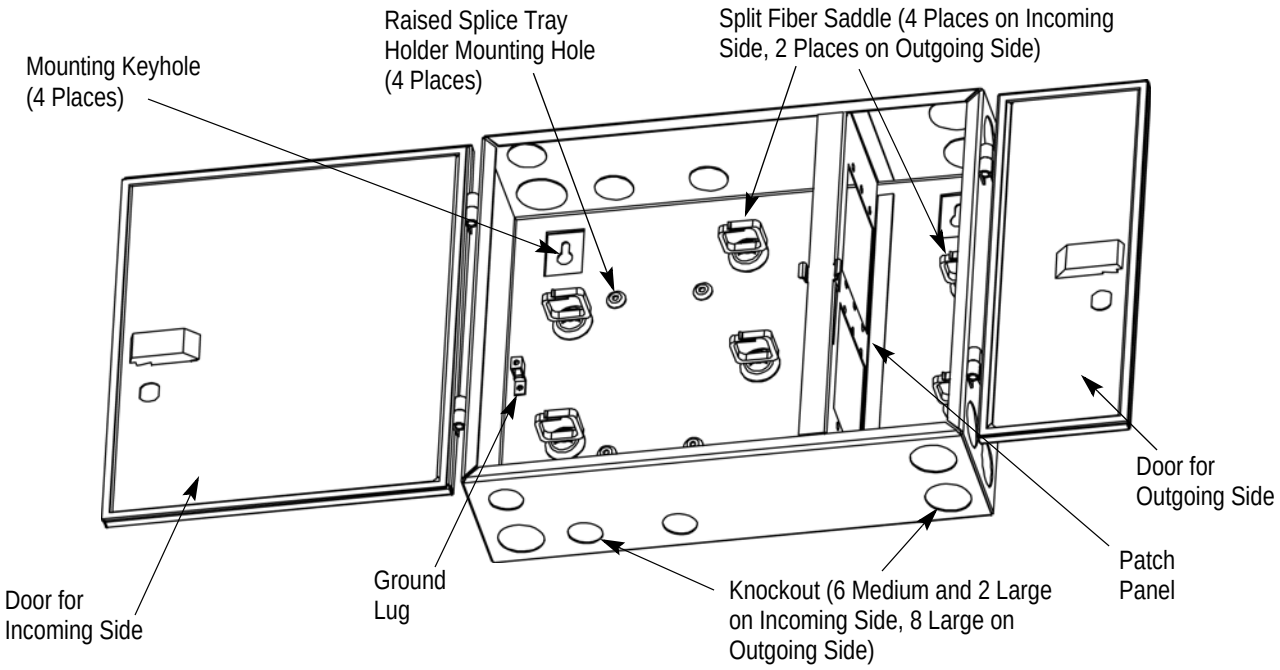

Figure 1

1. INTRODUCTION

Distribution Boxes (DB) 36/72 1278755-[ ] are designed to be used for storage and distribution of fiber optic cables for indoor application. Read these instructions, and referenced instructions, thoroughly before starting installation.

NOTE

Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

2. DESCRIPTION

Each box consists of a chassis with two latching double-hinged doors, four mounting keyholes, and patch panel. The incoming side of the box features a ground lug, four split fiber saddles, six medium knockouts, and two large knockouts, and four raised splice tray holder mounting holes. The outgoing side of the box features two split fiber saddles and eight large knockouts. A laser radiation warning label and four 36-line connector label cards are included.

Box -3 also includes a large cable gland, medium cable gland, and two large rubber grommets.

Box -4 also includes a large cable gland, medium cable gland, two large rubber grommets, and a splice tray holder kit which consists of a splice tray holder, hook-and-loop fastener strap, and four mounting screws.

NOTE

Items included with Box -3 and -4 are also available separately.

The knockouts, when removed, provide openings for cable entry and exit. The rubber grommets are used to protect the cable from damage at the knockout opening, and the cable glands, in addition to protecting the cable, provide a dust and water-resistant seal to the box. Cable routing and support within the box is facilitated by the fiber saddles. The ground lug is used to ground the incoming cable.

The patch panel holds up to six “snap-in” adapter plates and is marked with “A B C” for connector identification.

