



# GREAT LAKES

DATA RACKS & CABINETS

WMCM, WDX, WM, WD, 15WM, WE,  
WLP & NEMA 12K Series Wall Mounts

## Installation Instructions



WMCM



WDX

# 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 a Great Lakes wall mount. In addition, only trained service personnel should install equipment in wall mounts.

## SAFETY SYMBOLS USED IN THIS MANUAL

This manual provides general safety guidelines to be observed during installation, operation, and maintenance of the GL wall mount.



**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 Great Lakes wall mount could result in equipment damage, serious injury, or possible death.

Only trained service personnel should be used to remove the wall mount from its packaging. Also, be sure you have a sufficient number of service personnel. Do not attempt to move wall mount by yourself.

Only UL® Listed ITE (Information Technology Equipment) units should be installed inside the Great Lakes wall mount.

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; components and the wall mount for safe operation of the equipment when installed in accordance with the National Electrical Code ANSI/NFPA 70-1999.

The ambient temperature operating range for the Great Lakes wall mount and accessories is +50 to +95° F (+10 to +35° C).

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

# INSTALLATION

## Receiving and Unpacking

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



**WARNING:** Only trained service personnel should be used to unpack and move the wall mount. Also, be sure you have a sufficient number of service personnel. Do not attempt to move wall mount by yourself.

# MOUNTING INSTRUCTIONS

## Wood Studded Wall

Once the location on the wall has been determined, inspect the wall surface. The wall must be flat and square in the horizontal and vertical plane to ensure the Great Lakes wall mount closes correctly. If the wall is not flat and square, the use of shims may be required.

Wood studded wall mounting instructions apply to a 2" x 4" wood stud wall with 3/4" plywood.

## Recommended Mounting Hardware for Wood Studded Wall

For WM, WE, and 15WM Series:

Qty. (4) 3/8 x 2" long Lag Bolts and 1" O.D. Flat Washer

For WMCM, WDX, WLP and NEMA 12K Series:

Qty. (4) 3/8 x 2 1/2" long Lag Bolts and 1" O.D. Flat Washer

## Masonry Wall Surface

For masonry wall surface, the installer must provide all the appropriate hardware.

# PROTECTIVE GROUNDING

Protective grounding studs are provided along with grounding jumper wires that electrically bond the wall mount door to the wall mount frame.

## Loading Equipment



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

To maintain a uniform distribution of the mechanical load in the wall mount, load the heaviest equipment first, at the bottom of the wall mount and load the lighter units at the top. Rated or maximum load capacities for the wall mounts are as follows:

Part No.	Height (in.)	Width (in.)	Depth (in.)	RMU	Wt. Cap. (lbs.)
GL24WMCM	24.00	24.00	30.54	12	150
GL36WMCM	36.00	24.00	30.54	19	250
GL48WMCM	48.00	24.00	30.54	25	350
GL24WDX	24.00	24.00	32.07	12	250
GL36WDX	36.00	24.00	32.07	19	300
GL48WDX	48.00	24.00	32.07	25	350
GL2418WM	24.00	21.25	18.00	12	100
GL24WM	24.00	21.25	24.54	12	150
GL36WM	36.00	21.25	24.54	19	250
GL48WM	48.00	21.25	24.54	25	350
GL24WD	24.00	24.00	32.13	11	250
GL36WD	36.00	24.00	32.13	18	300
GL48WD	48.00	24.00	32.13	25	350
GL15WM	15.38	22.25	17.66	7	100
GL24WE	24.00	36.10	20.50	10	350
GL24WLP	24.00	27.00	10.00	4	105
GL36WLP	36.00	27.00	10.00	4	105
GL48WLP	48.00	27.00	10.00	4	105
GL240N12	24.00	24.00	24.00	12	150
GL360N12	36.00	24.00	24.00	19	250
GL480N12	48.00	24.00	24.00	26	300

# POWER AND GROUNDING



**WARNING:** To avoid injury to persons or loss of life, ground each cabinet 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 on the back of the rear section on the WMCM, WM, WDX, WE and inside on the side of the 15WM Series using a listed ring or closed-loop terminal.

## **Connecting Main Protective Grounding Stud to the Protective Bonding Conductors-**

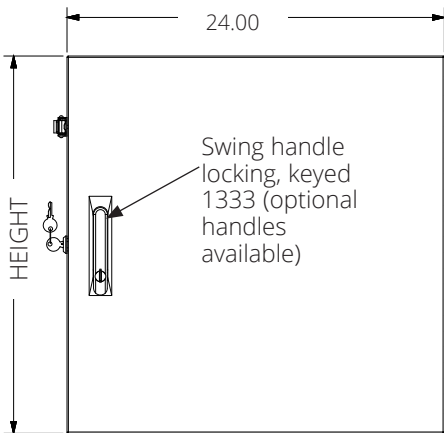
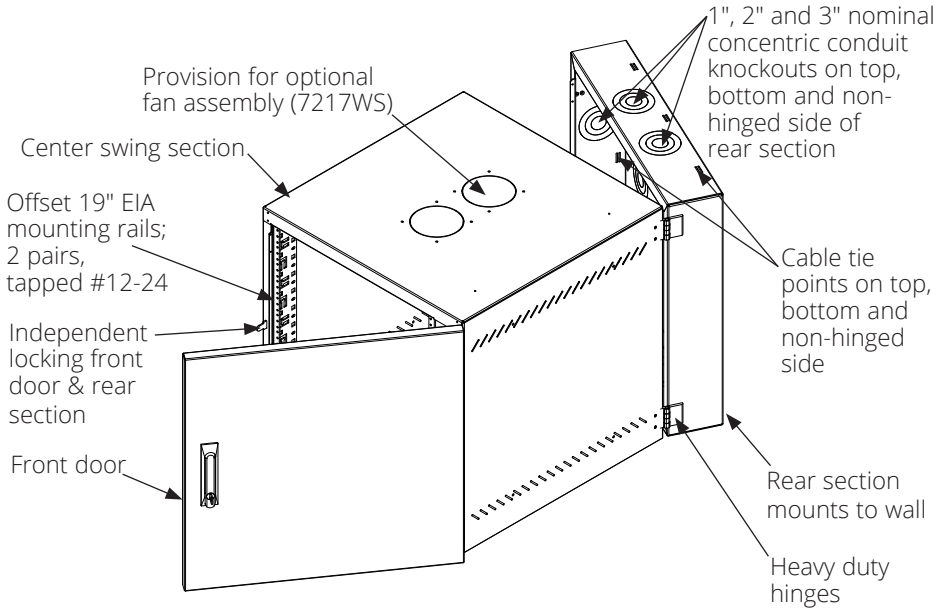
Connect the middle wall mount frame on the WM and WD Series to the main protective grounding stud located inside on the back of the rear section using a listed ring or closed-loop terminal. Connect the wall mount frame on the WE and 15WM Series to the main protective grounding stud located inside on the back of the rear section on the WE Series and inside on the side of the 15WM Series using a listed ring or closed-loop terminal. Connect the front door to the grounding stud located inside at the side of the wall mount frame using a listed ring or closed-loop terminal.

## **Parts Not Bonded to Protective Earthing Terminal-**

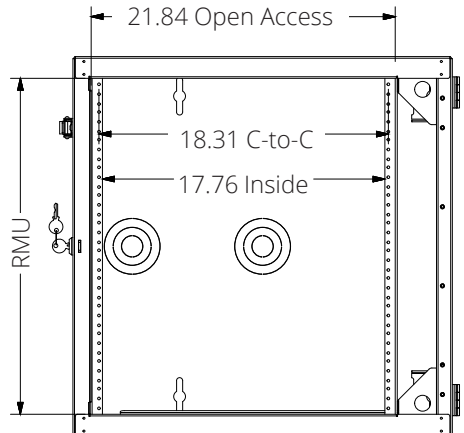
The following parts are not effectively bonded to the protective earthing terminal: rails. If these parts need to be bonded to the protective earthing terminal, do so in accordance with Article 250 of the National Electrical Code.

# WMCM SERIES WALL MOUNT

1. Mounting holes are designed for 3/8" hardware, 16" on center.
2. Use the template on the shipping box to locate your mounting holes.
3. Wall mount comes hinged right from the manufacturer. For mounting hinged left, rotate wall mount 180° and follow additional steps on page 8.



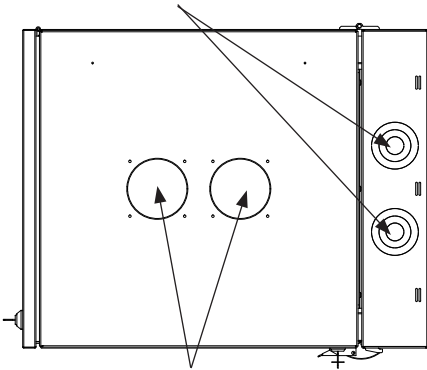
FRONT VIEW WITH DOOR



FRONT VIEW WITHOUT DOOR

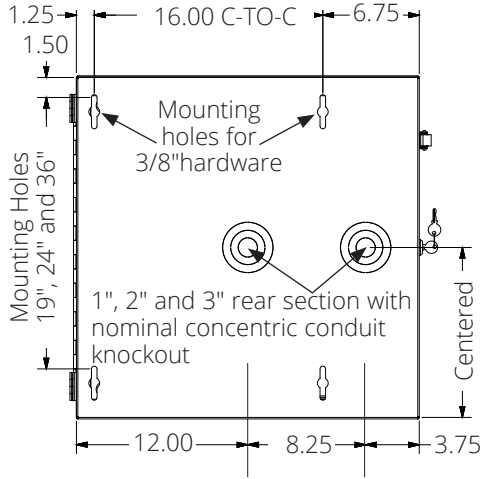
# WMCM SERIES WALL MOUNT

1", 2" and 3" rear section with nominal concentric conduit knockout

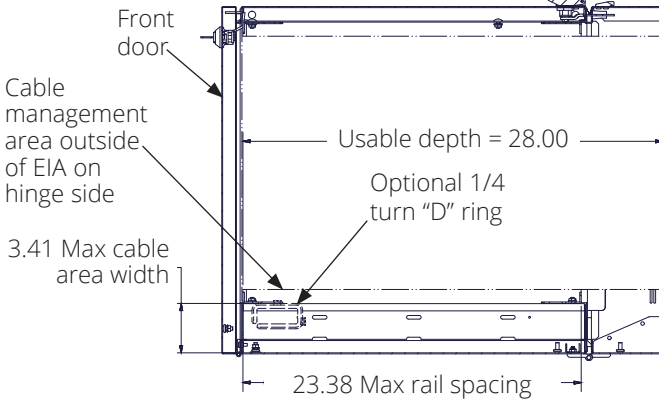


Provision for optional fan assembly (7217WS)

