Installation Instructions

Ceiling Zone Enclosures

CZE-242412A

CZE-242412WB

CZE-242412PP

Enclosures are designed for distribution of low voltage cabling only.

(1) The ceiling tile grid system must be installed prior to the installation of this enclosure This enclosure is designed to be hung from (4) 3/8" threaded rods attached to the building structure in accordance with local codes and regulations. All conduit and field wiring to be done by trained service personnel.

(2) A1222-HR and A1024-HR are AC Power ready and includes 9 CFM fan with transformer. 115 volt circuit/duplex receptacle to be provided by electrical contractor and wired to the externally mounted receiving box provided. Wire and install as per local code requirements.

Note: Model numbers above are designed to accept INLET and/or OUTLET cables from either end. The maximum number of cables per penetration should not exceed 16- 25 pair, 96-4 pair copper, and/or 96-4 fiber cables. These units require fire rated cable penetration foam kits (included). These kits are designed for simple (in the field) installation. Installation instructions are included as Exhibit "A" incorporated in these instructions.

■ **Assembly Components**

1 ea. - Zone Cabling Ceiling Enclosure
2 ea. - Knob Assemblies (factory installed on the Access Door)
1 ea. - Equipment Mounting Plate
(factory installed on the Access Door)
1 ea. - 2U-DMHR Equipment Mounting Assembly (for mounting of hubs, switches, & patch/punch down panels.
2 ea. - FP-B33-25 Plenum Rated Foam Kits
Air intake/exhaust port covers
(factory installed on the A1222-HR)
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NOTE: Parts 3-8 are located inside the enclosure

■ **Installation Tools and Supplies to be provided by Installer**

1. Plum Bob
2. Adjustable Wrenches
3. Screw Drivers
4. Drill with Assorted Bits
5. Utility Knife
6. Straight Edge
7. (4) 3/8 inch threaded rods (P/N 11440-001) and hardware as approved by local codes
8. 8 ea. #6 X ½" sheet metal screws (Models A1222-HR & A1024-HR)
9. Miscellaneous hardware as required by specific location requirements

STEP 1

Opening the Shipping Box and Removal of the Ceiling Enclosure

- Prepare a location for the ceiling enclosure to be positioned for inspection after removal from the shipping container. The ceiling tile receiving rails around the equipment ACCESS DOOR are designed to hold the ceiling tile in place prior to and after installation. After the ceiling enclosure is properly installed, the outside surfaces of these rails will be exposed to the workspace below the ceiling tile. For appearance purposes, the outside surfaces of these rails should be protected from denting and scratching. Remove the ceiling enclosure from the shipping container and place it on its side. This will protect the rails from damage.

  CAUTION: The ACCESS DOOR located on the ceiling enclosure should be latched shut in the closed position. Make sure the knobs are in the closed position when lifting the enclosure out of the box to ensure that the door does not swing open.

STEP 2

Equipment Mounting Plate Removal

1. With the ceiling enclosure on its' side, (hinged side down), turn both knobs to allow the ACCESS DOOR to open (downward).

2. The EQUIPMENT MOUNTING PLATE and ASSEMBLY is located on the ACCESS DOOR. Remove the nuts at the top of the EQUIPMENT MOUNTING PLATE, located on the inside of the ACCESS DOOR.

3. Lift the top of the plate to clear the plate retention screws. Remove the EQUIPMENT MOUNTING PLATE and ASSEMBLY from the ACCESS DOOR.