The ribbed gasket around the perimeter of each door ensures a dust and water-resistant seal when the doors are closed and latched.

3. INSTALLATION

3.1. Mounting the Box (Figure 2)

CAUTION

ALWAYS use safe lifting techniques. NEVER lift more than you can manage comfortably. Lifting guidelines are available from the Occupational Safety and Health Administration (OSHA).

1. Determine mounting location. Allow sufficient room above and below or at the left and right sides (depending on box orientation) for cable entering and exiting the box.

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2. Disengage each latch, and open the doors. Secure the box to the surface with appropriate hardware using the mounting keyholes. Refer to Figure 2 for mounting dimensions.

NOTE

Consult local codes and regulations for recommended mounting hardware.

3. Attach the warning label to the outside of the box in a location that can readily be seen.

Box Dimensions (Not Including Doors)

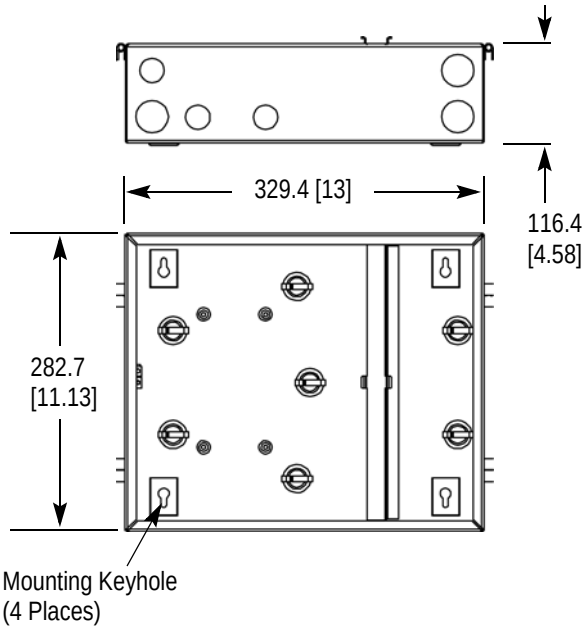


Figure 2

3.2. Installing Adapter Plate onto Patch Panel

1. Position the adapter plate over the upper or lower opening in the patch panel so that the split end of the lock pins align with the holes in the patch panel. See Figure 3.

2. Push the lock pins into the holes until the adapter plate is secure.

3. Follow same procedure for remaining adapter plates.

3.3. Preparing the Cable

DANGER

ALWAYS wear eye protection when working with optical fibers. NEVER look into the end of a terminated or unterminated fiber. Laser radiation is invisible but can damage eye tissue. NEVER eat, drink, or smoke when working with fibers. This could lead to ingestion of fiber particles.

DANGER

BE VERY CAREFUL to dispose of fiber ends properly. The fibers create slivers that can easily puncture the skin and cause irritation.

Installing Adapter Plate

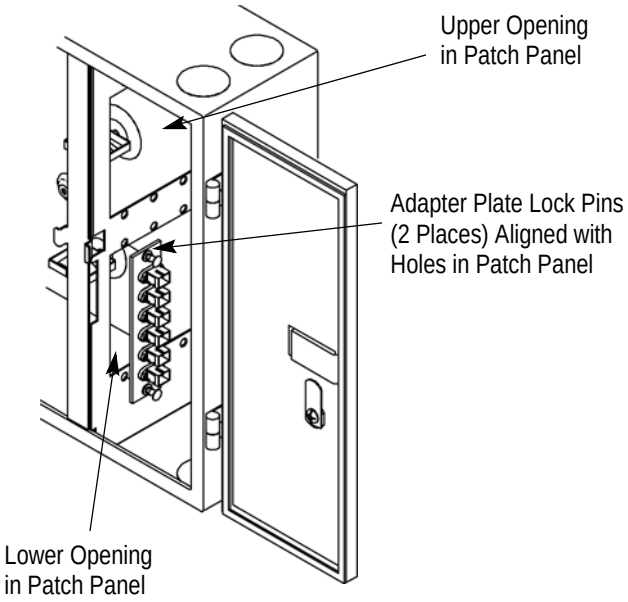
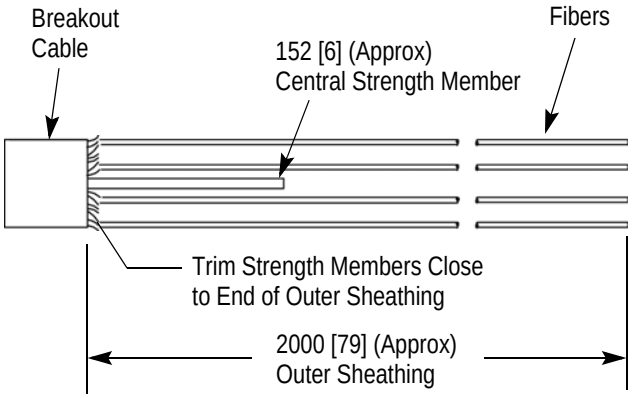