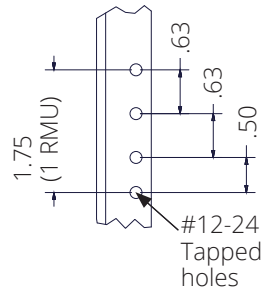
TOP/BOTTOM VIEW



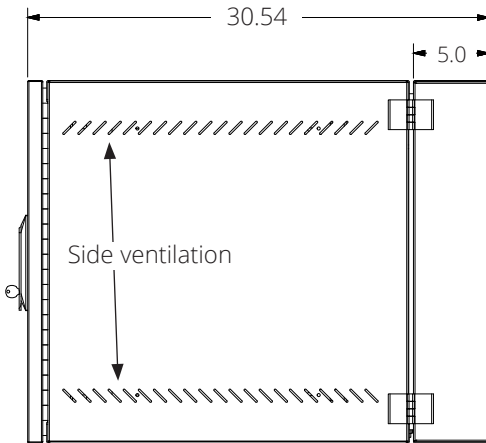
REAR VIEW



INTERNAL TOP VIEW

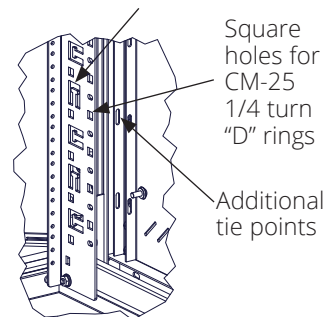


EQUIPMENT MOUNTING RAIL DETAIL



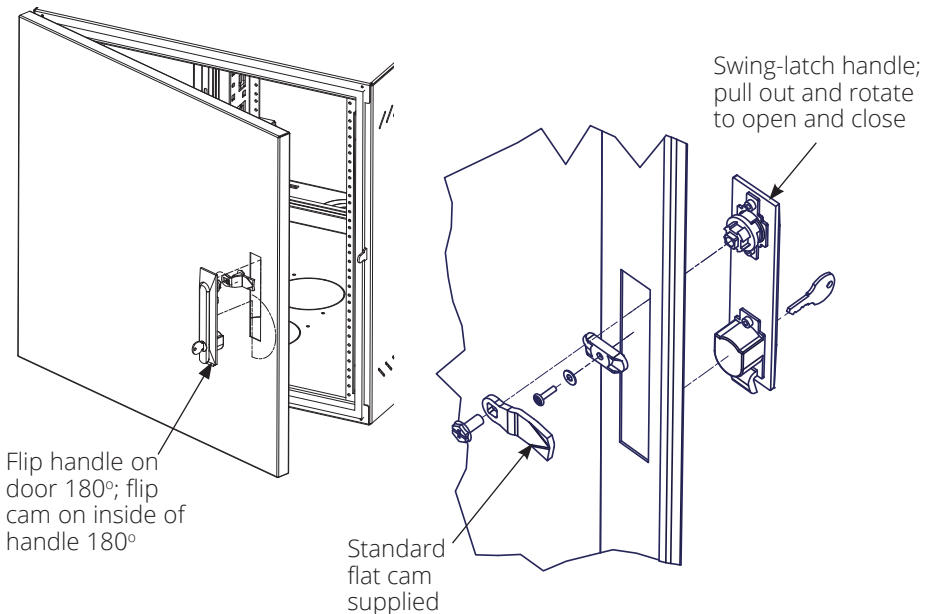
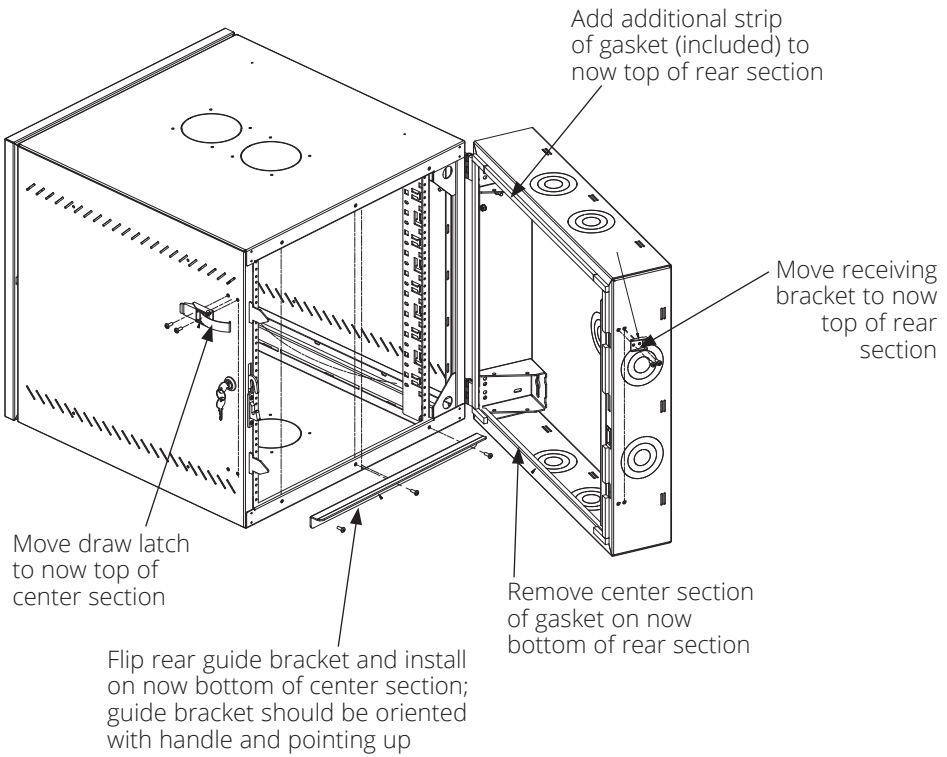
SIDE VIEW

Cable management tie points on rails; outside of EIA



# WMCM SERIES WALL MOUNT

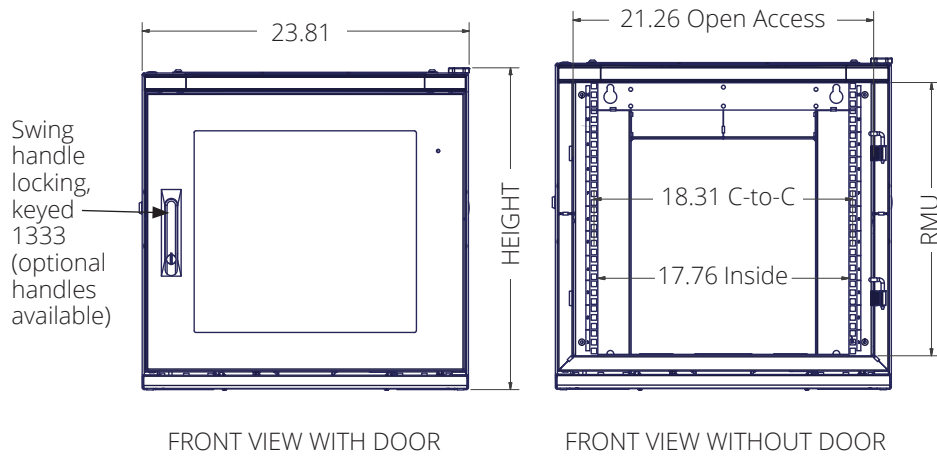
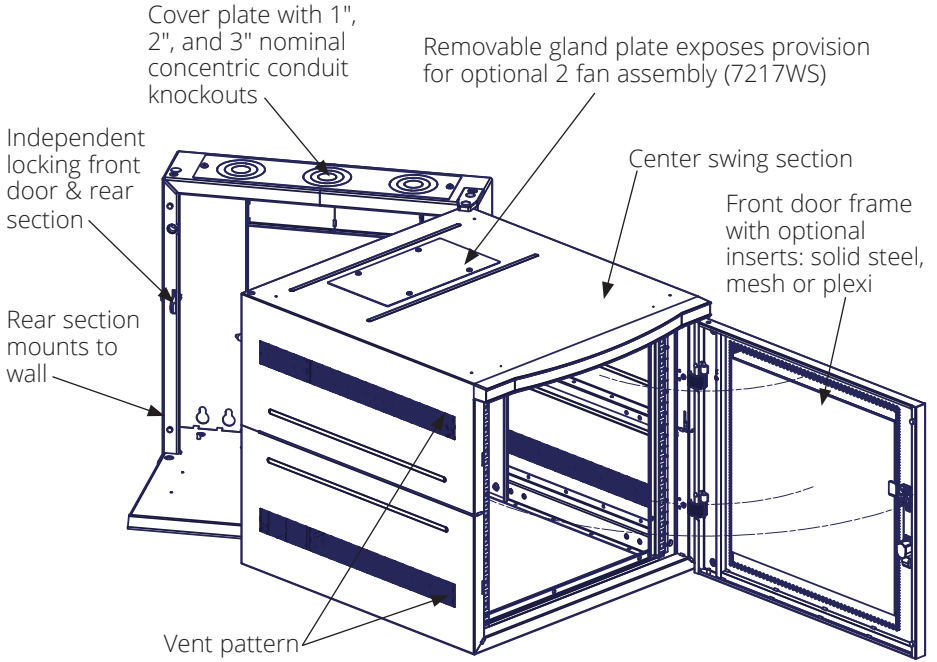
## REVERSING THE WALL MOUNT - LEFT HAND HINGE





# WDX SERIES WALL MOUNT

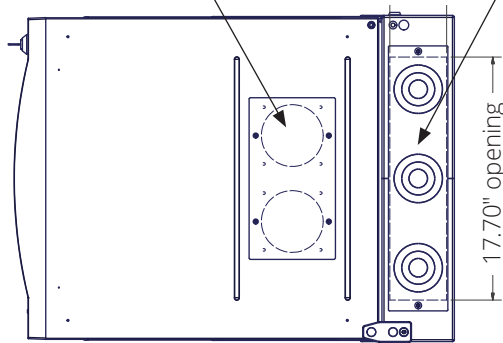
1. Mounting holes are designed for 3/8" hardware, 16.00" on center.
2. Use the template on the shipping box to locate your mounting holes.
3. Wall mount comes hinged right from the manufacturer.



