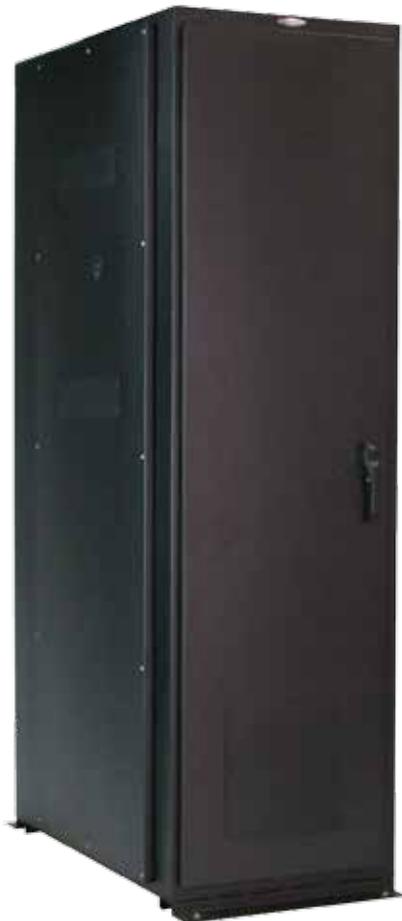


NEMA Enclosures Installation Instructions



WeRackYourWorld.com

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

Instructions for the following Great Lakes Enclosures:
GL840N12-2442-SA, GL840N12-2442-SB, GL840N12-2442-SS,
GL840N12-3042-SA, GL840N12-3042-SB, GL840N12-3042-SS

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 NEMA Enclosures. 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 NEMA Enclosure.



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

SAFETY CONSIDERATIONS



WARNING: Improper handling and use of the NEMA 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.

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 NEMA 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 NEMA Enclosures 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

WHAT'S INCLUDED

- NEMA unit (assembled)
- 3/8" SQ. hole mounting rails (includes M6 cage nuts and 12mm long screws)

NEMA weight capacity: 2000 lbs.

INSTALLATION

Receiving, Unpacking, and Removing the NEMA 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 NEMA Enclosure has been properly secured. Do not move the NEMA Enclosure assembly while loaded.

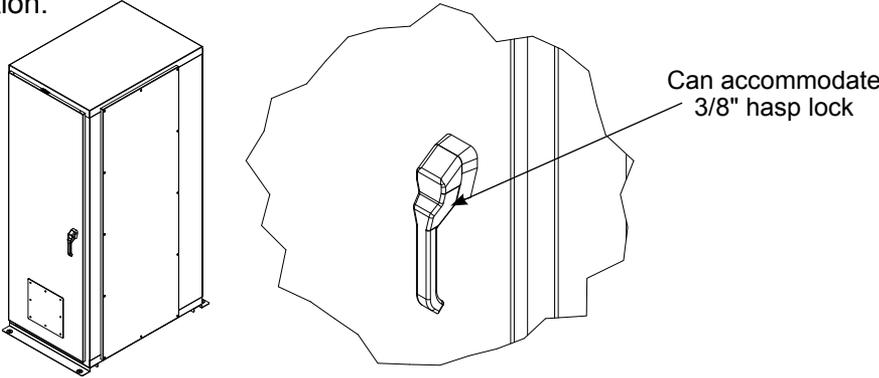
Once in place at the desired/intended location, deploy the leveling feet for maximum stability.

Rated or maximum load capacity for the NEMA Enclosure is 2000 pounds on the floor.

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

OPERATING DOOR HANDLE

As part of the NEMA 12 design the front and rear doors are set up with three point latching doors. The door handles have been installed at the manufacturer. No additional assembly is required. To operate the door handle turn it to the right to open. This will release the top, bottom and center door compression. To close the door have the handle in the open position put slight pressure on the door against the enclosure frame to make sure all three points will close and return the handle to the vertical position.

