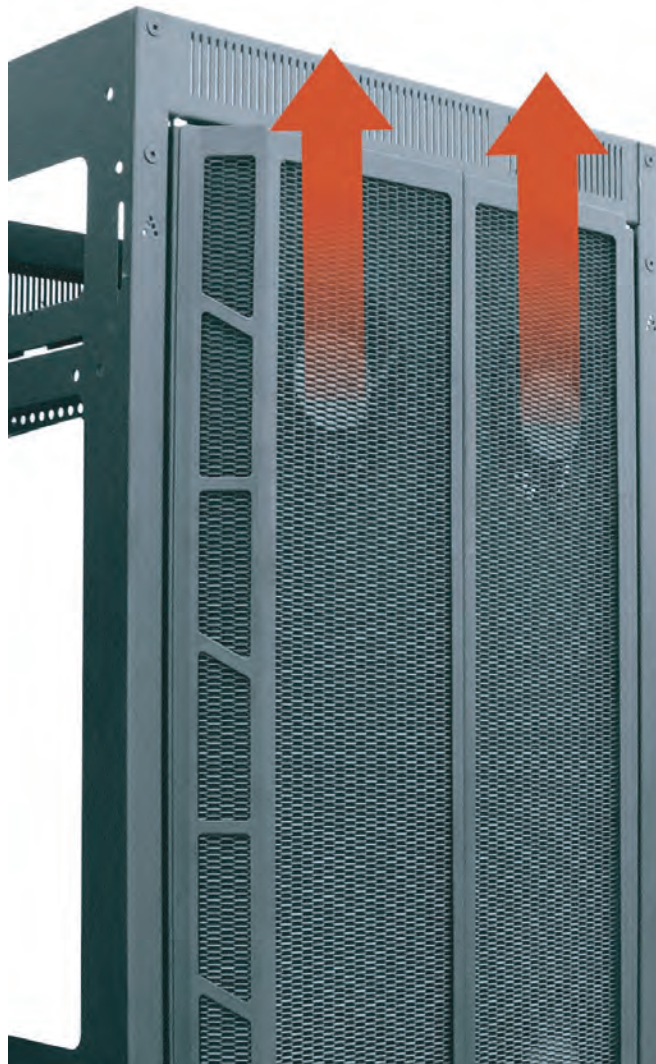


INSTRUCTION SHEET
CFRD SERIES
HIGH CFM SPLIT REAR DOORS



THANK YOU

Thank you for purchasing the CFRD Series High CFM Split Rear Doors. Please read these instructions thoroughly before installing this product.

PRODUCT FEATURES

- Unique high flow design removes the hot air from the enclosures and directs it upward toward the air returns
- Pre-configured at the factory with six 6" fans providing a total of 1,320 CFM of air movement
- Pre-wired for an additional ten (10) 6" fans (16 in total) that can be added to boost total air movement up to 3,520 CFM
- Fans can be repositioned for optimal heat removal

FITS:

44 SPACE DRK SERIES
42 & 45 SPACE WMRK SERIES
44 SPACE WRK-SA, WRK, MRK, VRK

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow all instructions
- Do not use this apparatus near water
- Clean only with dry cloth
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus
- Only use attachments/accessories specified by the manufacturer
- Unplug this apparatus during lightning storms or when unused for long periods of time
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



DANGEROUS VOLTAGE

The lightning flash with the arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons