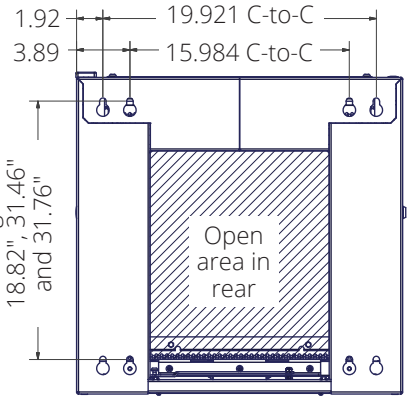
# WDX SERIES WALL MOUNT

Provision for optional 2 fan assembly (7217WS)

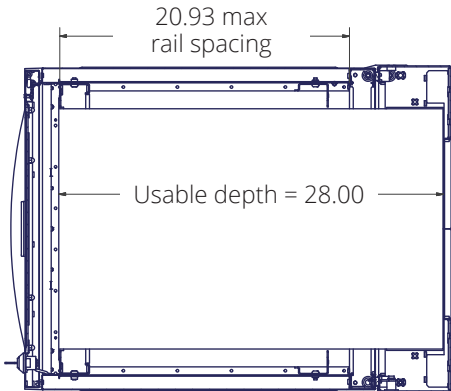
Cover plate with 1", 2", and 3" nominal concentric conduit knockouts



TOP VIEW

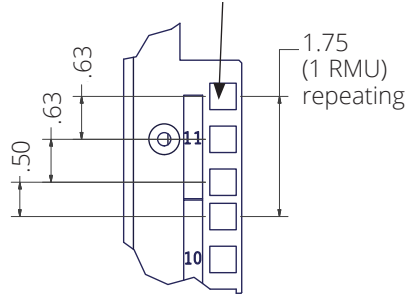


REAR VIEW

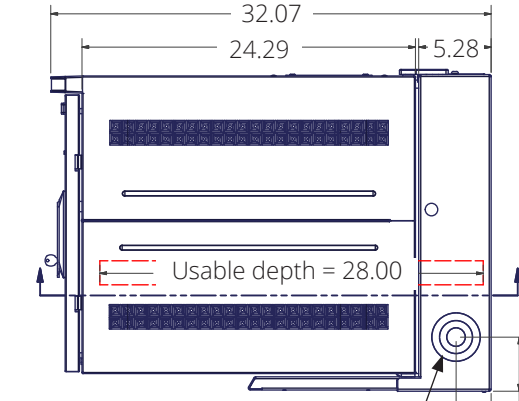


INTERNAL TOP VIEW

3/8" square EIA mounting holes with cage nuts (M6)



EQUIPMENT MOUNTING RAIL DETAIL



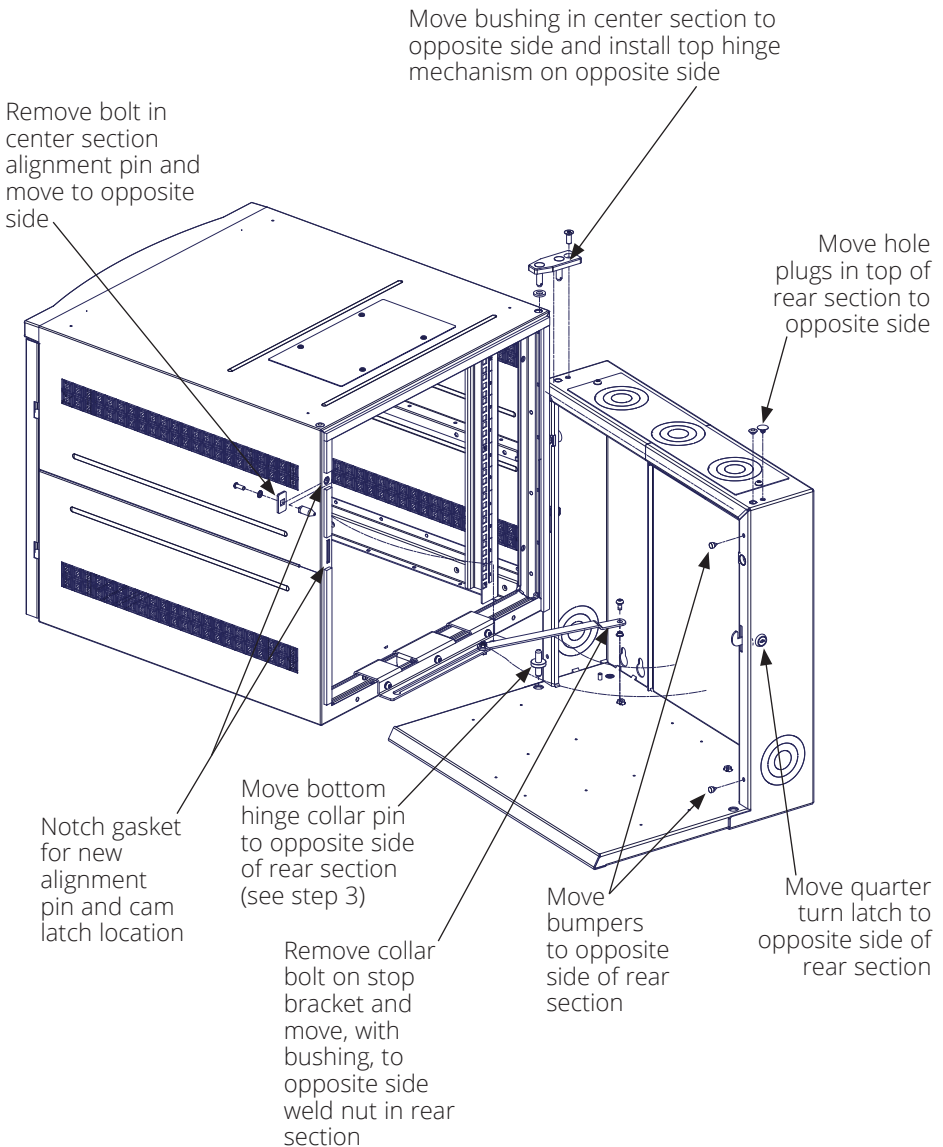
RIGHT SIDE VIEW

1", 2", and 3" nominal concentric conduit knockouts (knockouts on right side only)

# WDX SERIES WALL MOUNT

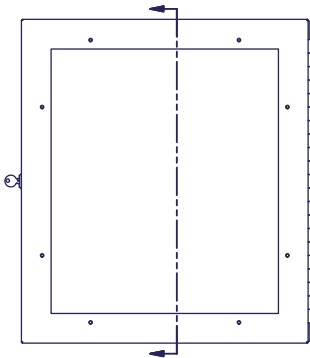
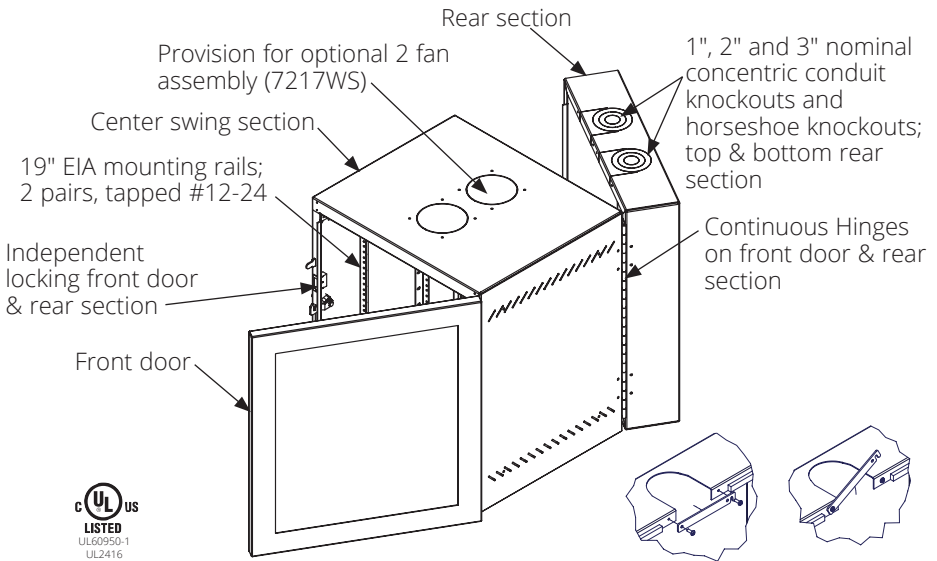
## REVERSING THE CENTER SECTION

1. Remove flat head bolt on top hinge mechanism
2. Lift center section off bottom hinge collar pin
3. After bottom hinge collar pin is moved, align with new hinge location on center section
4. Move bushing in center section to opposite side and install top hinge mechanism on opposite side

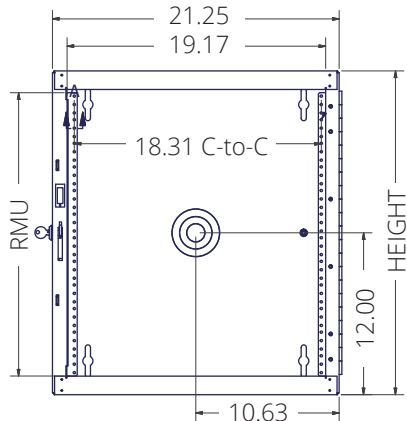


# WM SERIES WALL MOUNT

1. Mounting holes are designed for 3/8" hardware, 16.00" on center.
2. Use the template on the shipping box to locate your mounting holes.



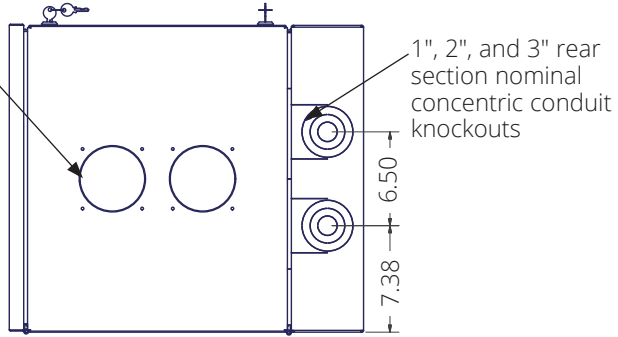
FRONT VIEW WITH DOOR



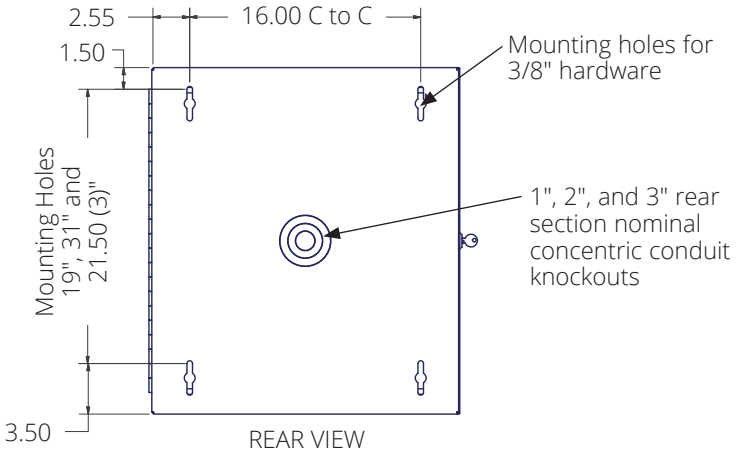
FRONT VIEW WITHOUT DOOR

# WM SERIES WALL MOUNT

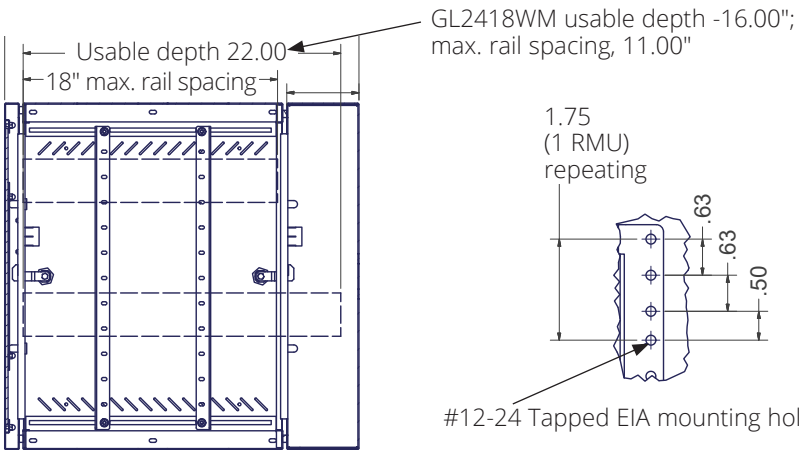
2 fan unit mounting shown for GL24WM, GL36WM and GL48WM; 2 fan unit is rotated 90° on GL2418WM