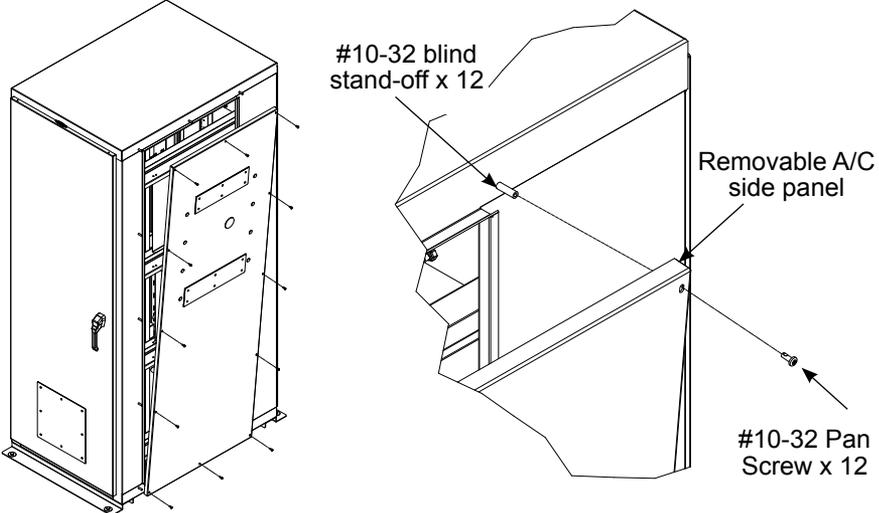


SIDE PANEL REMOVAL



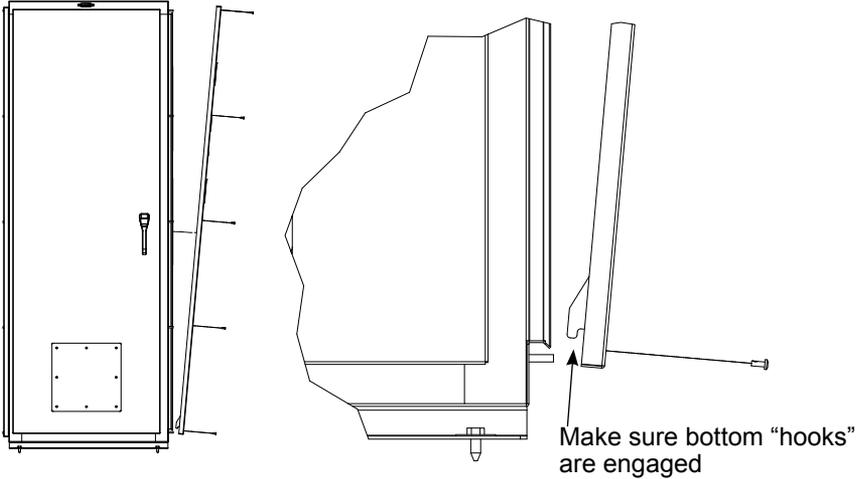
WARNING: Side panels should not be removed if an air conditioning (A/C) unit is attached. Remove A/C unit before removing side panel.

Side panels are secured to the frame using #10-32 screw into a blind #10-32 stand-off; there are screws in 12 locations.



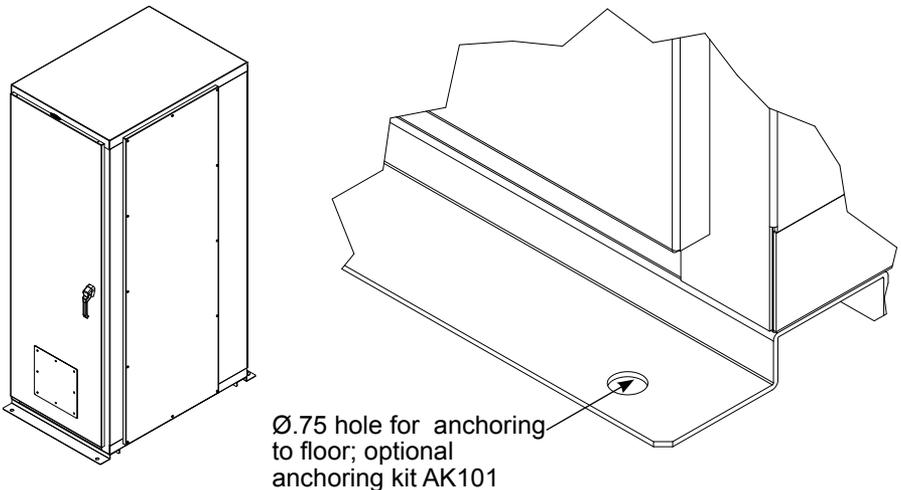
SIDE PANEL REMOVAL

To remove the side panel, have one person remove the screws while the other person holds the panel for removal. Once the screws have been removed tilt the top of the side slightly away from the enclosure and lift up and away. To reinstall make sure the bottom “hooks” are engaged before securing the 12 x #10-32 screws.



