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0170_NAFTA_AEN   Eclipse Hardware Product Family Specification Sheet

1.   Components

- (1) ECL-W3P or (1) ECL-W6P housing
- (12) Cable ties
- (2) Strain-relief brackets
- (4) 6-32 black screws
- (2) Lock nuts
- (1) Hardware kit:
  - (2) 6-32 screws
  - (2) M6 washers
  - (2) U-washers
  - (2) Nuts

- (1) Cable clamp kit:
  - (1) Cable clamp
  - (2) 6-32 flat head screws
  - (1) 10-32 lock washer
  - (1) #10 washer
  - (2) Plastic bases
  - Sand paper
  - Shims (2 each of various sizes)
  - (1) Spacer for smaller diameter cables

2.   Tools and Equipment

In addition to the usual complement of installation tools, you will need 5/16-inch and 3/8-inch nut drivers.

3.   Precautions

⚠ **WARNING: Never look directly into the end of a fiber that may be carrying laser light.** Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

	CAUTION: Cleaved or broken glass fibers are very sharp and can pierce the skin easily. Do not let these pieces of fiber stick to your clothing or drop in the work area where they can cause injury later. Use tweezers to pick up cleaved or broken pieces of glass fibers and place them on a loop of tape kept for that purpose alone. **Good housekeeping is very important.**
	CAUTION: Recommend the use of safety glasses (spectacles) conforming to ANSI Z87, for eye protection from accidental injury when handling chemicals, cables, or working with fiber. Pieces of glass fiber are very sharp and have the potential to damage the eye.
	CAUTION: The wearing of cut-resistant safety gloves to protect your hands from accidental injury when using sharp-bladed tools and armored cable is strongly recommended. Use extreme care when working with severed armor. There will be a sharp edge where armor is cut. To minimize the chance of injury from the cut armor, cover the exposed edge with a wrap of electrical tape. To minimize the chance of injury from sharp-bladed tools, always cut away from yourself and others. Dispose of used blades and armor scrap properly.
	CAUTION: Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

4. Wall-Mounting

Step 1: Select a flat, vertical surface to prevent warping of the unit.

Step 2: Hold the unit in position on the wall and mark the hole locations with a pencil.

Step 3: Drive wood screws or anchors in at the top two locations leaving a 1/8-inch gap between
the mounting surface and screw head. (Hardware used for mounting depends on the
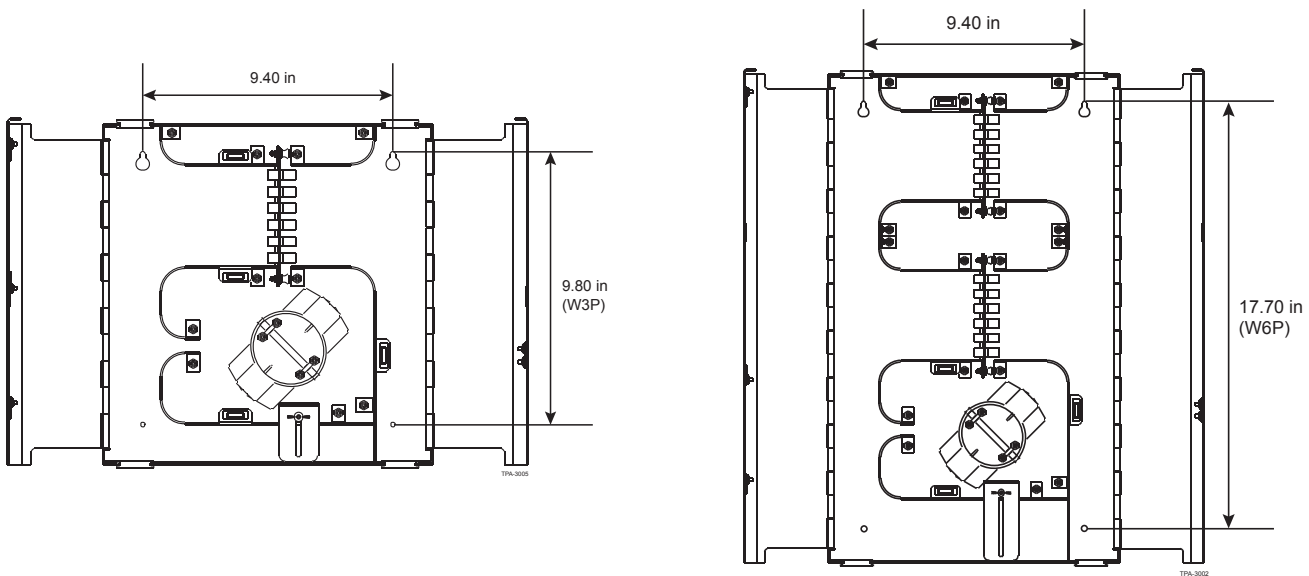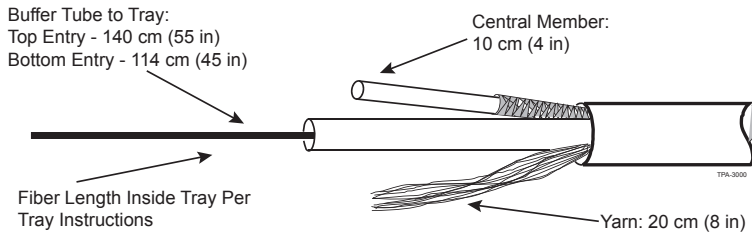

mounting surface.)