TOP/BOTTOM VIEW



REAR VIEW

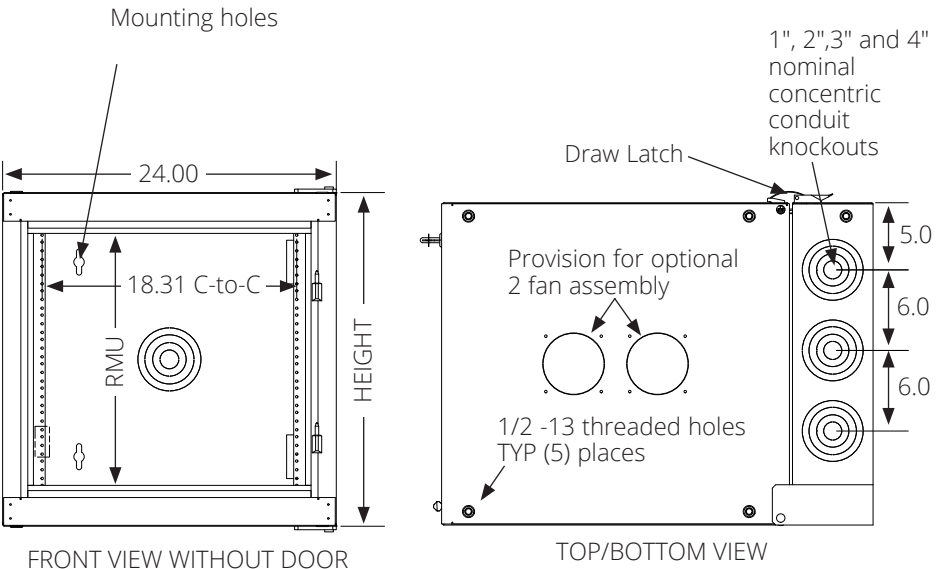
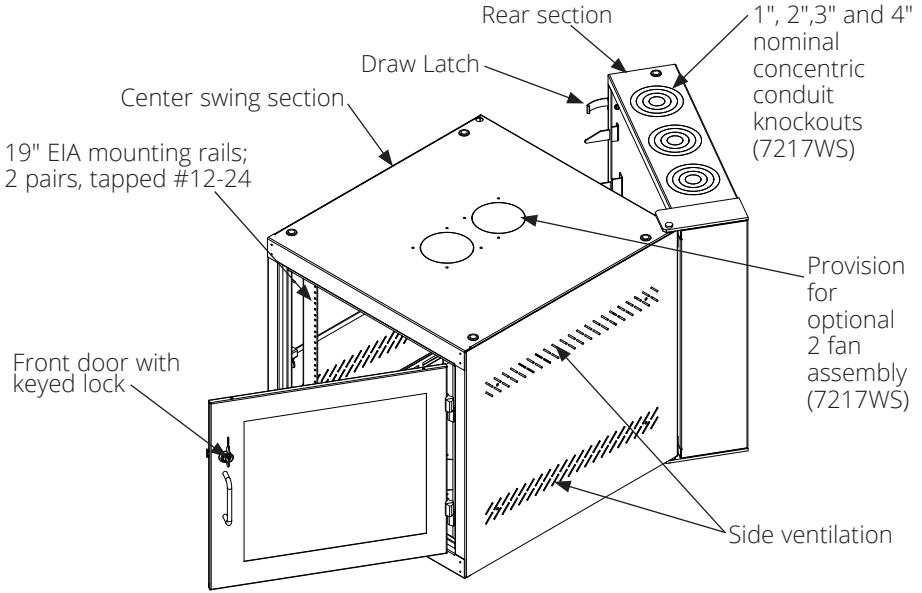


INTERNAL SIDE VIEW

EQUIPMENT MOUNTING RAIL DETAIL

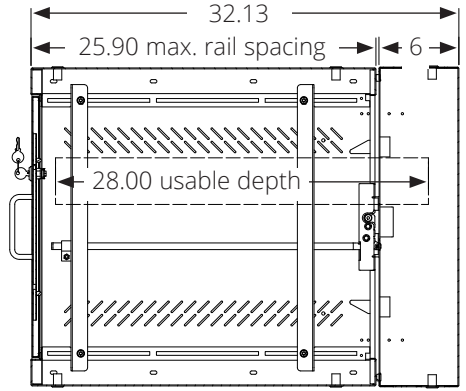
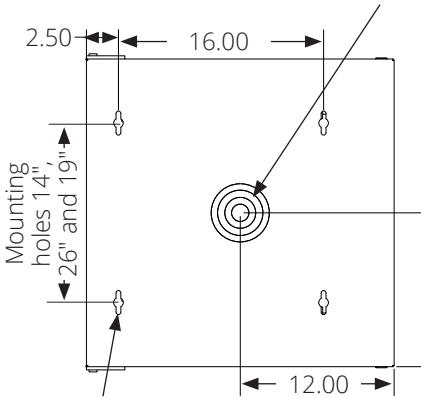
# WD SERIES WALL MOUNT

1. Mounting holes are designed for 3/8" hardware, 16.00" on center.
2. (Optional) For the ease of installation, mount only rear section to the wall first. Remove the hinge pins to detach the center swing section (see Detail A ). After mounting rear section to the wall, reassemble center swing section and secure it with hinge pins.
3. WD handles can be found in the hardware bag.



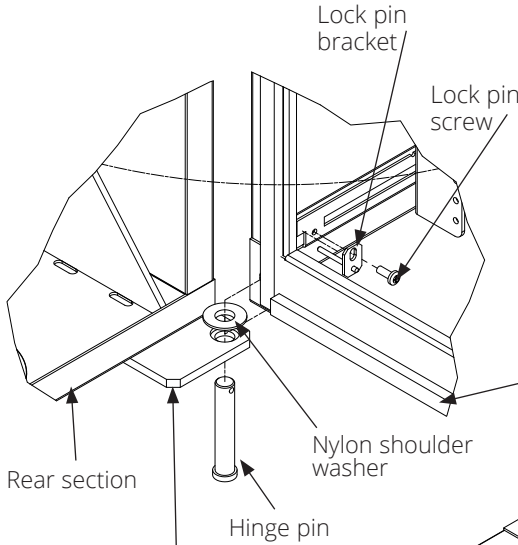
# WD SERIES WALL MOUNT

1", 2", 3" and 4" nominal  
concentric conduit knockouts

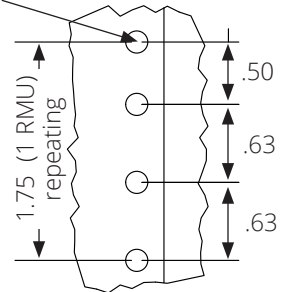


REAR VIEW

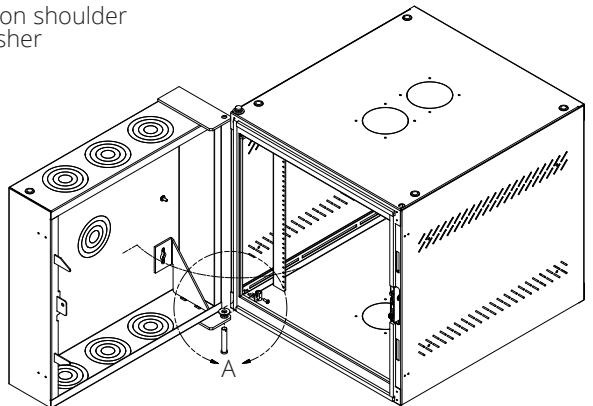
INTERNAL SIDE VIEW



#12-24 Tapped EIA  
mounting holes



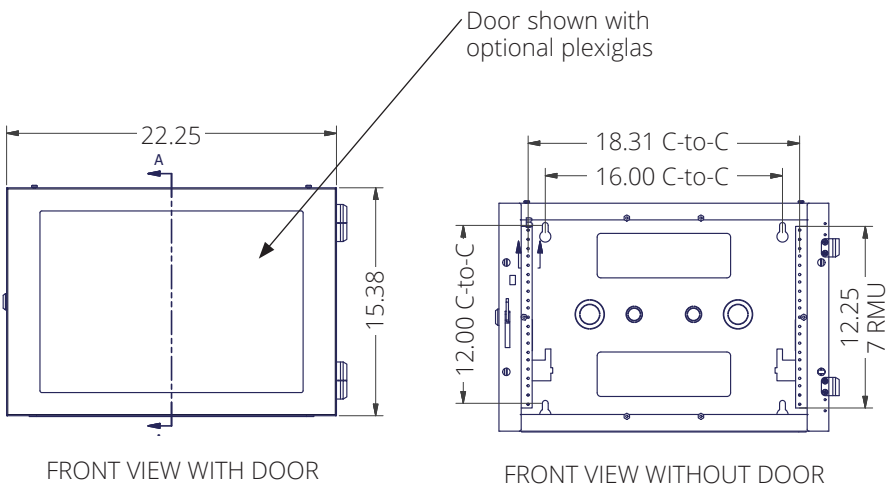
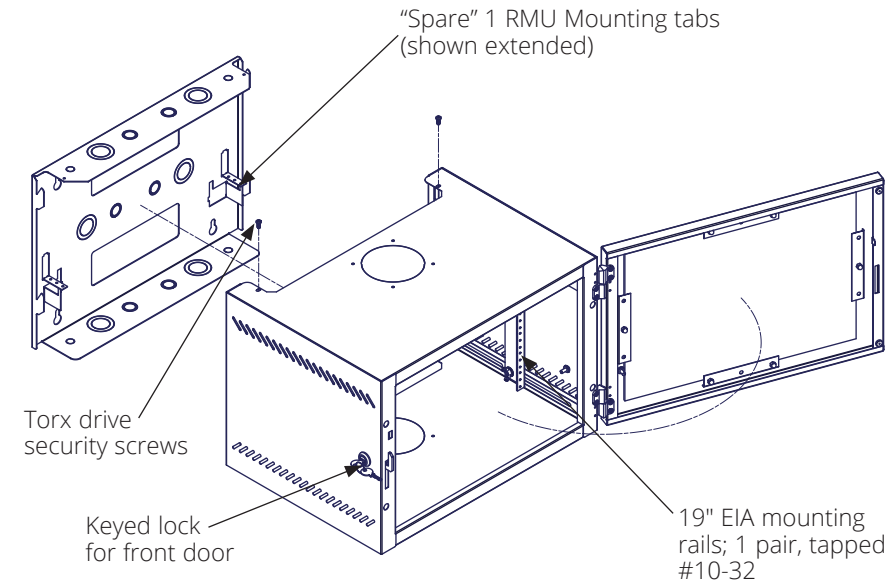
Center swing section



