closed-loop terminal.

### **PARTS NOT BONDED TO PROTECTIVE EARTHING TERMINAL**

The following parts are not effectively bonded to the protective earthing terminal: rails and front to back rail horizontals. If these parts need to be bonded to the protective earthing terminal, do so in accordance with Article 250 of the National Electric Code.

# ACCESSORIES

PART NO.	DESCRIPTION
----------	-------------

## CABLE MANAGEMENT

BGS-84-48	Brush Grommet for 84"H x 42"D enclosure; to cover rear vertical cable pass through
BGT	Brush Grommet to cover top cable pass through knockouts
CMP	Cable Management Post, 3"
ESC-K12	Cable Management Rail Kit for front or rear rails; includes 12 sections of "fingers" (each section 7 RMU); rails will need to be recessed 4.5"
HCM-D36	Horizontal Cable Organizer; to mount from the front to the rear of the enclosure includes hardware
TCT30	Top Cable Trough and hardware; 6.5"W x 4"D x 30"L
VCT-84	Vertical Cable Trough
VCT-84C	Cover for VCT-84

## STATIONARY SHELVES FOR 19" MOUNTING

7206-FR-ADHD	Front/Rear Mount adjustable, 17.50"W x 27.25"D, 150 lb. weight capacity
7206-FR-A32HD	Front/Rear Mount adjustable, 17.50"W x 32.00"D, 300 lb. weight capacity

## SLIDING & SPECIALTY SHELVES FOR 19" MOUNTING

7206-FRSL-ADHD	Front/Rear Mount adjustable, 17.50"W x 26.00"D, 100 lb. weight capacity
7206-FRSLA300	Front/Rear Mount adjustable, 14.33"W x 30.00"D, 300 lb. weight capacity
7206-MKM	Monitor/Keyboard/Mouse Shelf
7206-PKB-MT	Pivoting Keyboard Tray with Mouse Tray

## POWER STRIPS, COPPER BUS BAR, & COOLING EQUIPMENT

7215-20ARTLP	16 position, 20 amp Power Strip; 5-20R receptacle and L5-20P plug
7215-20AR	16 position, 20 amp Power Strip; 5-20R receptacle and 5-20P plug
7215-30A	24 position, 30 amp Power Strip; 5-20R receptacle and L5-30P plug
CBB-72	Copper Bus Bar 70" (isolated)
GL-EC-42-1832	Exhaust Chimney for 42"D enclosure with an adjustable range of 18" to 32"
GL-EC-42-3246	Exhaust Chimney for 42"D enclosure with an adjustable range of 32" to 46"
GL-ECFT42	Optional Fan Tray for chimney, 1200 CFM

## HARDWARE

HDW-105-50	Package of 50 M6 cage nuts with screws (12mm screw length)
G101ES	Networking/Ganging Kit

Visit our web site at [www.werackyourworld.com](http://www.werackyourworld.com) for a complete list of available accessories.  
NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS

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