ANCHOR MOUNTING

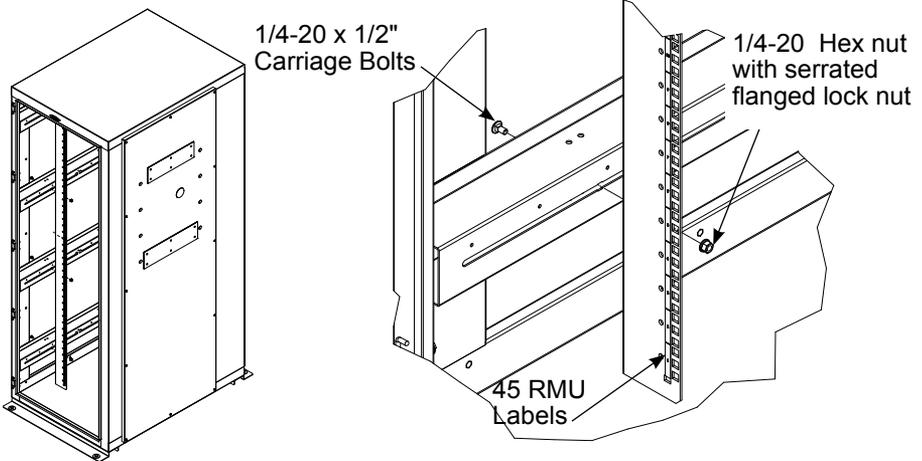
It is recommended that you secure the GL840N12 enclosure to the floor. The enclosure has four Ø.75" diameter anchoring holes for this purpose. Please use the appropriate hardware for your application. Note: Great Lakes offers the AK101 Seismic anchoring kit for cement floor. (Please see our web-site werackyourworld.com for more info)



MOUNTING RAILS & ADJUSTMENT

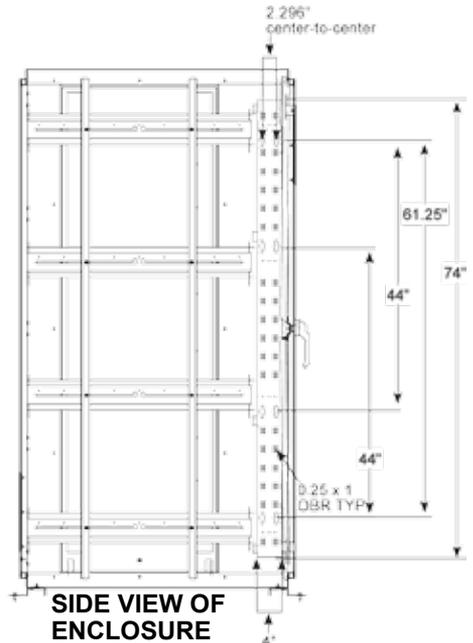
Each enclosure comes with two (2) pair of 19" EIA 310-E 3/8" SQ. hole mounting rails and a package of M6 cage nuts & 12 mm M6 screws. Rack Mount Units (RMU) are marked on the rails for easy equipment mounting.

The GL840N12 rails are attached using a 1/4-20 x 1/2" L carriage bolt and 1/4-20 Hex nut with serrated flanged lock nut. To adjust the rails, loosen the top and bottom bolts with a 3/8" socket set just enough to allow the rail to move. Adjust to desired position and re-tighten.



CABLE MANAGEMENT LACING BAR / POWER STRIP MOUNTING

Each GL840N12 comes with two rear cable management lacing bars (one in each corner). These bars can also be used for Power Distribution Unit (PDU) mounting. Each lacing bar comes with keyway holes allowing you to mount PDUs that have button mounting.



