OCSH

Optimus Cabinet Splice Hub

About This Document

This document describes the Optimus Cabinet Splice Hub (OCSH) in multiple fiber counts and placement styles. Included are cabinet mounting procedures,

General Safety Precautions

Warning: Placing or installing in wet conditions increases the potential for receiving an electrical shock. To prevent a hazardous situation, never install or use electrical equipment in wet conditions or during a lightning storm.

Warning: Before commencing to dig, be sure to check with all local utilities for locating services. Failure to locate cables, pipes and especially power and gas lines could lead to serious injury and service failure.

Danger: Never look directly into the end of any optical fiber.
Never assume the laser power is turned off or dead at the far end.
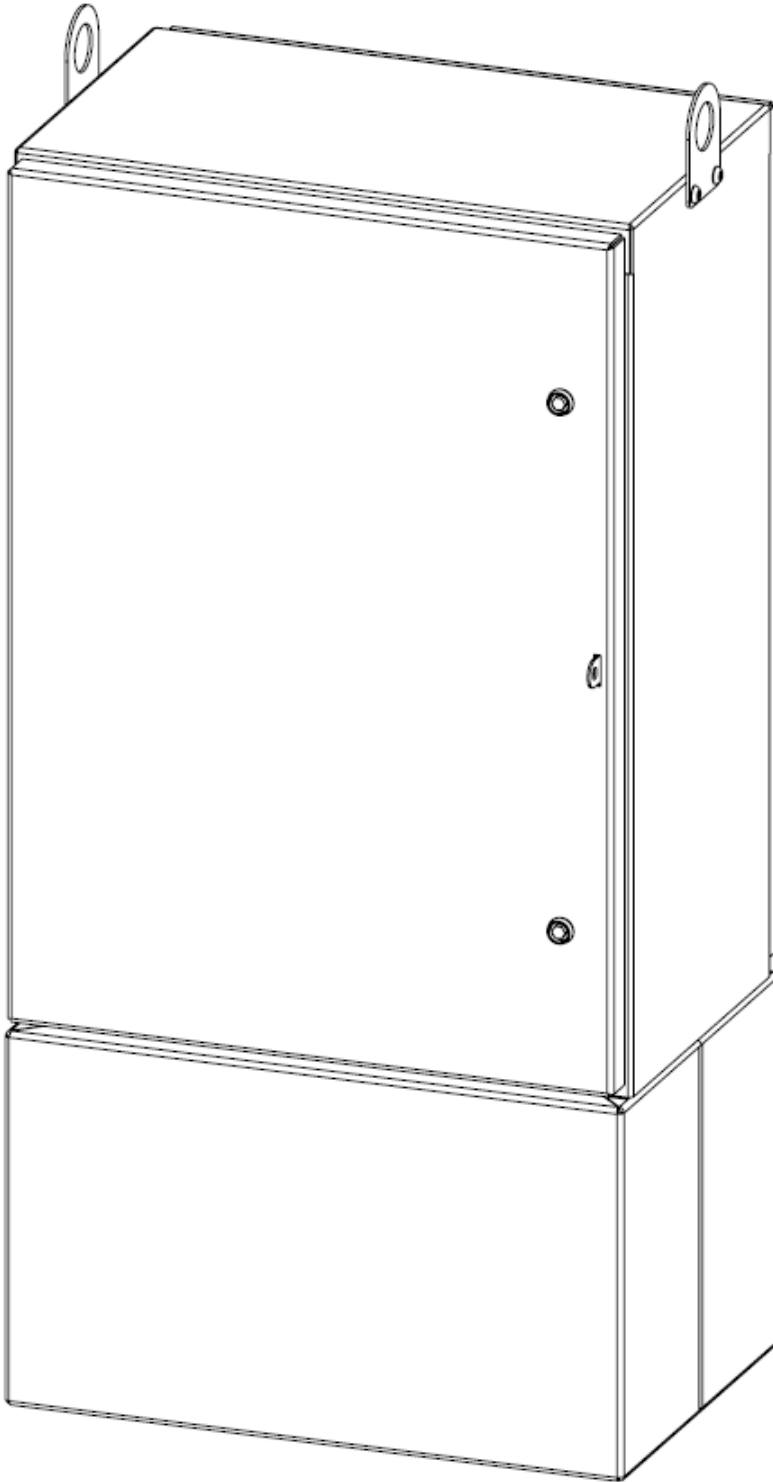
Danger: Stand clear of cabinet during placing operations.
Do not stand in pit or directly under cabinet, as a shift in position can cause serious harm.