Step 4: Place the unit on the mounting hardware and tighten the screws.

Step 5: Drive the two remaining screws through the mounting holes in the bottom of the housing.

5. Opening the Wall-Mount unit

Both the provider and customer door are secured with magnets. To open the door, pull on the flange at the to of the cabinet.

Flange

6. Cable Sheath Removal

Perform cable sheath removal steps as explained in the instructions for the cable type you are installing. Suggested sheath removal lengths are shown.

Buffer Tube to Tray:
Top Entry - 140 cm (55 in)
Bottom Entry - 114 cm (45 in)

Central Member:
10 cm (4 in)

Fiber Length Inside Tray Per
Tray Instructions

Yarn: 20 cm (8 in)

TPA-3000

7. Cable Strain-relief and Grounding

Step 1: Pierce grommet at cable entry location.

Step 2: Feed cable through the grommet.

NOTE: Do not attach the bracket to the unit until you have performed the necessary steps to strain-relieve the cable.

Step 3: Scrape paint off the base of the unit where the cable strain-relief bracket will be installed. Scrape paint off of the strain-relief bracket also to ensure a good connection when the bracket is installed on the unit.

Step 4: Attach the grounding bar (p/n GROUND-KIT-1, ordered separately) to the bracket in the location shown.

Step 5: Connect to the building ground by using a ground wire to link the grounding bar on the unit to the building ground.
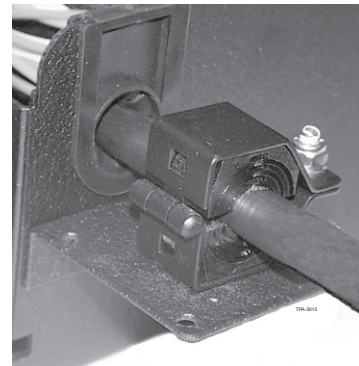

TPA-3011

Ground bar
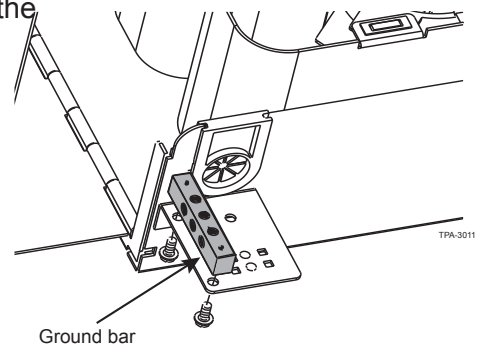
Strain-relieving Cable without Central Member

If the entire length of outside plant cable is routed within an environmentally controlled building (where temperature fluctuation is minimal), strain-relieving the cable sheath with the Universal Cable Clamp (UCC) is adequate.

**Step 1:** Install the cable into the clamp per the instruction provided with the UCC kit.

Step 2: Attach bracket to the housing using the 6-32 screws provided. Slide grommet into position.

TPA-3013

If you are terminating an outside plant cable or temperatures fluctuate widely along any part of the cable, the strength members should be secured. Failing to do so may result in damage to the cable as temperatures vary.

Step 1: Attach the cable to the bracket (with cable ties in two places).

Step 2: Install the 8-32x5/8-inch screw from the front side of the strain-relief bracket through the flat washer and U-shaped washer. Loosely install the hex nut.

Step 3: Wrap the strength member yarn in a clockwise direction around the screw and under the U-shaped washer.

Step 4: Insert the central member of the cable between the flat washer and the U-shaped washer.

Step 5: Tighten the hex nut.

Step 6: If the central member is metallic, place the eye of a ground wire (#6 AWG, purchased separately in appropriate length from any electrical supply store) under the U-shaped washer or under the flat washer.
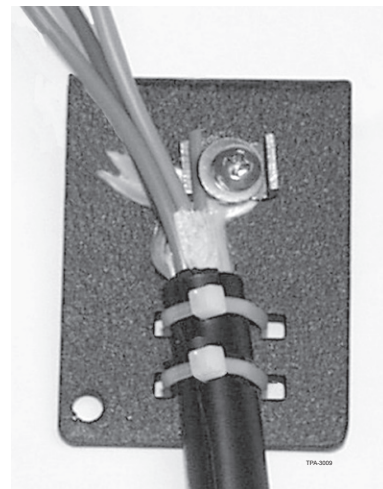
NOTE: The ground wire must have metal-to-metal contact providing an electrical path to the central member in order to properly ground the cable.

Step 7: Attach the other end of the ground wire to the building ground.

Step 8: Trim off the excess yarn and central member.

NOTE: The exposed length of the central member (after strain-relief) is to be less than or equal to 6.5 cm (2 1/2 inches) between the U-shaped washer and the end of the cable sheath.

Step 9: Attach the bracket to the housing using the 6-32 screws provided. Slide grommet in position.