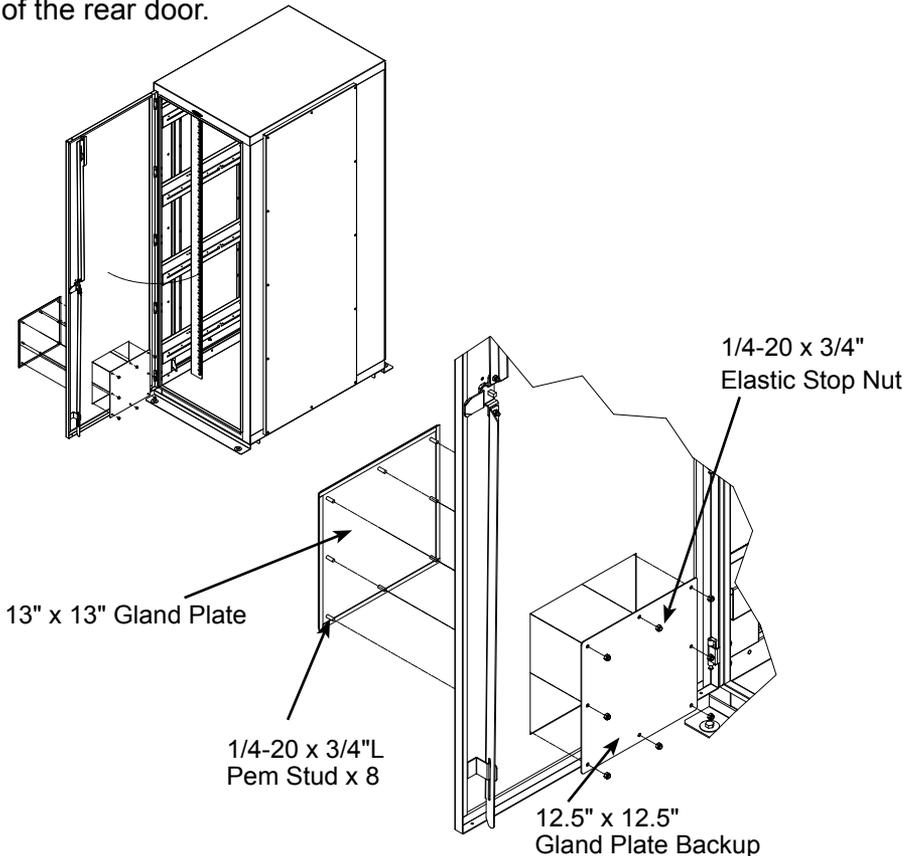
FAN ASSEMBLY FILTER KITS

There are three fan/filter options for the GL840N12 enclosures. Each gives you a different CFM rating.

- FFKN12-A1** Fan assembly (includes filter) & exhaust filter assembly, 230 CFM, 115V
- FFKN12-A2** Fan assembly (includes filter) & exhaust filter assembly, 295 CFM, 115V
- FFKN12-A3** Fan assembly (includes filter) & exhaust filter assembly, 368 CFM, 115V

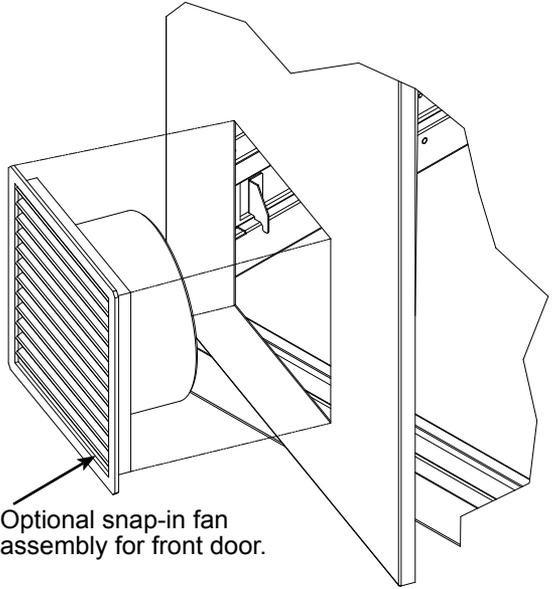
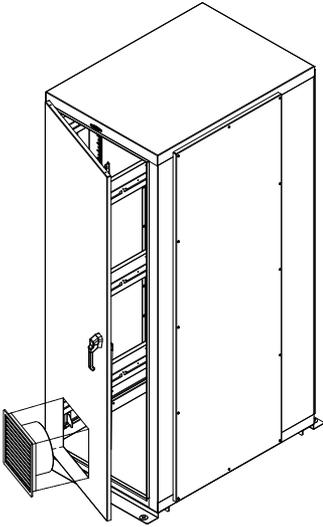
Fans/filter combinations ordered with the enclosure will be installed at the factory. Note: the fan will take up 5.75" of enclosure space behind the face of the door. Mounting rails will have to be moved back to allow for fan mounting and airflow. The fan will introduce air into the bottom of the enclosure and it will leave via the top rear filter assembly. Filters can be replaced by removing the front snap on cover of the fan and filter assemblies.