ATTENTION

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

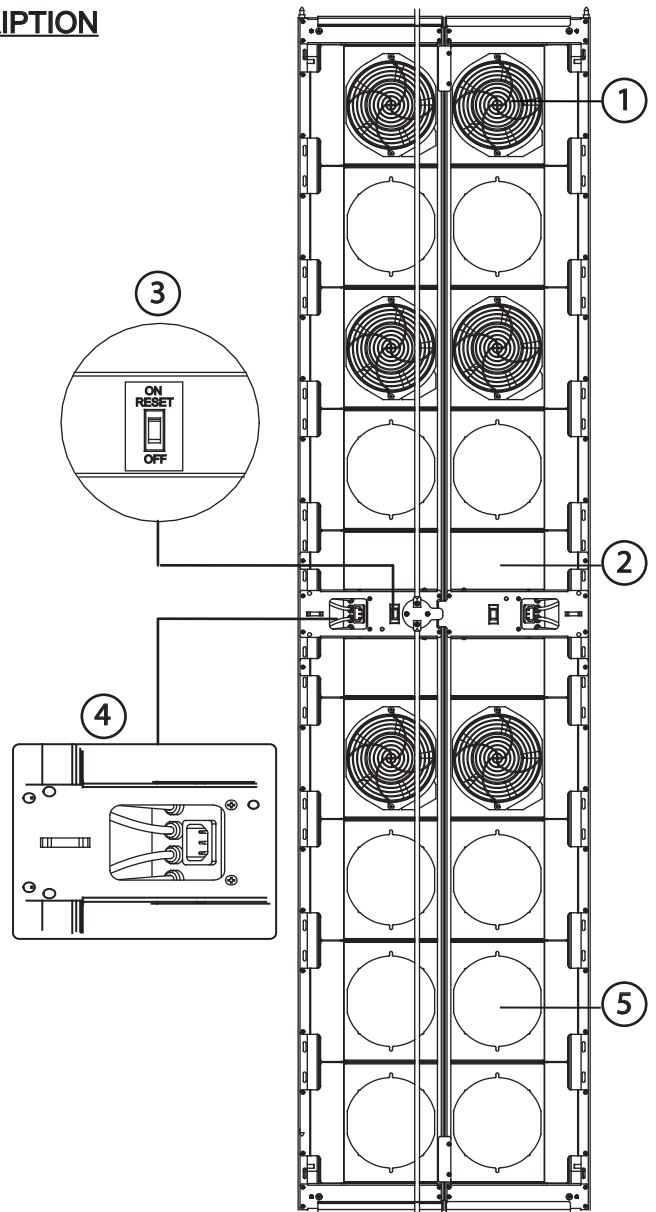
- **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT USE ANY FAN CONTROL DEVICE OTHER THEN THOSE SPECIFIED BY THE MANUFACTURER**
- **WARNING: TO REDUCE THE RISK OF AN ELECTRIC SHOCK, DO NOT EXPOSE TO WATER, RAIN OR MOISTURE**
- **WARNING: THIS APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES SHALL BE PLACED ON THE APPARATUS**
- **WARNING: MUST BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION**
- **WARNING: THE MAINS PLUG OR AC INLETS USED AS THE DISCONNECT DEVICES SHOULD REMAIN READILY ACCESSIBLE**
- **CAUTION: NO USER SERVICEABLE PARTS**
- **CAUTION: FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS**
- **CAUTION: TO REDUCE THE RISK OF INJURY DISCONNECT ALL MAIN POWER CONNECTIONS FROM EACH DOOR BEFORE PERFORMING ANY MAINTENANCE OPERATIONS**
- **NOT FOR USE IN COOKING AREAS**
- **FOR USE IN NON FIRE-RATED INSTALLATIONS ONLY**
- **DO NOT OPERATE ANY FAN WITH A DAMAGED CORD OR PLUG**
- **DO NOT RUN CORD UNDER CARPETING. DO NOT COVER CORD WITH THROW RUGS, RUNNERS OR SIMILAR COVERINGS. ARRANGE CORD AWAY FROM TRAFFIC AREA AND WHERE IT WILL NOT BE TRIPPED OVER**