Figure 3

Strip the outer sheathing and cut the central strength member of the breakout cable to the dimensions shown in Figure 4. Trim the strength members close to the end of the outer sheathing. Clean the fibers with an alcohol pad.

Cable Stripping and Cutting Dimensions



Note: Not to Scale

Figure 4

The cable glands and grommets are designed to fit in the knockout openings on the incoming side of the box, and the large cable glands and large grommets are designed to fit in the openings on the outgoing side. The following instructions reflect these options, however, unless required otherwise, it is recommended using cable glands for the incoming side and grommets for the outgoing side. The illustrations reflect this recommendation.

NOTE

It is recommended that grommets be used for multi-cable applications.

Proceed as follows:

A. Installing Cable Gland

1. Select the cable gland according to the outside diameter of the cable.

NOTE

The medium cable gland accepts cable with a maximum outside diameter of 17.78 [.70]. The large cable gland accepts cable with a maximum of 25.4 [1.00].

2. Remove the knockout from the box that corresponds with the size of the cable gland.

3. Remove the locknut from the cable gland, and set aside. Remove the compression ring, washer, and rubber bushing from the gland body. Refer to Figure 5, Detail A. Peel the layers from the inside of the rubber bushing until the inside diameter of the bushing corresponds with the outside diameter of the cable.

4. Slide the compression ring (threaded end facing stripped end of cable), washer, rubber bushing, and gland body (threaded end facing stripped end of cable) onto the cable until there is at least 9.52 [.375] of the cable jacket extending from the end of the gland body. See Figure 5, Detail B.

5. Screw the compression ring onto the gland body, and tighten.

6. Feed the stripped end of the cable through the knockout opening until the gasket of the gland body is seated on the opening. Slide the locknut over the stripped end of the cable, and secure the locknut to the cable gland. See Figure 5, Detail C.

B. Installing Grommets

1. Slide the grommet onto the stripped end of the cable until there is at least 9.52 [.375] of the cable jacket extending from the grommet.

2. Remove the large knockout from the box.

3. Feed the stripped end of the cable through the knockout opening until the grommet is seated on the opening. Fit the grommet into the opening until the grommet is secure. See Figure 6.

3.4. Routing the Cable

Use the following guidelines when installing and routing the cable in the box. Whatever method is used, make sure that it not only meets the application needs, but also conforms to local codes and standards:

- Allow enough cable in the box for the service loop and cable routing

Installing Cable Gland

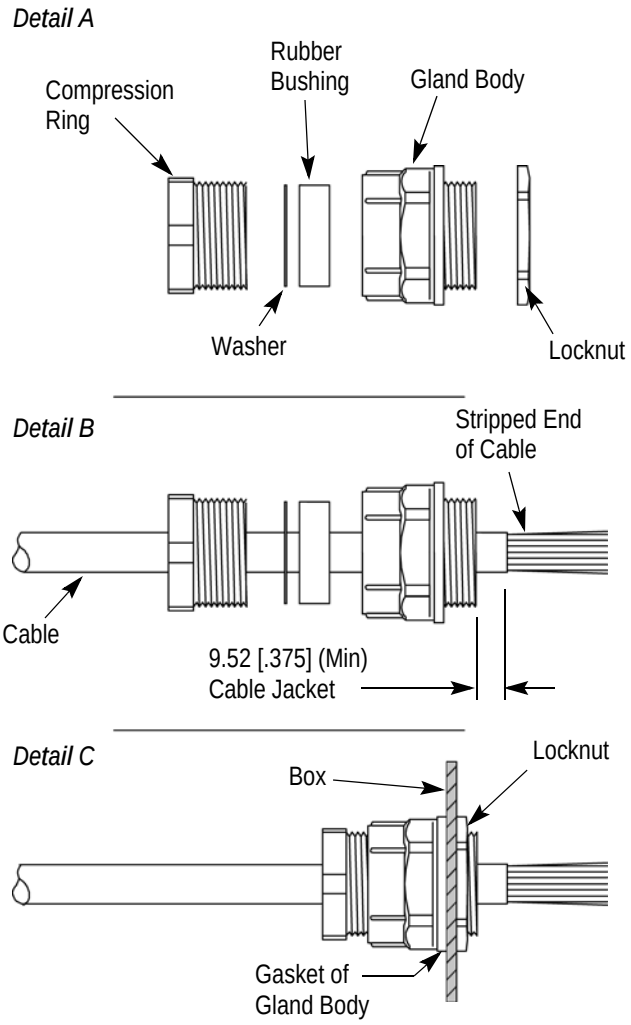


Figure 5

Installing Grommet

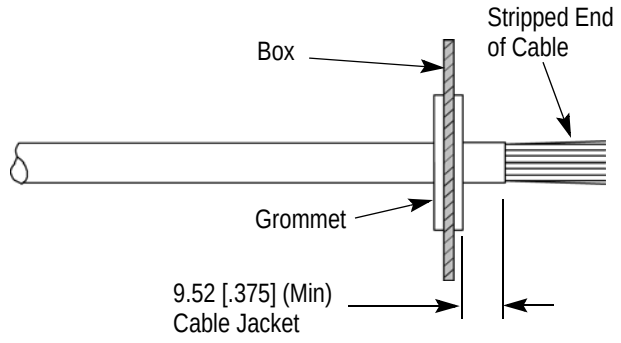


Figure 6

- Coil excess cable around fiber saddles
- Keep bend radii of cable as large as possible (always follow manufacturer's minimum bend radius)

CAUTION

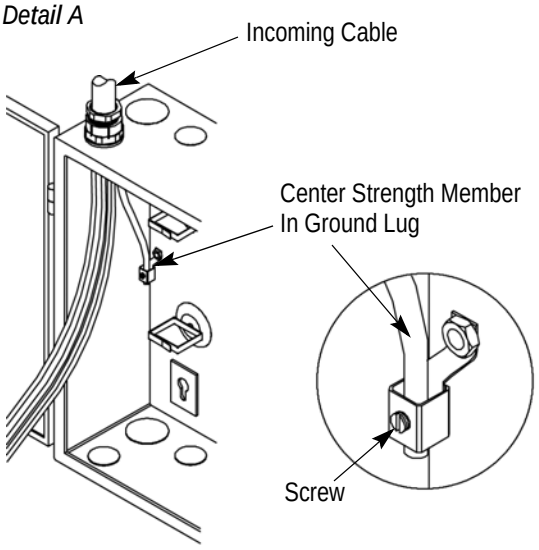
Do NOT exceed minimum bend radii for the cable or fiber. ALWAYS avoid placing fiber under tension or torsion.

A. Incoming Cable

1. Insert the center strength member from the incoming cable into the ground lug. Tighten the ground lug screw firmly. See Figure 7, Detail A.