4. Set aside until STEP 5

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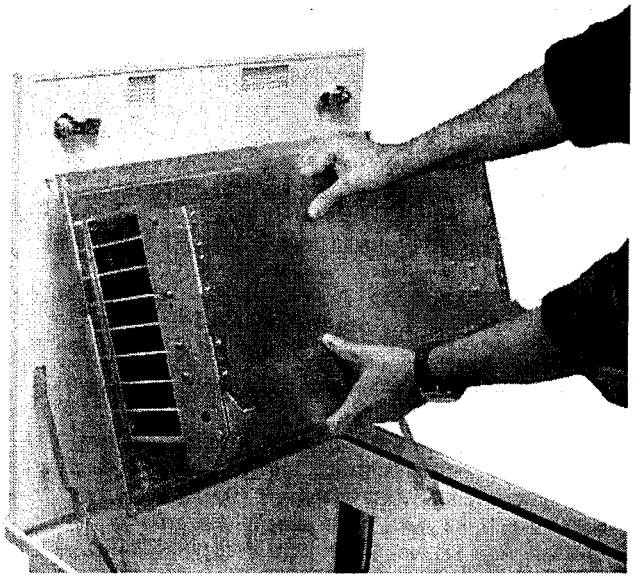
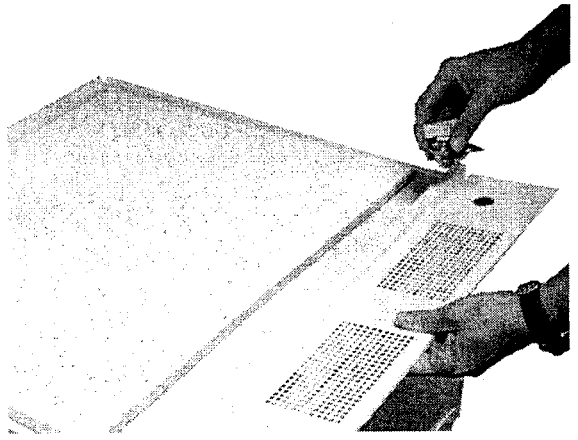


STEP 3A

Cutting & Installing Ceiling Tile on Access Door

1. First remove knob/latch assemblies and then the tile retention rail from the outside of the access door. Mark and cut the access door portion of the ceiling tile so it will fit within the retention rail along all sides of the door

2. If the ceiling tile was cut correctly, the retention rail will fit snug against the ceiling tile when placed on the ACCESS DOOR. Carefully re-attach Retention Rail and Knob/Latch Assemblies to ACCESS DOOR. If locks will be used on the enclosure, install at this time.



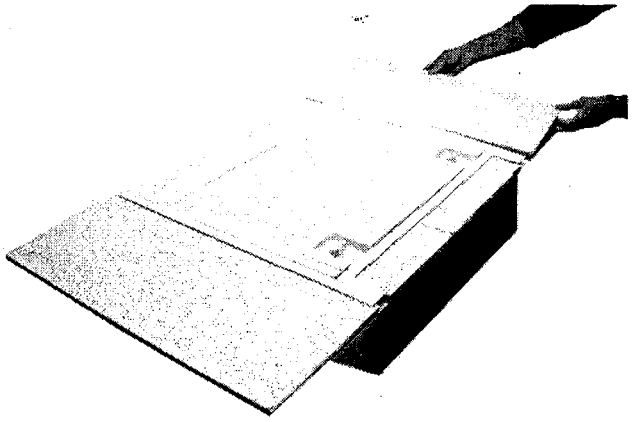
STEP 3B

Mount Ceiling Tile to the Ceiling Enclosure
(A1024 Models Only)

1. Install the ceiling tile to the ceiling enclosure enclosure before mounting the enclosure to the building structure. Measure your cut dimensions approximately 1/8" longer or wider than required. Ensure that the tile cuts are clean and smooth.

2. Mark and Cut the portion of the ceiling tile to be placed on the (4) sides (not including the portion to be used on the face of the door) of the ceiling enclosure. Position tile sections in place.

3. From the back of the face of the ceiling enclosure, insert the ceiling tile retention screws (10 - #6 X ½") through the holes that are pre-drilled. This will hold the tiles in place until the ceiling enclosure is hung from the building structure.



STEP 4

Install the Ceiling Enclosure without the Equipment Mounting Plate/Assembly Attached

- Install four (4) 3/8"threaded rods to the building structure in accordance with standard practices and local codes. Level the enclosure so that the weight of the ceiling enclosure is not born by the ceiling tile grid system. Allow approximately 1/32" space between the grid system and the surface of the ceiling tile mounted on the ceiling enclosure.

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STEP 5

Cabling the Ceiling Enclosure (Inlet & Outlet)

Note: Total weight of cables and apparatus inside enclosure not to exceed 70 lb. The maximum number of cables per penetration should not exceed 96 - 4 pair, 16 - 25 pair copper or 96 - 4 fiber cables

- With the ceiling enclosure in place and supported, install the cables. Install the cables against the back wall of the ceiling enclosure. Secure cables with Saf-T-Grip® Cable Management Straps (P/N 02006-201)

STEP 6

Terminate Cables

NOTE: For A1222-LP and A1024-LP, install blocks on plate prior to termating cables (see step 7A).

- Prepare all cable ends and terminate according to equipment manufacturer's specifications.

STEP 7

Attach Equipment to Mounting Plate

NOTE: Total weight of apparatus mounted on door not to exceed 20 lb, 70 lb total for the enclosure.