SPECIFICATIONS					
FAN QTY	VOLTAGE VAC @ 60 Hz	TOTAL CURRENT (A)	TOTAL POWER WATTS	AIRFLOW (CFM) M ³ / MIN	DbA
6	120	2.4	288	1320 [37.4]	64.0
7	120	2.8	336	1540 [43.6]	64.7
8	120	3.2	384	1760 [49.8]	65.2
9	120	3.6	432	1980 [56.0]	65.8
10	120	4.0	480	2200 [62.3]	66.2
11	120	4.4	528	2420 [68.5]	66.6
12	120	4.8	576	2640 [74.7]	67.0
13	120	5.2	624	2860 [80.9]	67.3
14	120	5.6	672	3080 [87.2]	67.7
15	120	6.0	720	3300 [93.4]	68.0
16	120	6.4	768	3520 [99.6]	68.2

NOTE: dBA measured one meter away centered vertically and horizontally from doors

PHYSICAL DESCRIPTION

- ① 6" FANS, PRE-CONFIGURED AS SHOWN (QTY 6)
- ② ADJUSTABLE HALF-HEIGHT PANELS (QTY 4)
- ③ 15 Amp POWER SWITCH/CIRCUIT BREAKER (QTY 2)
- ④ IEC 15 Amp C14 INLETS (QTY 2)
- ⑤ ADJUSTABLE PANELS (QTY 16)
(10 BLANK, 6 FAN ≡ 16 PANELS)
- ⑥ 48" NEMA 5-15P IEC POWER CORD (QTY 2)



44 SPACE DOOR INSTALLATION

NOTE: Only 44 SPACE DOORS require Stop Brackets.
If you do not have a 44 Space Door please proceed to Page 5.

TOOLS REQUIRED

5/16" Wrench
#2 Phillips Head Driver

ASSEMBLY

TOP STOP BRACKET

- 1) Remove the bottom bolts on the enclosure's top knockout panel using a 5/16" wrench (FIGURE A).
- 2) Install the provided Stop Bracket as shown using two (2) of the provided #2 Phillips Head Screws (FIGURE B).

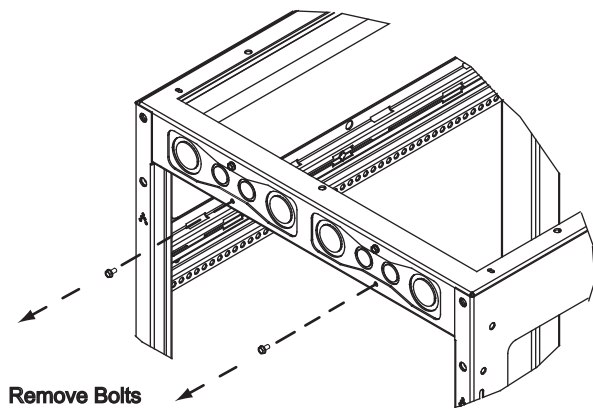


FIGURE A

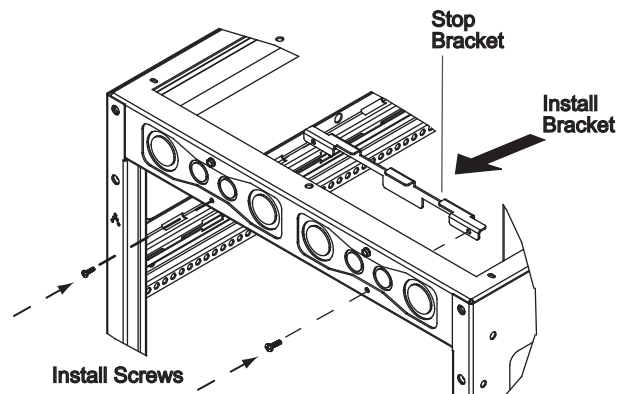


FIGURE B

BOTTOM STOP BRACKET

- 3) Remove the top bolts on the enclosure's bottom knockout panel using a 5/16" wrench (FIGURE C).
- 4) Install the Stop Bracket as shown using two (2) of the provided #2 Phillips Head Screws (FIGURE D).