# 15WM SERIES WALL MOUNT

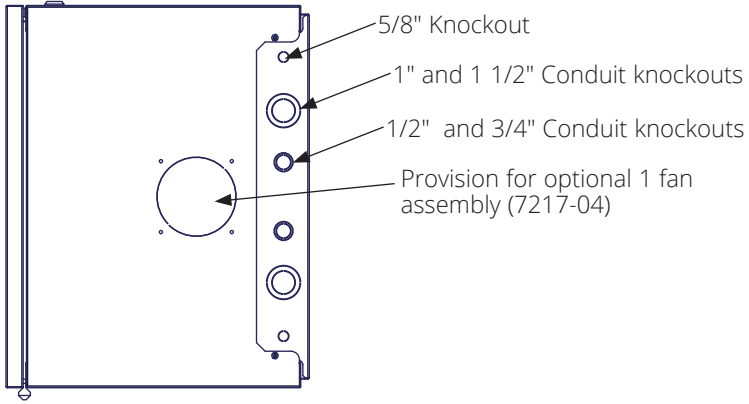
1. Unscrew specialty torx screw using the supplied torx screw bit. Fig 1 (A)
2. Remove back panel from wall mount. Fig 1
3. Mount back panel to wall using 3/8" hardware, 16.00" on center.
4. Once back panel is mounted, hang main body on mounted back panel. Fig 1 (B)
5. Secure main body using torx screw (keep bit in safe place for future use).

*Note: Push down tabs (Detail A) to get one RMU mounting on the back panel.*

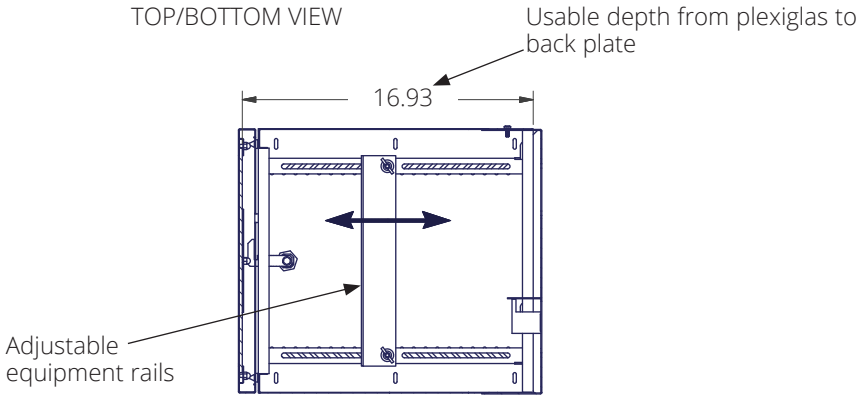




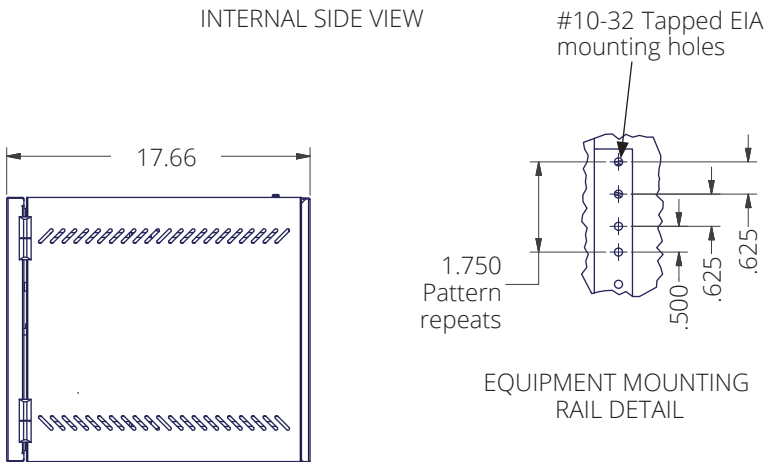
# 15WM SERIES WALL MOUNT



TOP/BOTTOM VIEW



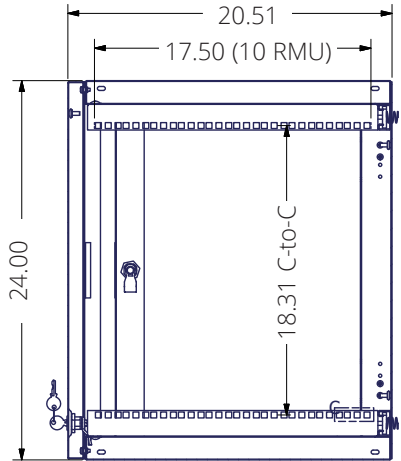
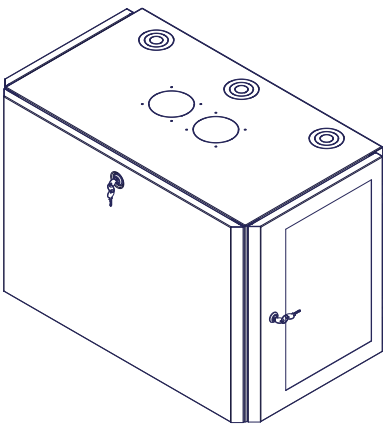
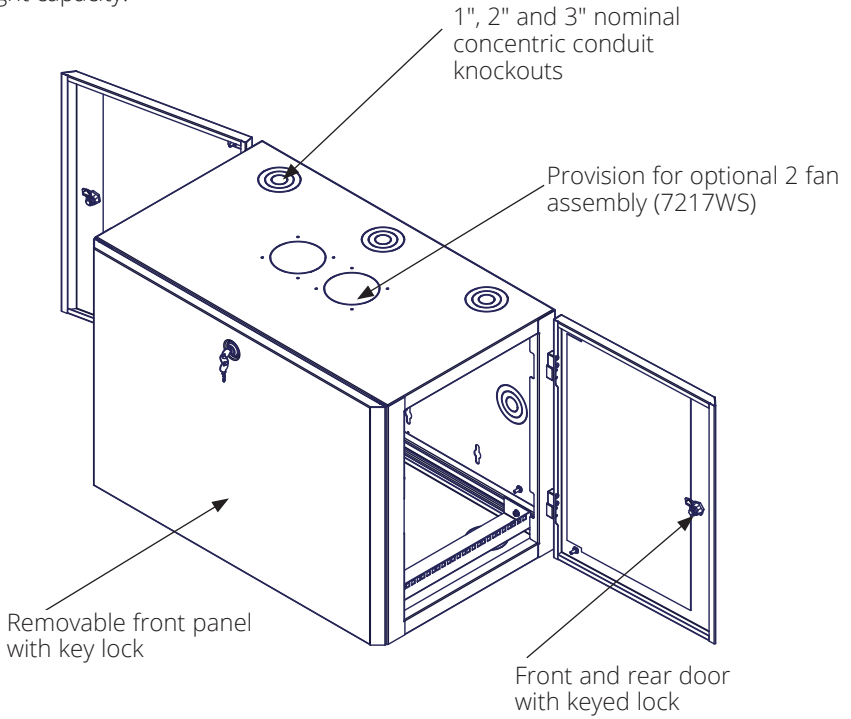
INTERNAL SIDE VIEW



SIDE VIEW

# WE SERIES WALL MOUNT

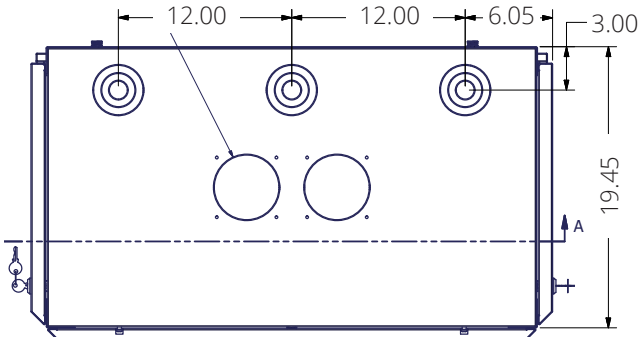
1. Mounting holes are designed for 3/8" hardware, 16.00" on center.
2. Wall Mount must be mounted to three wall studs to achieve maximum weight capacity.



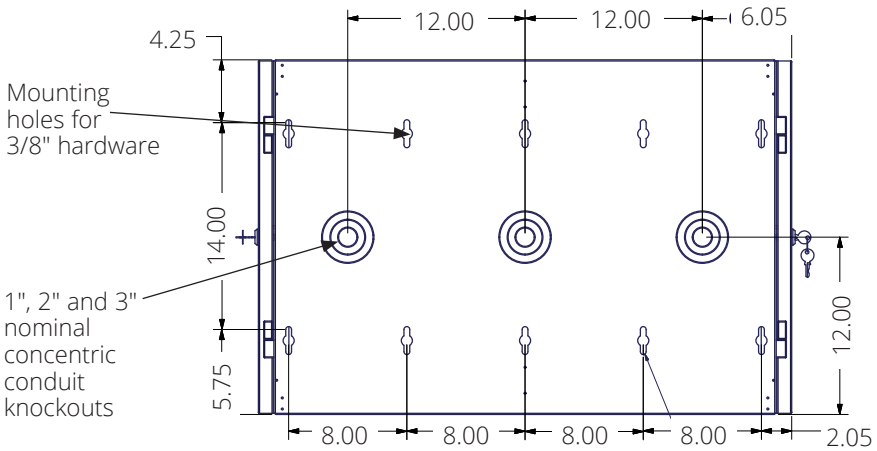
FRONT VIEW

SIDE VIEW WITHOUT DOOR

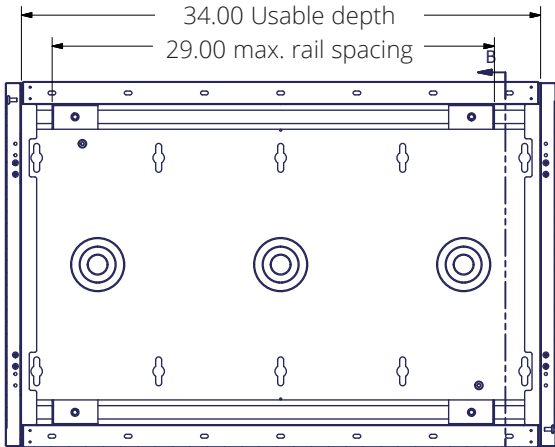
# WE SERIES WALL MOUNT



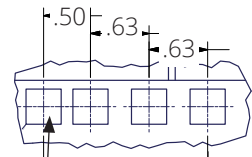
TOP/BOTTOM VIEW



REAR VIEW



INTERNAL VIEW FRONT PANEL REMOVED



3/8" Square holes mounting with cage nut (M6)  
1.75 Pattern repeats

EQUIPMENT MOUNTING RAIL DETAIL

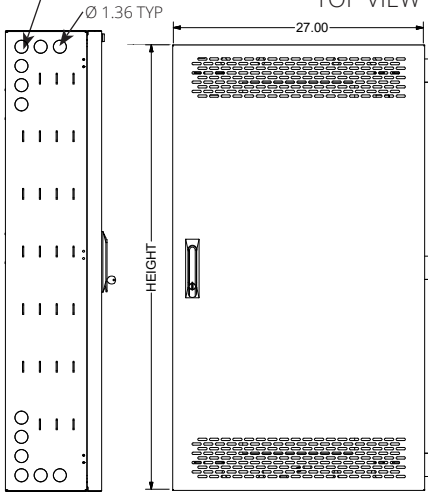
# WLP SERIES WALL MOUNT

$\varnothing$  4.54 TYP  
 $\varnothing$  3.54 TYP  
 $\varnothing$  2.42 TYP  
 $\varnothing$  1.36 TYP  
 1", 2", 3" and 4" Nominal Concentric Conduit Knockouts