NOTE: Make sure the cable does not bend excessively as it enters the housing.
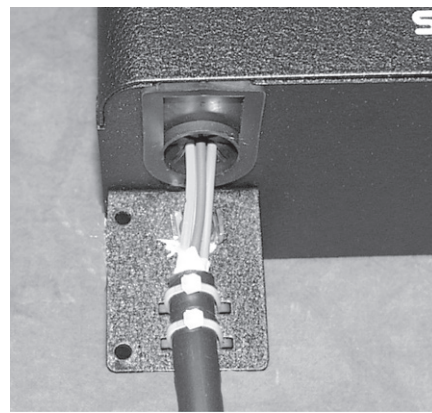
8. Buffer Tube Fan-out

Step 1: If using buffer tube fan-out kits (ordered separately) to transition from buffer tubes to single fibers, follow the instructions provided with the kits.

Step 2: Secure the fan-out bodies to the buffer tube fan-out bracket using a cable tie.

**Step 3:** Fasten the bracket to the housing using (2) lock nuts.
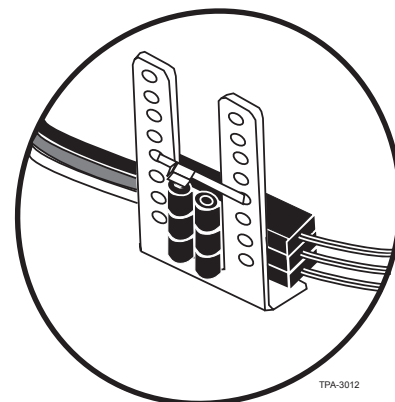
9. Splicing to Pigtails

Step 1: Provide cable slack in the slack storage area.

Step 2: Install pigtail connectors.

Step 3: Label both the cable components and the pigtails with identification tags.

Step 4: Route the cable and pigtails to an appropriate splicing surface and perform steps as described in the instructions for the splice tray and splicing method you are using.

Step 5: Once splicing is complete, route cable slack around the plastic retaining guides inside the storage area and secure the splice tray into the unit using the retainer bracket.
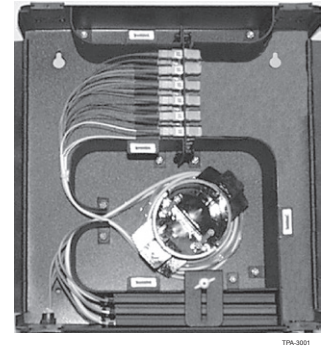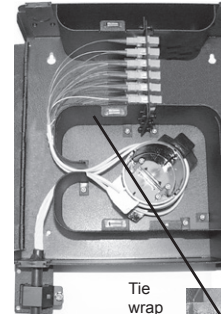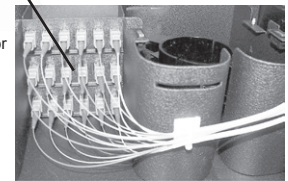
10. Cable Routing

Step 1: Install connectors onto the fibers as per manufacturing instructions, if nessessary.

Step 2: Route the fibers inside the housing using the routing pattern shown, ensuring a minimum bend radius is maintained.

Step 3: Clean adapters annd connectors per standard company practices. Mate connectors in the adapters.

NOTE: A cable tie and anchor can be used to secure the fibers as needed.

11. Jumper Installation

Route the jumpers into the unit through either top or bottom holes in the customer compartment and secure to the strain-relief bracket using cable ties or the UCC.
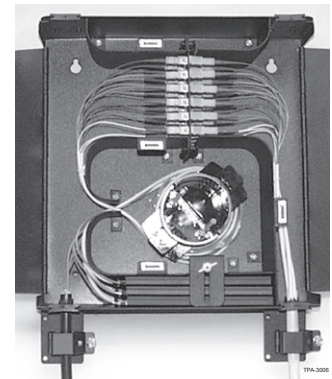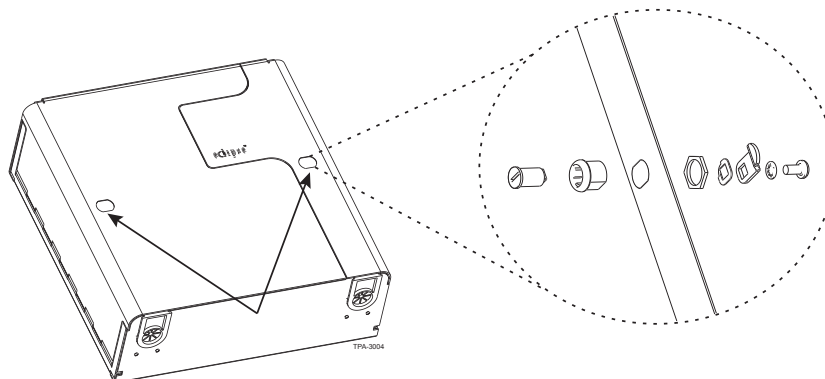
12. Door Lock Installation

Step 1: Remove the double-D knockout from the appropriate door.

Step 2: Using the locking kit (p/n HDWR-LOCK-KIT), assemble the components in the orientation shown.