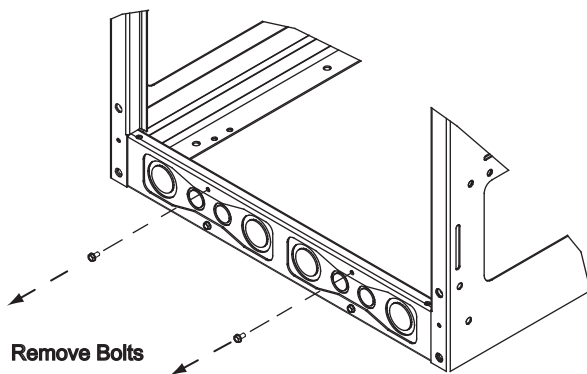


FIGURE C

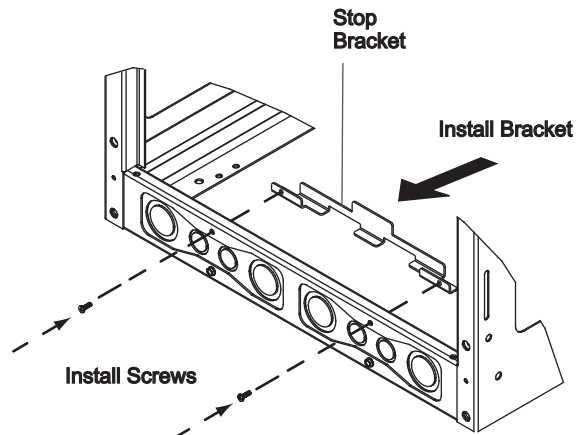


FIGURE D

INSTALLING THE DOORS ONTO THE ENCLOSURE

(REAR VIEW)

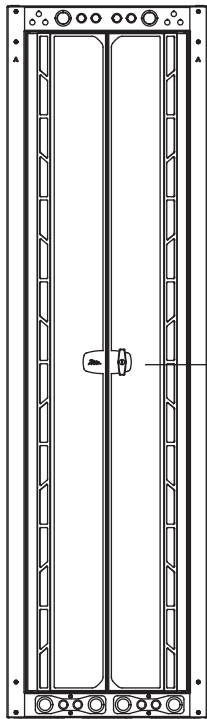


FIGURE E

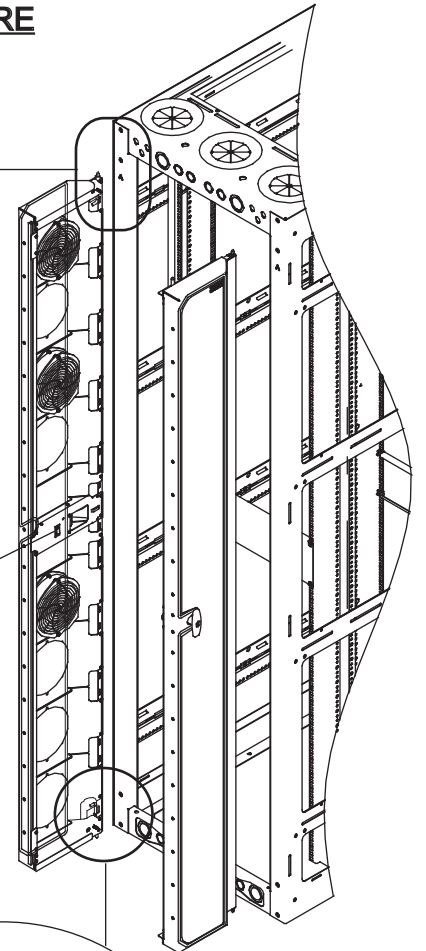
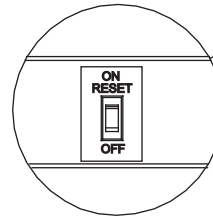
IMPORTANT NOTE

To ensure proper upward air flow, the door with the handle must be installed on the **RIGHT** side of the enclosure.