1. Remove the gland plate from the bottom of the front door and the top of the rear door.

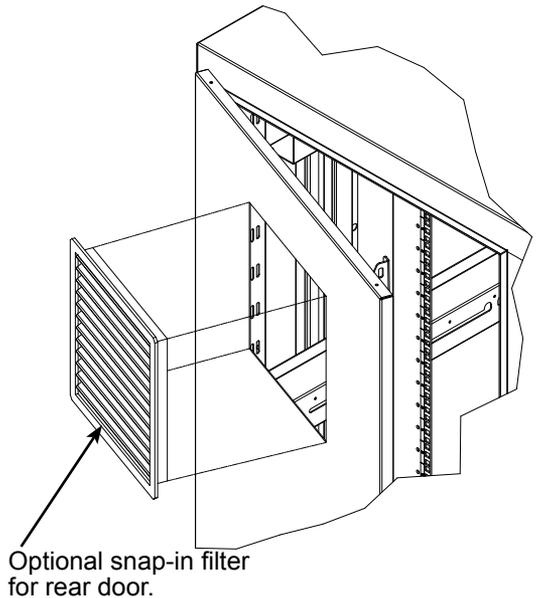
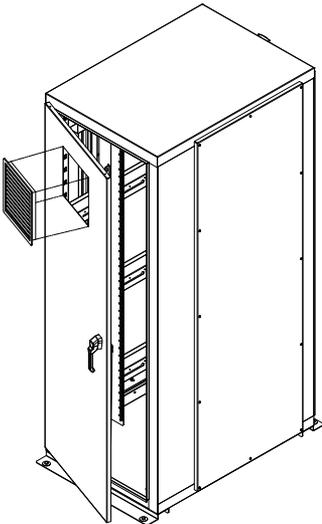


FAN ASSEMBLY FILTER KITS (continued)

2. Install the fan and feed the cord through the front door and snap in the fan assembly.



3. Install the filter assembly and snap it into the top rear door opening.



A/C MOUNTING with SIDE PANEL "A" & SIDE PANEL "B"

There are seven (7) air conditioners available for the GL840N12 enclosures.

The GL840N12 enclosures can come with one of two side panels that will accept the following A/C units.

Side Panel "A" will accept:

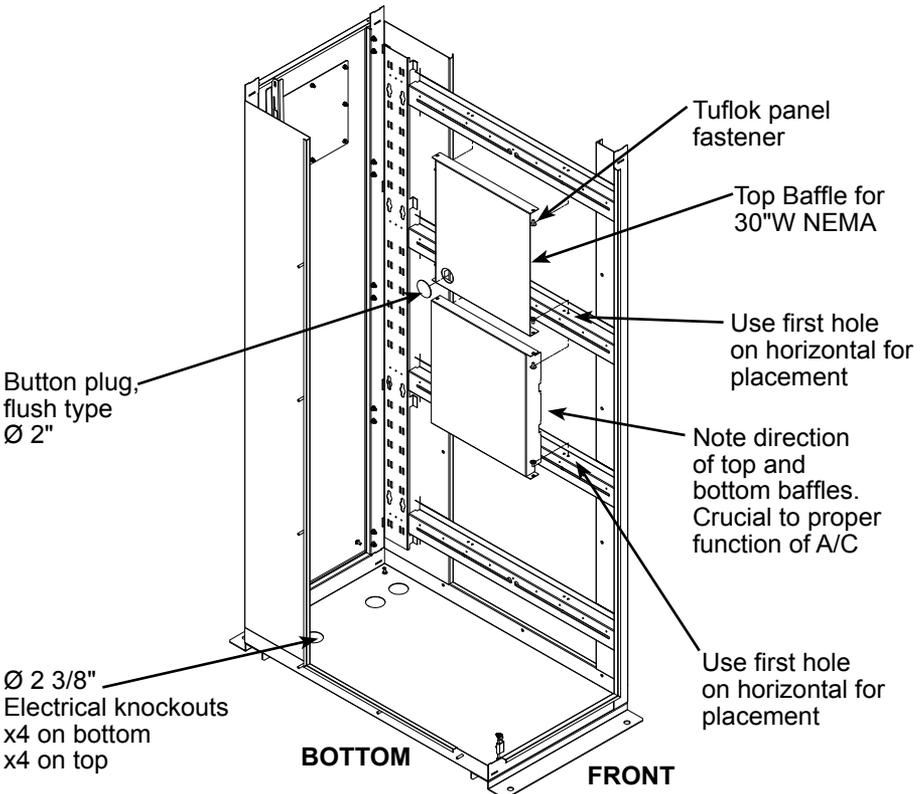
- GL2500V A/C Unit, 120V, 2500 BTU, 7.3 amps
- GL3500V A/C Unit, 120V, 3500 BTU, 8.2 amps
- GL4500V A/C Unit, 120V, 4500 BTU, 9.5 amps
- GL6000V A/C Unit, 120V, 6000 BTU, 10.9 amps

Side Panel "B" will accept:

- GL8000VHA A/C Unit, 120V, 8000 BTU, 14.7 amps
- GL10000V A/C Unit, 120V, 10,000 BTU, 15.1 amps
- GL1200V A/C Unit, 120V, 12,000 BTU, 19.6 amps