Warning: **Use proper lifting equipment when setting or moving the cabinet.**

288F PATCH AND SPLICE CABINET

PLACEMENT OF THE GRADE LEVEL VAULT *(if not already in place)*

Installation Considerations

This Installation Instruction provides general information useful for installing the Channell line of Grade Level Vaults. This guide cannot anticipate all situations that could be encountered in the field and thus represents information applicable to common installation conditions. Please consult local company practice for proper product configuration for each application.
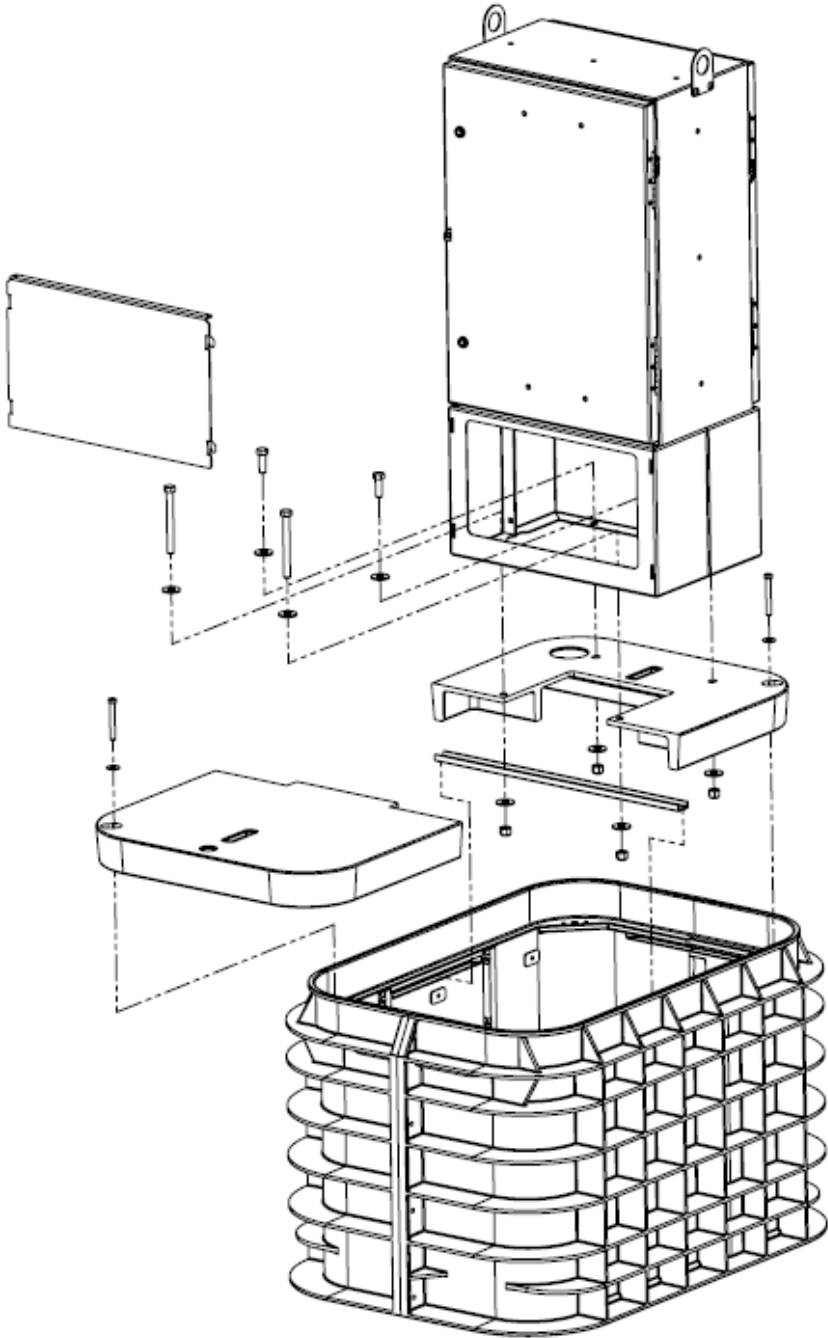
Site Preparation

1. Ensure that all local, state, federal, OSHA and company-specific regulations are met prior to beginning and throughout the installation process.

2. Plan the excavation approximately 12 to 16 inches larger in length and width than the actual dimensions of the ground box to be installed.

3. Excavate the hole 6 to 8 inches in depth more than the overall height dimension of the ground box with the cover in place. Tamp the floor of excavated pit using either a hand tamp tool and/or a mechanical tamper.

4. Place 5 to 6 inches of 3/4" crushed rock over the entire floor. The rock should be free of soil and other organic matter. This important step prevents the vault from subsiding over time, aids in drainage, and provides a solid foundation for the ground box.

   a. As an alternative, a dry mix of cement and crushed rock in a 1:10 ratio may be used to form a higher strength foundation.
   b. NOTE: Do not use "pea gravel" or other "round stone" for this step.