DOOR WITH
HANDLE
(RIGHT SIDE)

FIGURE G

FIGURE H



TIP: Locate the Upper and Lower Hinges on the doors. Begin the assembly with the Lower Door Hinge.

LOWER DOOR HINGE

- 1) Pull the hinge pin upward and tilt the door to align the pin tip with the lower pivot hole on enclosure. Release the pin into the hole (FIGURE F).

UPPER DOOR HINGE

- 2) Depress the upper hinge pin and tilt the door to align the pin tip with the upper hinge pin pivot hole. Release the pin into the hole (FIGURE G).



To avoid pinching or damaging cabling, route all cables/cords in a manner that will not damage them when opening or closing the doors.

- 3) Push the SWITCH/CIRCUIT BREAKER to the RESET/ON position to turn the fans on (FIGURE H).



In the event of an overload or short-circuit, the assembly is protected by the Circuit Breaker Switch (FIGURE H).

- 4) Bonding Studs are provided on the top and bottom of both doors to enable chassis bonding. Bonding Conductors are not included.

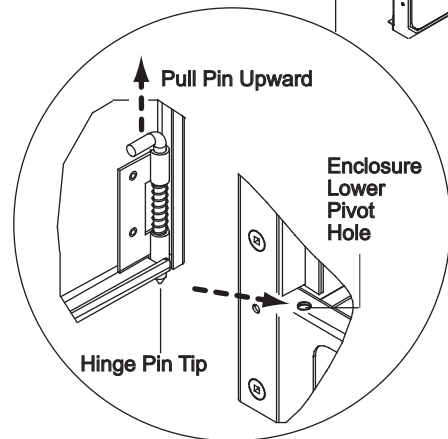


FIGURE F

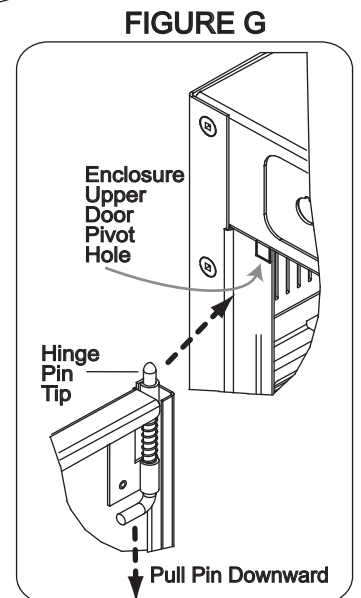
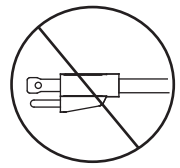