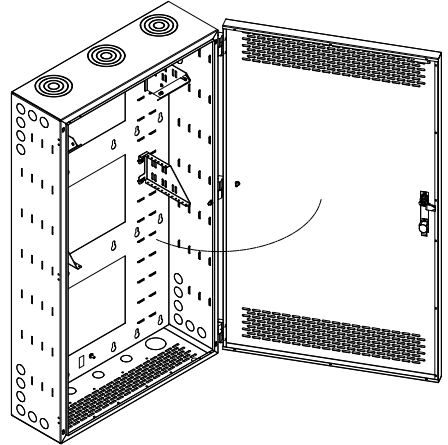
TOP VIEW

1" Nominal Conduit Knockouts

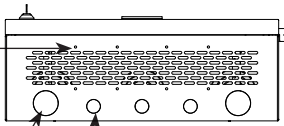


SIDE VIEW

FRONT VIEW



Optional Fan Assembly Provisions (7217-04)



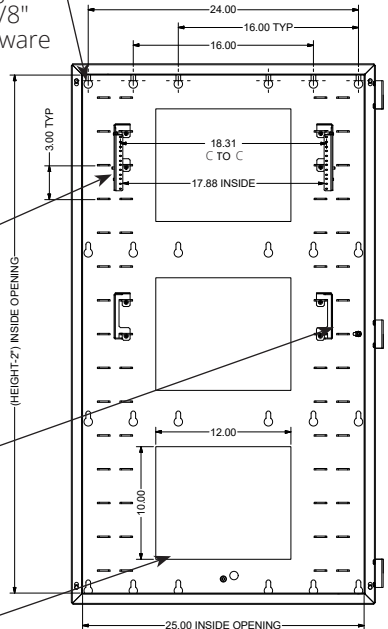
BOTTOM VIEW

2" Nominal Conduit Knockouts

1" Nominal Conduit Knockouts

Mounting holes designed for 3/8" hardware

FRONT VIEW WITHOUT DOOR



WLPTOB Tilt Out Bracket Set provided with each Wall Mount

WLPSB Stagger Bracket Set provided with each Wall Mount

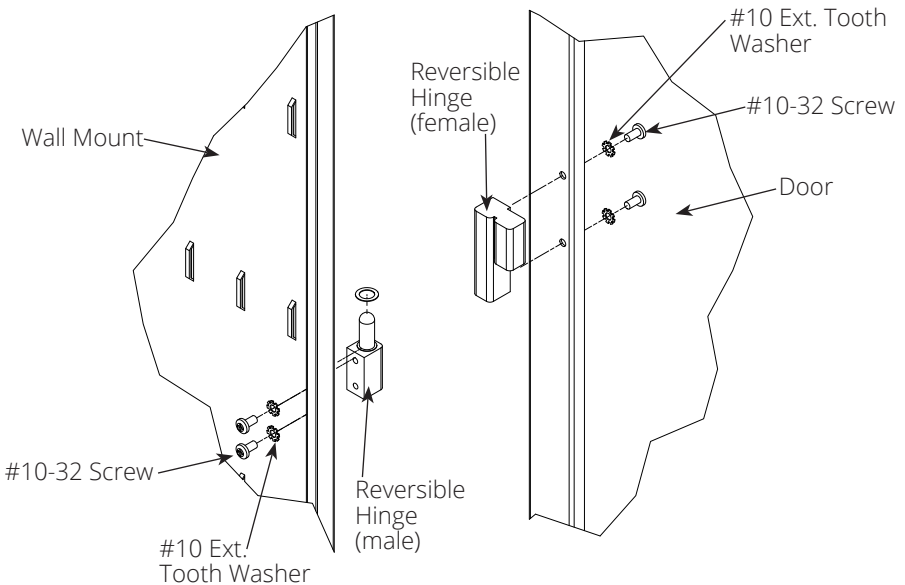
24WLP: 1 Opening  
 36WLP: 2 Opening  
 48WLP: 3 Opening



# WLP WALL MOUNT - FIELD REVERSIBLE DOOR

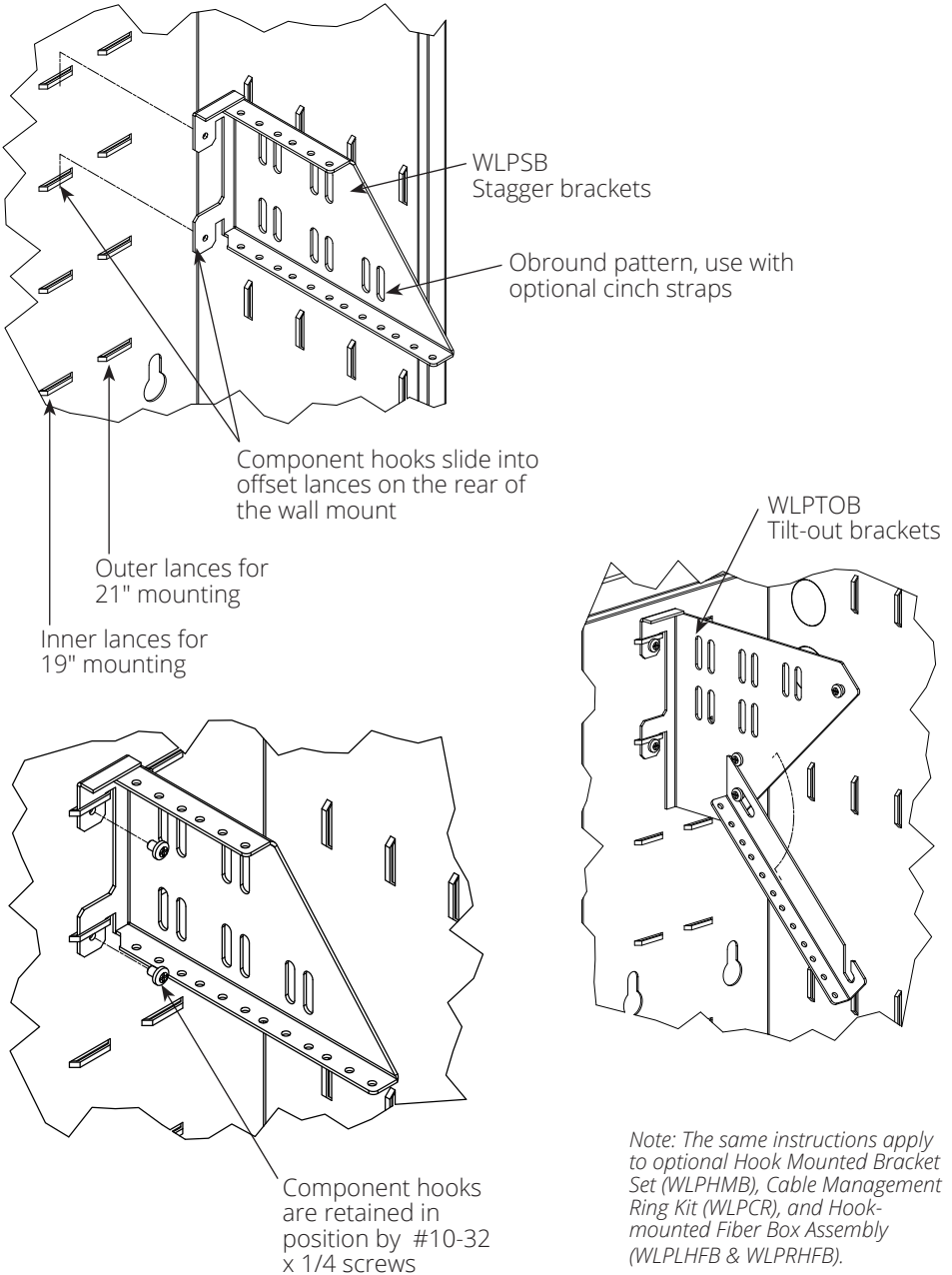
Before removing the door, pull apart the quick disconnect grounding wires. To remove the door, have one person remove the screws while the other person holds the door for removal.

1. Open the door.
2. Remove the bottom male hinge off the wall mount. The hinge is secured with (2) #10-32 screws and (2) external tooth washers located on the inside of the wall mount.
3. Carefully lift the door upward and pull away from the wall mount.
4. Remove the top male hinge off the wall mount. The hinge is secured with (2) #10-32 screws and (2) external tooth washers located on the inside of the wall mount. (Note: For 48"H wall mount, repeat this step to remove middle hinge)
5. Install the top male hinge onto the left side of wall mount and secure with (2) #10-32 screws and (2) external tooth washers. Make sure the hinge pin is positioned upward.
6. Attach the door by aligning top hinge of the door to its respective hinge pin on the wall mount and slowly slide the door down until seated.
7. Insert bottom hinge pin into bottom hinge on the door and secure to the wall mount with (2) #10-32 screws and (2) external tooth washers. (Note: For 48"H wall mount, repeat this step to install the middle hinge)



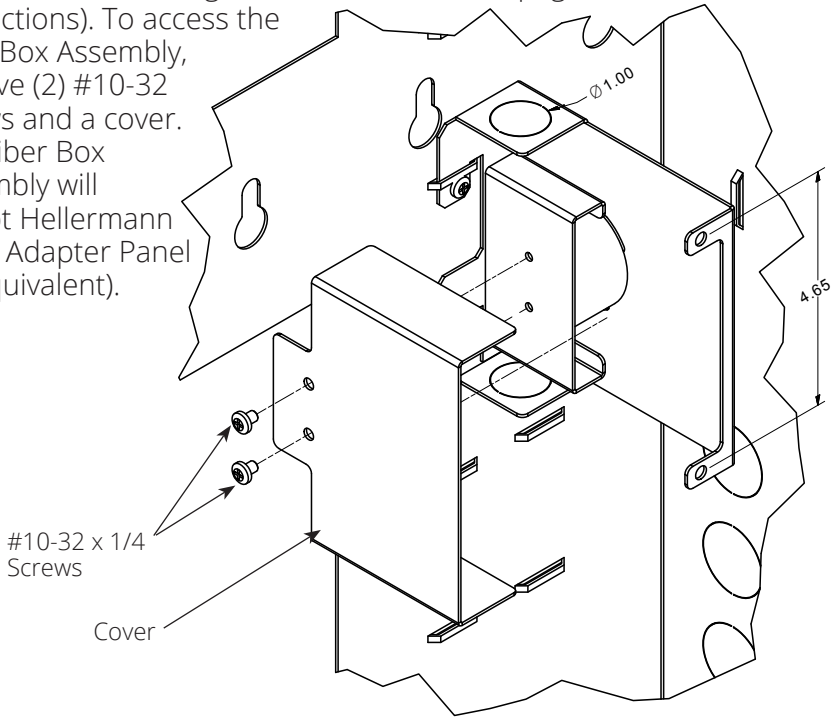
# WLP MOUNTING BRACKET ADJUSTMENT

The assembled wall mount includes one pair of #12-24 stagger brackets (WLPSB) and one pair of #12-24 tilt-out brackets (WLPTOB). The brackets come installed on the inner set of lances for 19" EIA 310-E mounting. Additional brackets can be added to the wall mount. Offset lances are positioned at 3" vertical intervals.