Routing Incoming Cable

Detail A



Detail B

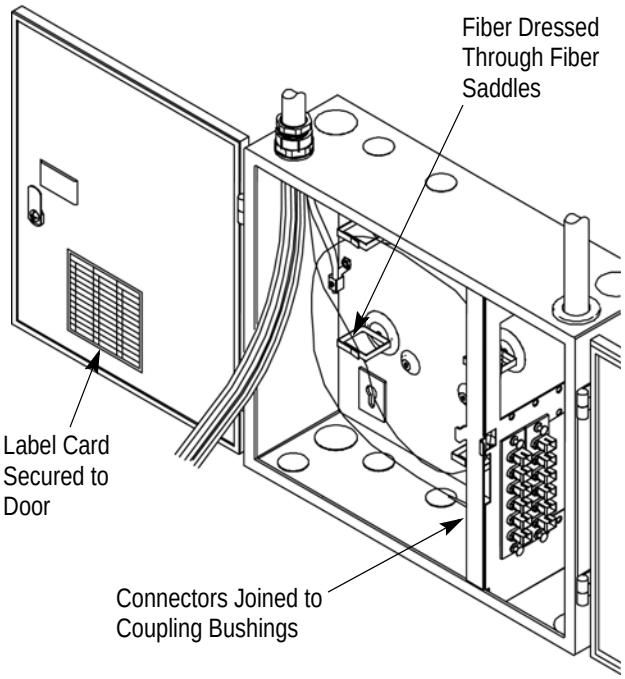


Figure 7

2. Dress fiber through the fiber saddles.

3. Terminate the fibers to the connectors according to the instructions supplied with the connectors.

4. Join the connectors to the coupling bushings, starting at either end of the adapter plate. Make sure that each connection is secure. See Figure 7, Detail B.

5. Record connector positions using the label cards, then secure the label cards to the inside of the box door. See Figure 7, Detail B.

NOTE

It is recommended to locate one label above and one label below the latch to designate which adapter plate the label pertains to.

B. Outgoing Cable

1. Dress fiber through the fiber saddles.

2. Terminate the fibers to the connectors according to the instructions supplied with the connectors.

3. Join connectors to the coupling bushings, starting at either end of the adapter plate. Make sure that each connection is secure. See Figure 8.

4. Record connector positions using the label cards, then secure the label card to the inside of the box door. See Figure 8.

NOTE

It is recommended to locate one label above and one label below the latch to designate which adapter plate the label pertains to.

Routing Outgoing Cable

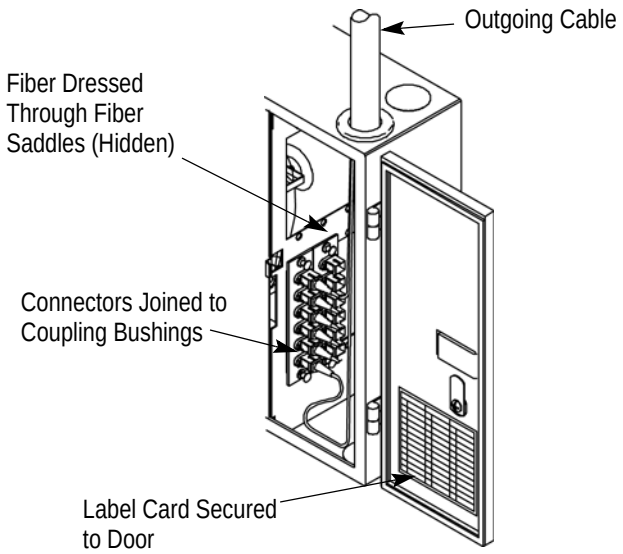


Figure 8

3.5. Splicing the Cable

1. Install the splice tray holder onto the incoming side of the box according to instruction sheet 408-8375 provided with the splice tray holder kit.

2. Install and route fibers according to instruction sheet 408-8376 provided with the splice tray assembly. Label fibers according to local practices.

3. Dress excess fiber through the fiber saddles on the incoming side of the box.

4. Secure the splice tray to the splice tray holder according to instruction sheet 408-8375 provided with the splice tray holder kit.

3.6. Closing and Inspection

Inspect installation according to the following:

— center strength member is fully inserted into ground lug and ground lug screw is tight

— there are no sharp bends or kinks in the fibers

— there are no fibers under tension

— all connectors are fully joined to coupling bushings

— Close the box doors, and inspect closing according to the following:

— gasket around each door is not damaged and tight against rim of chassis

— doors are fully latched

— no cable or fibers are pinched in doors

4. REVISION SUMMARY

Since the previous version of this document, the following changes were made:

- Replaced third-party trademark reference in Section 2.
- Updated document to corporate requirements.