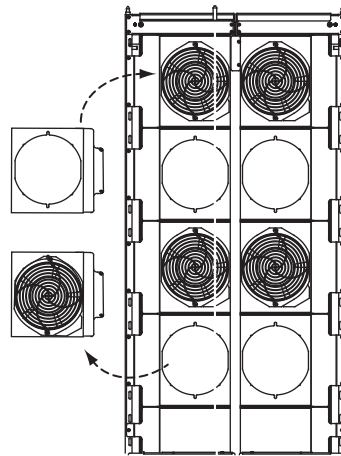
FIGURE G



REMOVE THE POWER TO THE DOOR PRIOR TO RELOCATING THE FANS



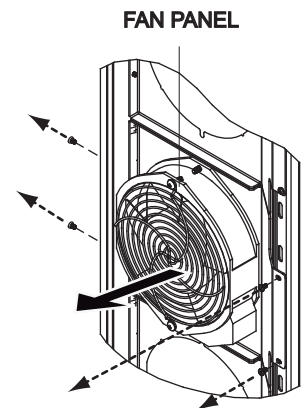
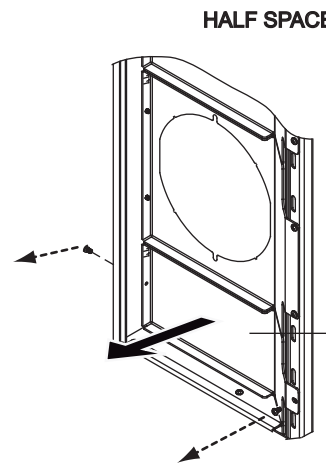
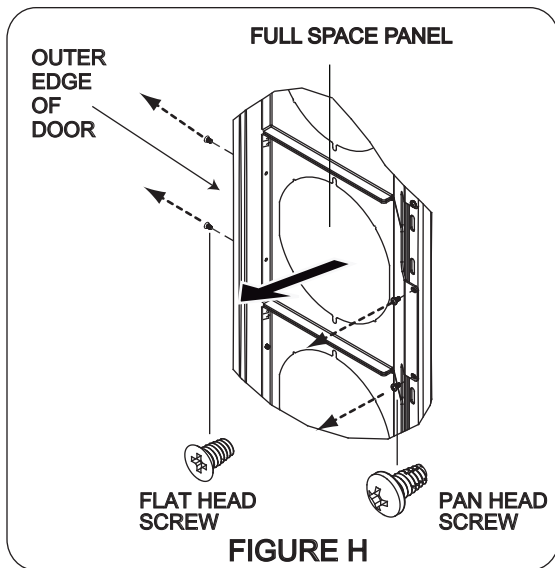
RELOCATING THE FANS ON THE DOORS



NOTE: INSTALLATION AND REMOVAL OF PANELS IS TYPICAL ON BOTH DOORS

REMOVE PANELS