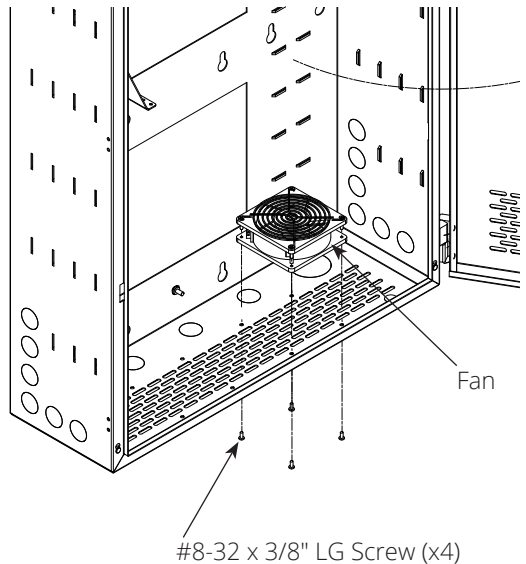
## WLP FIBER BOX ASSEMBLY

Optional hook-mounted Fiber Box Assembly is installed into mounting profile or cable management lances (refer to page 22 for installation instructions). To access the Fiber Box Assembly, remove (2) #10-32 screws and a cover. The Fiber Box Assembly will accept Hellermann Tyton Adapter Panel (or equivalent).



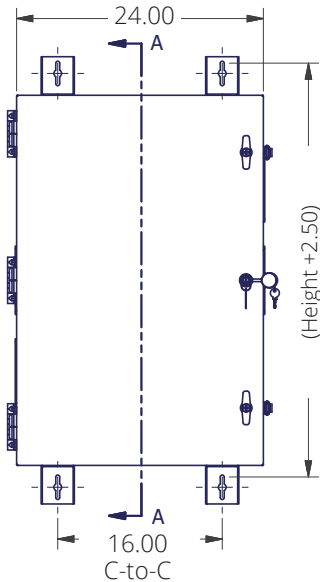
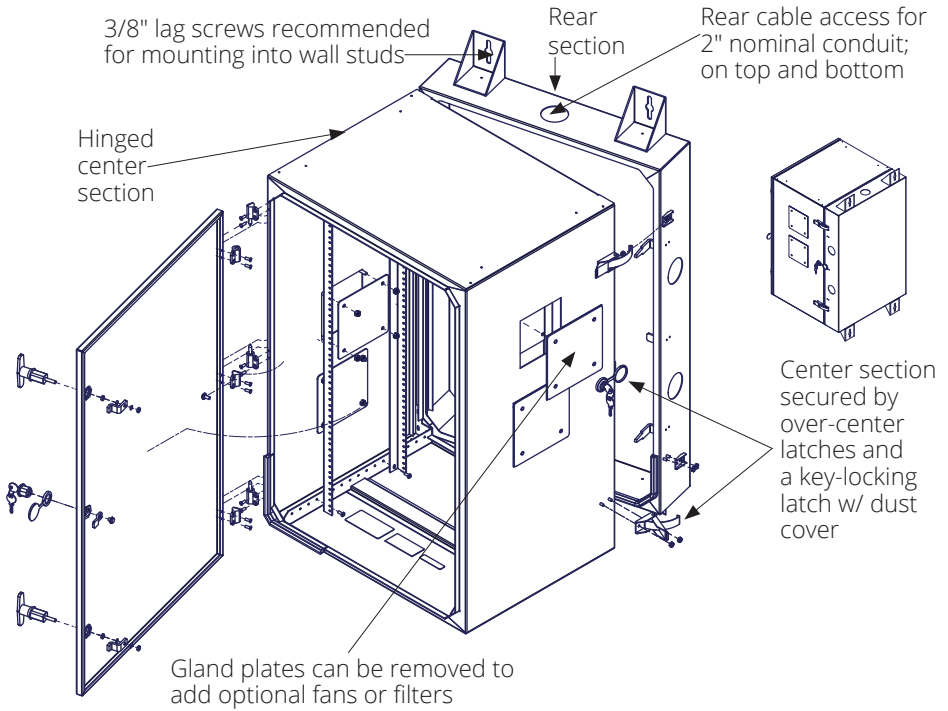
## FAN ASSEMBLY INSTALLATION

The 24"H & 36"H wall mount will accept (1) optional 75 CFM fan assembly, (7217-04). The 48"H wall mount will accept (2) 75 CFM fan assemblies, (7217-04). Each fan assembly shall be attached to the inside of the wall mount and secured with (4) #8-32 screws from the bottom.

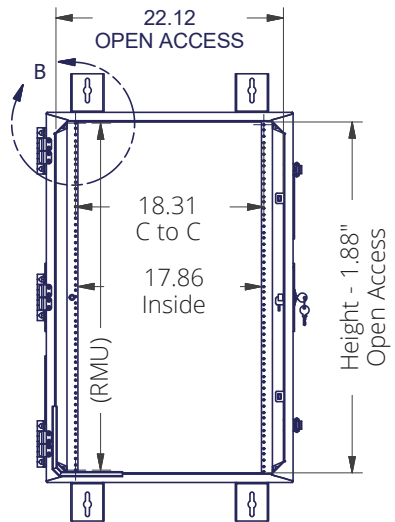


# NEMA 12K WALL MOUNT

1. Mounting holes are designed for 3/8" hardware, 16.00" on center.
2. Use the template on the shipping box to locate your mounting holes.



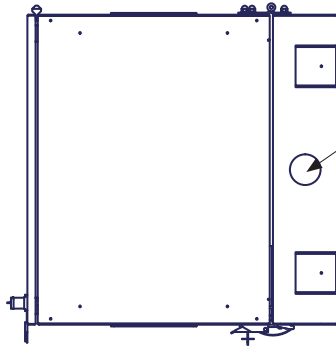
FRONT VIEW WITH DOOR



FRONT VIEW WITHOUT DOOR



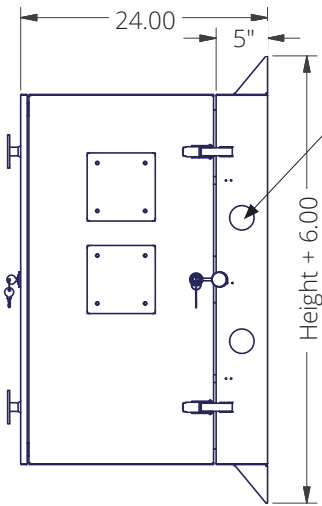
# NEMA 12K WALL MOUNT



TOP/BOTTOM VIEW

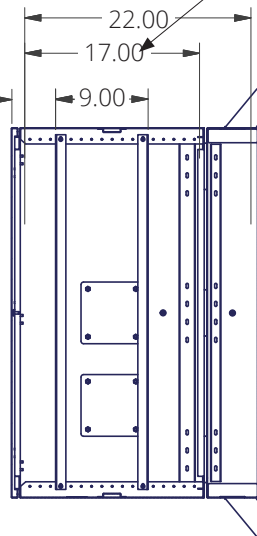
Rear top cable access for 2" nominal conduit; on top and bottom

Usable depth  
Max. rail placement



RIGHT SIDE VIEW

Right side cable access for 2" nominal conduit

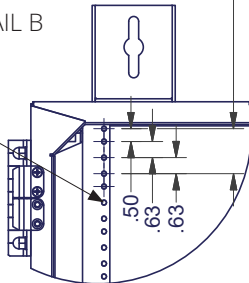


INTERNAL RIGHT SIDE VIEW

1.75 Pattern repeats (1 RMU)

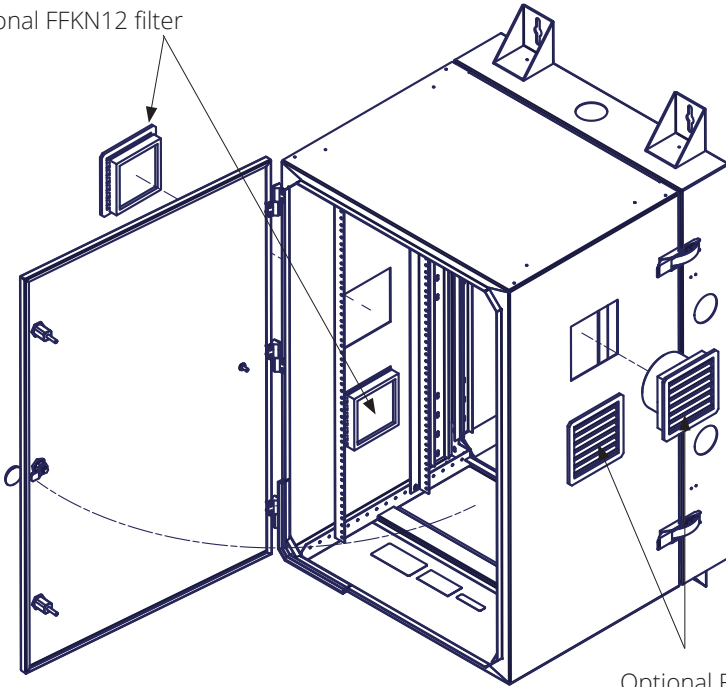
DETAIL B

#12-24 tapped EIA mounting holes



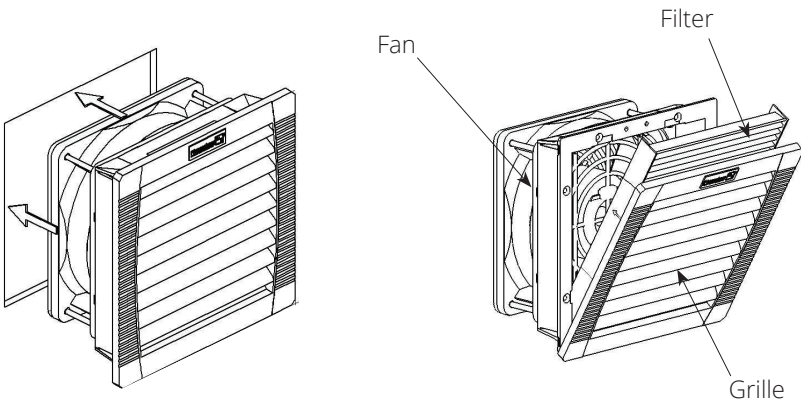
EQUIPMENT MOUNTING RAIL

Optional FFKN12 filter



Optional FFKN12 fan

SHOWN WITH OPTIONAL FANS AND INTAKE FILTERS



GL240N12 can accept one (1) fan unit  
GL360N12 can accept two (2) fan units  
GL240N12 can accept three (3) fan units

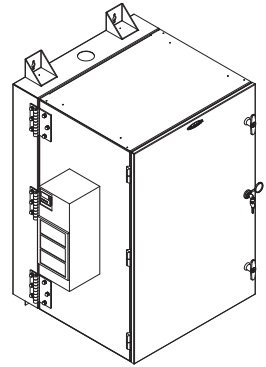
# NEMA 12K WALL MOUNT WITH OPTIONAL AC UNITS

## PREPARING THE WALL MOUNT:

IceQube air conditioning systems have been designed to be light weight for ease of installation. Side or vertical mount units have been designed with a simple “two stud” alignment feature to make initial fastening to the cabinet quick and easy.