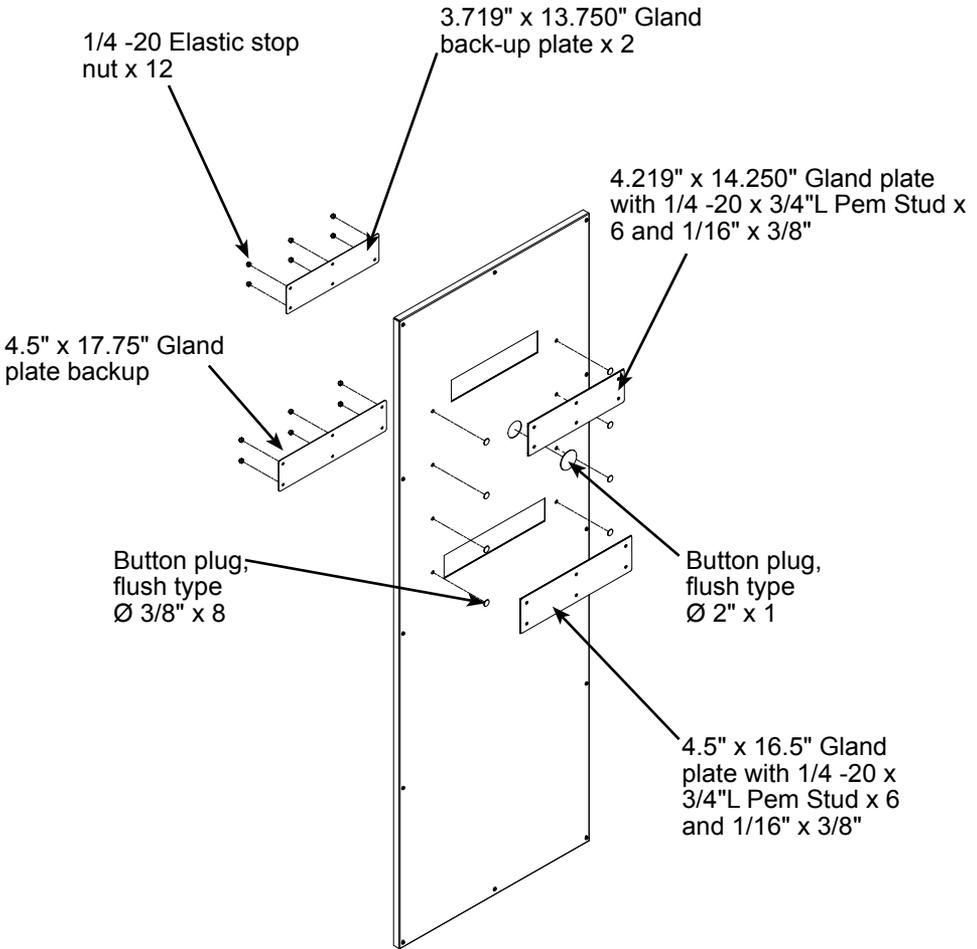
BAFFLE KIT

Each side panel comes with a baffle kit that will be pre-installed at the factory. There are two baffles. One will direct conditioned air to the front of the enclosure, the other will allow return air back to the A/C unit.

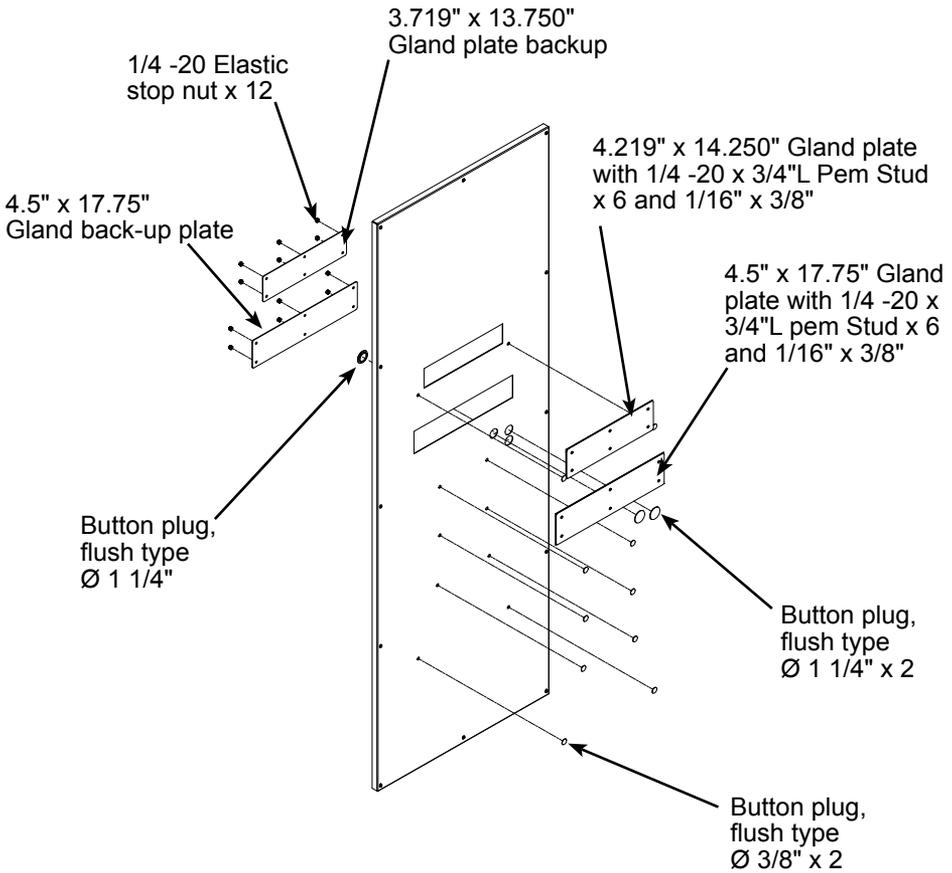


SIDE PANEL "A"

The A/C unit cannot be pre-installed at the factory, it must be installed on-site. The side panels have been designed so that no drilling or cutting is required. Remove the gland plates and button plugs and the side panel is ready to accept the A/C unit.



SIDE PANEL "B"



At this time, please find the specific air conditioner instructions and follow them carefully when mounting the A/C unit.

Important: To prevent excessive condensation, it is recommended that you turn off the A/C unit when working on equipment within the enclosure while door(s) are open.

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