- 1) To remove the panels, remove the screws that are holding the panel(s) in place. Full Space Panel (FIGURE H), Half-Space Panel (FIGURE J), and Fan Panel (FIGURE K);



RE-INSTALL PANELS

- 2) Re-position the Fan (Fan Panel) and the Blank Panel/Half Panel in the desired new locations and reinstall the screws (FIGURE L). **NOTE: Do not substitute preinstalled hardware.**

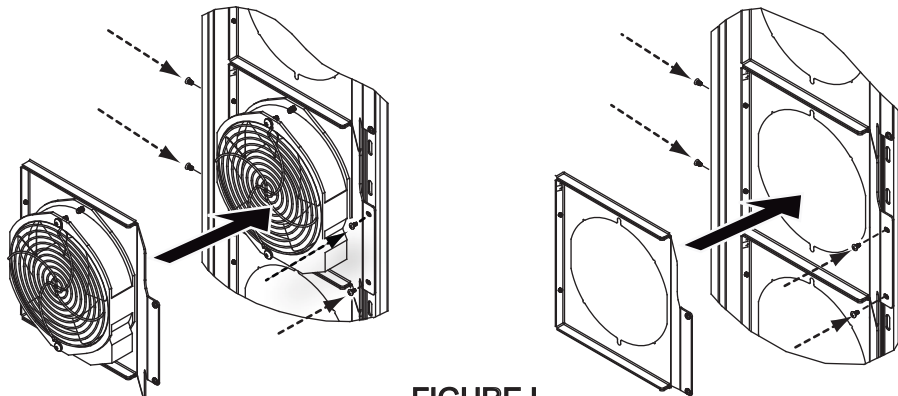
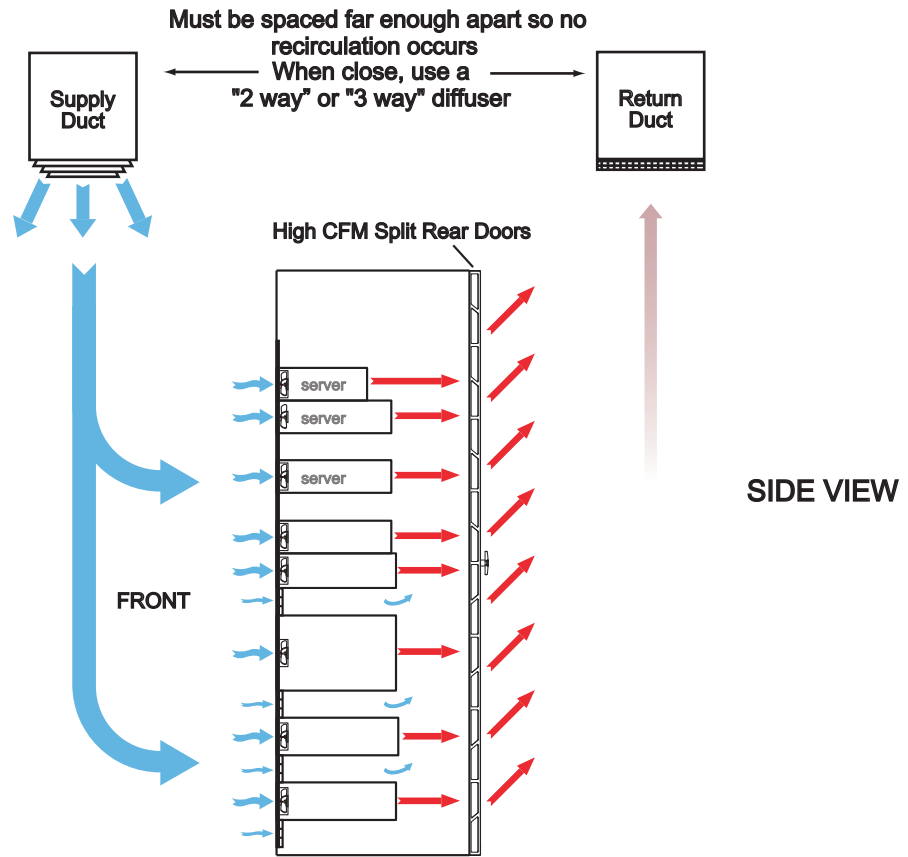