**1.** Determine the location of the IceQube system on the wall mount. The Great Lakes wall mount comes with a hole pattern that will accept the a/c unit.

**2.** After checking that all openings and bolt holes are in alignment, apply the provided gasket material to the IceQube a/c unit.



## CAUTION

Be careful while removing the backing on the gasket material. The material may stretch and the holes will not align.

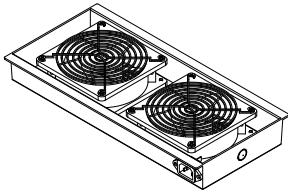
**NOTE:** *If the wall mount is not air tight, or the air conditioning system operates with the wall mount door(s) open, moisture will condensate inside the air conditioning system and may cause the condensate management system to overflow.*

**3.** After the gasket material has been installed, mount the IceQube system onto the wall mount and fasten it using the supplied nuts and bolts. Check to see if the power cord and all optional cables are in place. Fasteners need to be tightened securely and the gasket material needs to be in place in order to maintain wall mount integrity. The gasket material should be slightly compressed with no visible gaps. The IceQube system is now ready to begin operation.

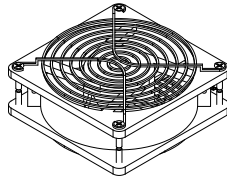
**NOTE:** *Near the bottom or on the side of the IceQube system cabinet is a nipple for condensate overflow. Although all vertical or side mounted IceQube air conditioners have built in condensate management systems, it may be necessary to attach a drain hose to this nipple on wall mount which are located in extremely humid conditions, or where wall mount doors are left open or the door seals are leaking.*

# WALL MOUNT ACCESSORIES

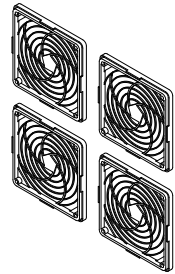
Part No.	Description	WMCM	WDX	NEMA	WM	WD	WE	15WM	WLP
7217WS	Fan assembly with two 75 CFM fans	X	X		X	X	X		
7217-04	Fan assembly with one 75 CFM fan							X	X
FFK1	Four fan filters	X	X		X	X	X	X	X
DK1	Dust Resistant Kit, includes cover plates, fan filters and hardware					X			
DK2	Dust Resistant Kit, includes cover plates, fan filters and hardware				X				
DK3	Dust Resistant Kit, includes cover plates, fan filters and hardware	X							
DK4	Dust Resistant Kit, includes cover plates and hardware		X						
1.75FP19BG	1 RMU Filler Panel with brush grommet	X	X	X	X	X	X	X	X
1.75-FP19	1 RMU metal Filler Panel	X	X	X	X	X	X	X	X
3.50-FP19	2 RMU metal Filler Panel	X	X	X	X	X	X	X	X



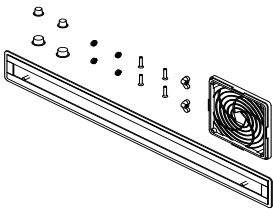
7217WS



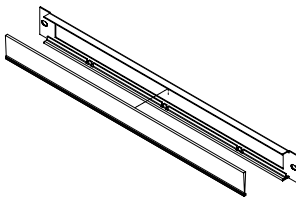
7217-04



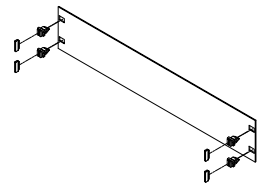
FFK1



DK1



1.75FP19BG

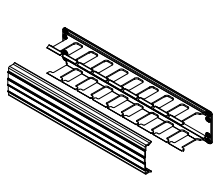


3.50-FP19

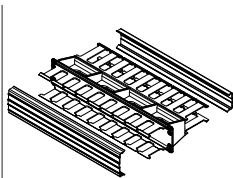
Part No.	Description	WMCM	WDX	NEMA	WM	WD	WE	15WM	WLP
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### CABLE MANAGEMENT

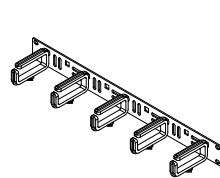
CM-16	Single-sided Organizer for 19" mounting; plastic fingers and cover, 2 RMU	X	X	X	X	X	X	X	X
CM-15	Double-sided Organizer for 19" mounting; plastic fingers and cover, 2 RMU	X	X	X	X	X	X	X	X
CM-05	Cable Organizer for 19" mounting with five 1.5" x 3.5", ¼ turn "D" rings; 1 RMU	X	X	X	X	X	X	X	X
CM-04	Cable Organizer for 19" mounting with five 3.5" x 5", ¼ turn "D" rings; 2 RMU	X	X	X	X	X	X	X	X
CM-25	Kit of 10, ¼ turn "D" rings, 1.5" x 3.5"	X							
CM-26	Kit of 10, ¼ turn "D" rings, 3.5" x 5"	X							



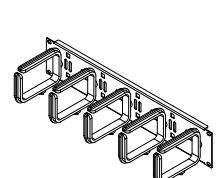
CM-16



CM-15



CM-05

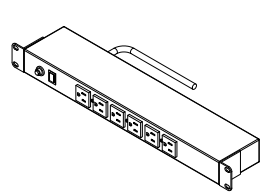


CM-04

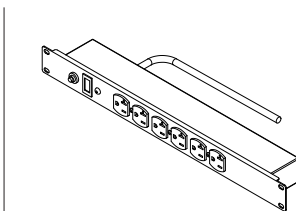
Part No.	Description	WMCM	WDX	NEMA	WM	WD	WE	15WM	WLP
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### POWER AND GROUNDING

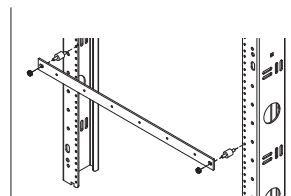
7219	6 position Power Strip for 19" mounting, 15 amp, 1 RMU	X	X	X	X	X	X	X	X
7219-SR14	14 position (6 front/8 back) Power Strip for 19" mounting, 15 amp, 1 RMU	X	X	X	X	X	X	X	X
7219-20AR	6 position Power Strip for 19" mounting, 20 amp, 1 RMU	X	X	X	X	X	X	X	X
CBB-19	Copper Bus Bar for 19" mounting, 1 RMU	X	X	X	X	X	X	X	X



7219



7219-20AR

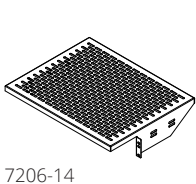


CBB

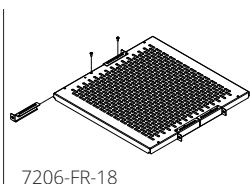
Part No.	Description	WMCM	WDX	NEMA	WM	WD	WE	15WM
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## SHELVES

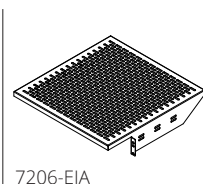
7206-14	Stationary Shelf, 17.5"W 14"D, 80 lb. weight capacity	X	X	X	X	X		X
7206-EIA	Stationary Shelf, 17.468"W x 18"D, 80 lb. weight capacity	X	X	X	X	X		
7206-FRA-18	Stationary Shelf (front/rear mount adjustable), 17.5"W x 18"D, 150 lb. weight capacity	X	X	X	X	X		
7206-SL	Sliding Shelf, 16.343"W x 17.5"D, 40 lb. weight capacity	X	X	X	X	X		
7206-FRSL-AHD	Sliding Shelf (front/rear mount adjustable), 17.5"W x 22"D, 110 lb. weight capacity	X	X			X		



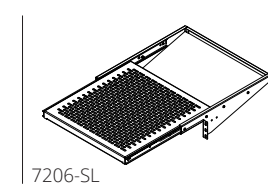
7206-14



7206-FR-18



7206-EIA

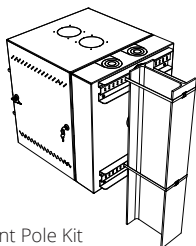


7206-SL

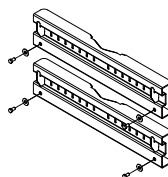
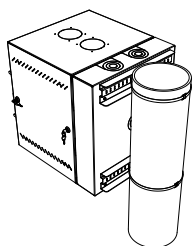
Part No.	Description	WMCM	WDX	NEMA	WM	WD	WE	15WM	WLP
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## MOUNTING KIT AND HARDWARE

WMPK	Wall Mount Pole Kit for use with indoor poles; banding is not provided			X	X				
HDW-102-50	Package of 50, #10-32 x 1/2" Phillips screws							X	
HDW-107-50	Package of 50 cage nuts with #12-24 x 1/2" Phillips screws		X				X		
HDW-104-50	Package of 50, #12-24 x 1/2" Phillips screws			X	X				X



Wall Mount Pole Kit



GreatCabinets.com

When installing a Great Lakes wall mount to materials such as wood, cinder block, concrete, etc., please consider the load capacity within the wall mount structure, and be certain to check with local authorities to determine the appropriate hardware requirements for these conditions. Because wall compositions may vary at different installation sites, Great Lakes cannot warrant the fitness or suitability of any installation instructions or installation hardware it may provide for wall mount. Great Lakes hereby **DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE SUFFICIENCY, FITNESS OR SUITABILITY OF ANY INSTALLATION INSTRUCTIONS OR INSTALLATION HARDWARE GREAT LAKES MAY PROVIDE FOR WALL MOUNTS.** Great Lakes recommends that an experienced maintenance and/or technical person be consulted regarding the proper wall mount hardware and procedures to be used for the anticipated load capacity of the wall mount.

*Product specifications are subject to change without prior notice.*



**GREAT LAKES**  
DATA RACKS & CABINETS

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for your  
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