7A For Models A1222-LP and A1024-LP

Match drill plate for wiring blocks and attach with sheet metal screws. Complete this step prior to terminating cables.

7B For Models A1222-PP and A1024-PP

Attach patch panels with #12-24 equipment mounting screws (P/N 40605-001) after terminating cables.

7C For Models A1222-HR and A1024-HR

Attach patch panels and switch with #12-24 equipment mounting screws (P/N 40605-001)

STEP 8

Installing the Equipment Mounting Plate to the Access Door

1. Store the cable slack inside the enclosure by forming a "Figure 8" by using the cable retention brackets as a pattern. Secure cables in place by using plastic ties or Saf-T-Grip® Cable Management Straps (P/N 02006-201). The slack cable may also be stored in the ceiling, if allowed by local codes.

2. Re-install the EQUIPMENT MOUNTING PLATE to the ceiling enclosure ACCESS DOOR. Ensure the lip of the EQUIPMENT MOUNTING PLATE firmly seats into the plate retention groove and the two holes at the top of the plate are firmly seated over and onto the plate retention screws. Reinstall the previously removed EQUIPMENT MOUNTING PLATE retention lock nuts. Do not over-tighten lock nuts.

STEP 9

Dress Cables

- Dress cables slack with Saf-T-Grip® Cable Management Straps (P/N 02006-201)

STEP 10

Install Foam Penetration Kits (See Exhibit "A')

STEP 11

Inspection

1. Ensure that the ceiling enclosure enclosure is hung from the building structure using approved threaded rods and is installed according to local code and regulations.

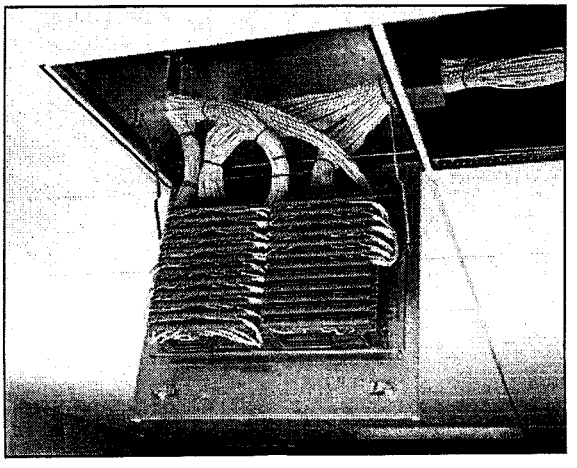
2. Ensure that the facing of the ceiling enclosure enclosure does not bare its weight directly onto the ceiling tiles grid system.

3. Ensure that the cuts and holes on the ceiling tiles are clean and smooth.

4. Ensure that the ACCESS DOOR opens and closes without binding or pinching cables.

5. Ensure that the cable bending radius is within manufacturer specifications.

6. Ensure that the EQUIPMENT MOUNTING PLATE is properly seated and secured to the ACCESS DOOR.



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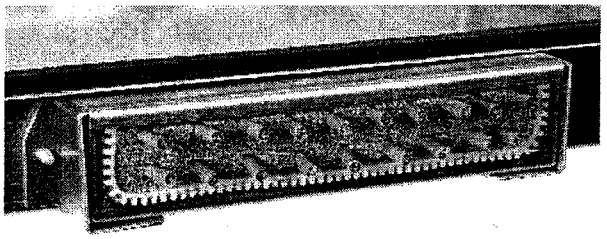

Exhibit " A "

Installation instructions for Installing Fire Penetration Kits

These kits are used to seal the unit with Fire Penetration Foam around installed access cables into the Ceiling Enclosure.

1. Remove the top plate from the first penetration to be cabled.
2. Sort and comb your cables for smooth and straight access through the penetration.
3. Lift the cables and place two layers of foam underneath the cables.
4. Place cables and space so you can insert strips of foam between them firmly to create a seal. Cut foam strips at least 3/8" width to be placed between the cables.
5. Put down a layer of foam and repeat the process until all cables are beaded between layers of foam.
6. Take the remainder of the foam and fill the void to the top of the penetration and compress down with the top plate. Be careful not to bind cables in excess of cable manufacturers specifications. Cables are installed.

Installation hint: We suggest you stagger the cables in their layers to give a better seal. Example: 1st row - 4 cables / 2nd row - 5 cables / 3rd row - 6 cables / 4th row - 5 cables / 5th row - 6 cables and so on.