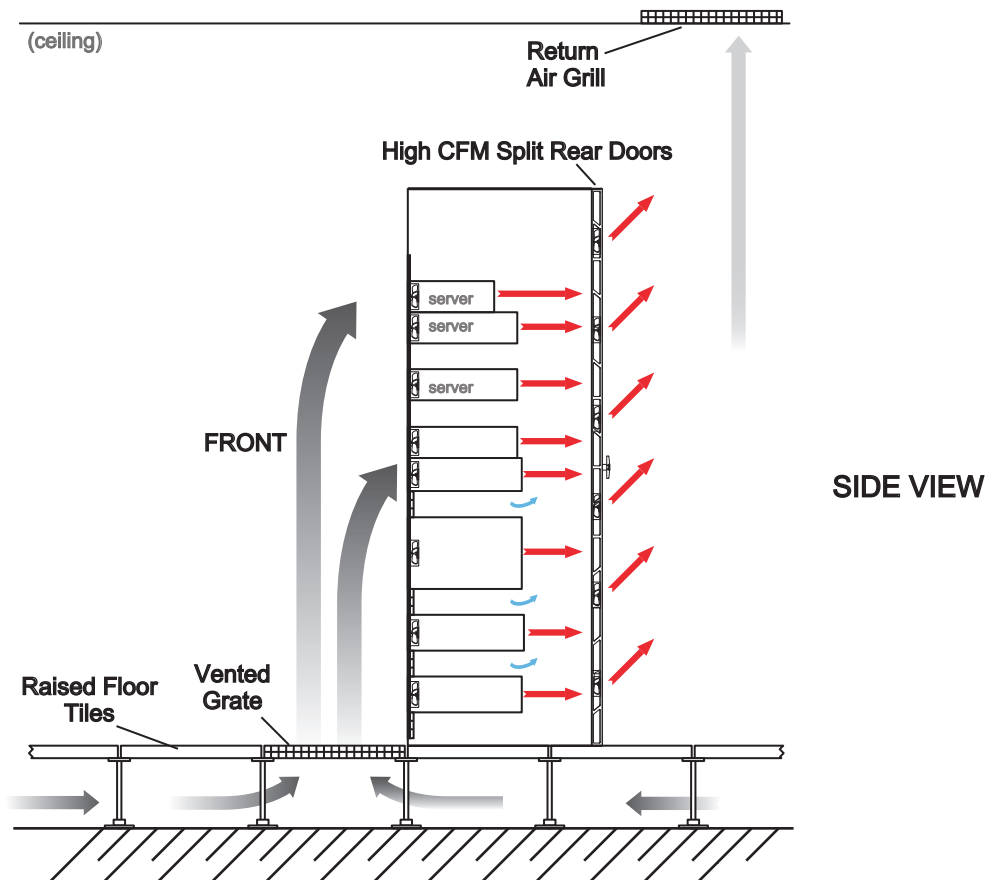
FIGURE L
Page 6

APPLICATIONS

1) Proper Air Conditioning Airflow And Rack Placement

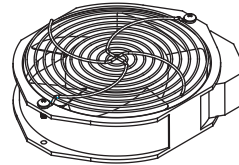


2) Properly Forced Air Through A Raised Floor and Vented Floor Grate. Enclosure contains High Density Computer Servers.



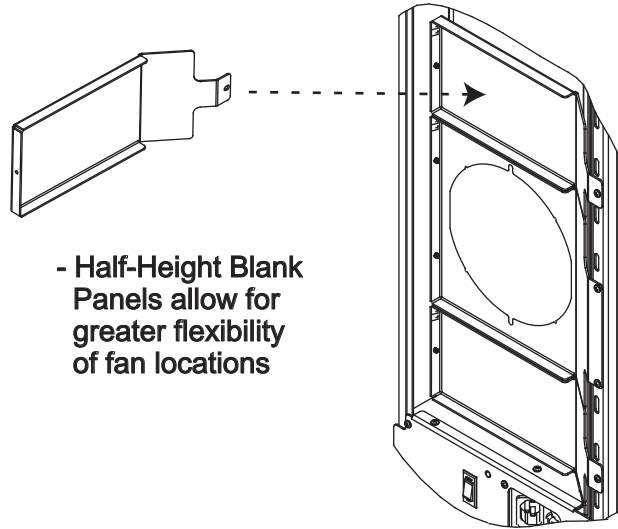


- Additional 6" fan for the High CFM Rear Door.



PART NUMBER:
MWCFRD-FKIT-compatible with all CFRD Series;

- Half-Height Blank Panels for HIGH CFM Split Rear Doors.



- Half-Height Blank Panels allow for greater flexibility of fan locations

PART NUMBERS:

- MWCFRD-1/2PNL-45 for MW-CFRD-45
- MWCFRD-1/2PNL-44 for MW-CFRD-44
- MWCFRD-1/2PNL-42 for MW-CFRD-42
- DCFRD-1/2PNL-44 for D-CFRD-44

WARRANTY

Middle Atlantic Products, Inc. (the "Company") warrants the CFRD Series High CFM Split Rear Doors be free from defects in material or workmanship under normal use and conditions for a period of (3) three years from date of shipment by the company. The Company's entire liability to the purchaser, and the purchaser's (or any other party's) sole and exclusive remedy, under this warranty shall be limited, at the Company's option, to either (a) return of and refund of the price paid for, or (b) repair or replacement at the Company's factory of the products purchased, or any part or parts thereof, which the Company has determined to be defective after inspection thereof at the Company's factory. This warranty does not cover damage due to acts of God, accident, misuse, abuse or negligence by parties other than the Company, or any modification or alteration of the products. In addition, this warranty does not cover damage due to improper handling, assembly, installation or maintenance.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL THE COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF THE PRODUCTS PURCHASED, EVEN IF THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE COMPANY'S LIABILITY TO THE PURCHASER (OR ANY OTHER PARTY) HEREUNDER, IF ANY, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCTS PAID TO THE COMPANY.

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At Middle Atlantic Products we are always listening. Your comments are welcome.

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