5. a. Place the ground box body into the pit.
   b. Center the ground box body in the excavated pit parallel to the sidewalk and/or curb if applicable.
   c. Level and adjust the height of the ground box to grade, as required, by adding more crushed rock.

6. Place the cover on the ground box to prevent the backfill soil from entering the inside of the ground box.

   The cover should be level with the ground. Bolting of the cover is recommend but is not a requirement for this step; however, the cover must always be bolted down prior to departure of the site.

7. The excess soil removed from the excavated pit shall be used during the backfill of the pit. The backfill shall be tamped continuously during the filling process to prevent settling around the sides of the ground box.

   During the process of filling soil around the ground box, stones that are 3" and larger shall be removed from the soil and not used.

8. The final backfill shall be tamped with a slope away from the ground box. All excess backfill material shall be removed from the installation site.

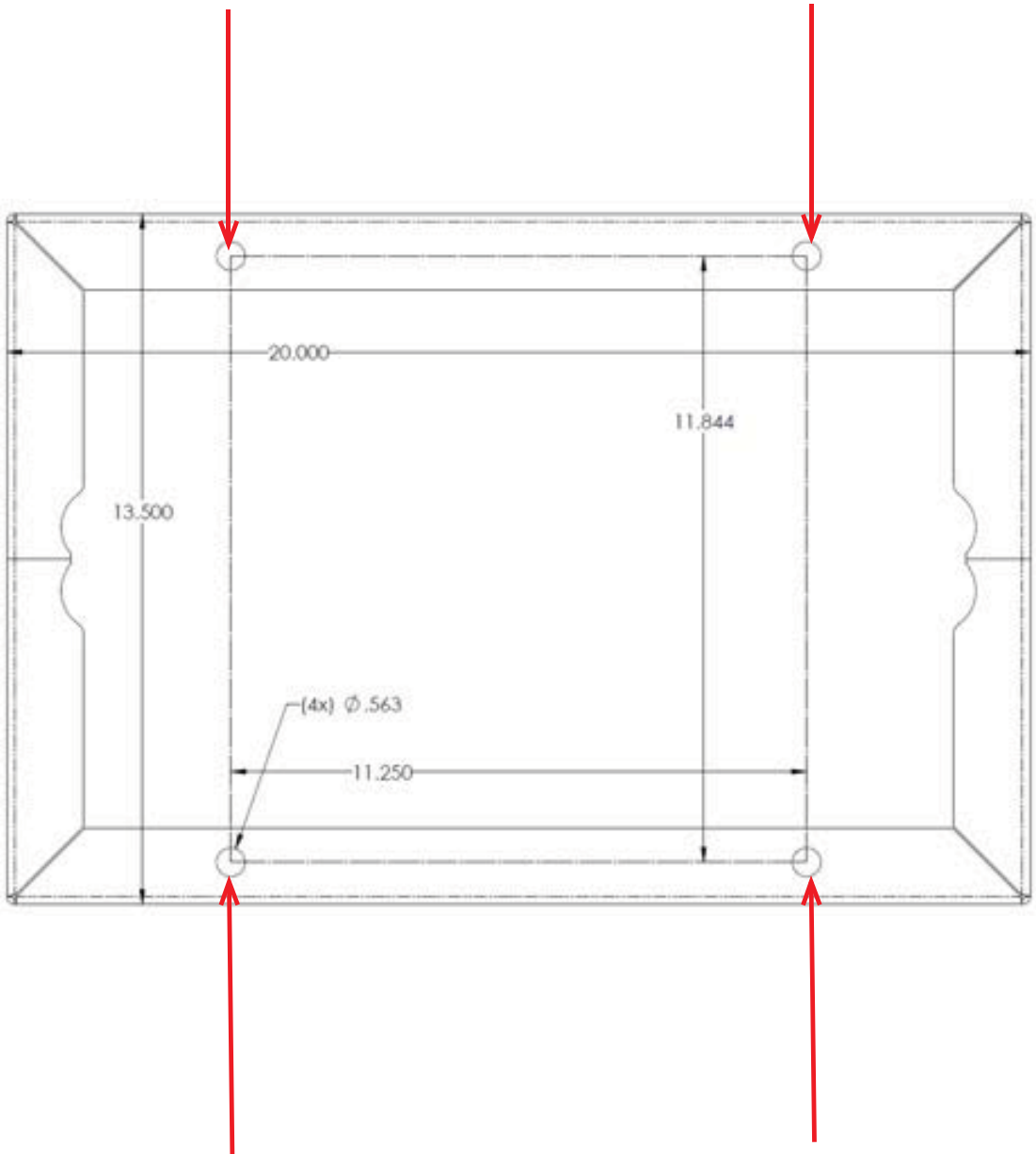**MOUNTING THE CABINET ON A GRADE LEVEL VAULT WITH SHIELD LID**

Instructions -- Next Page.

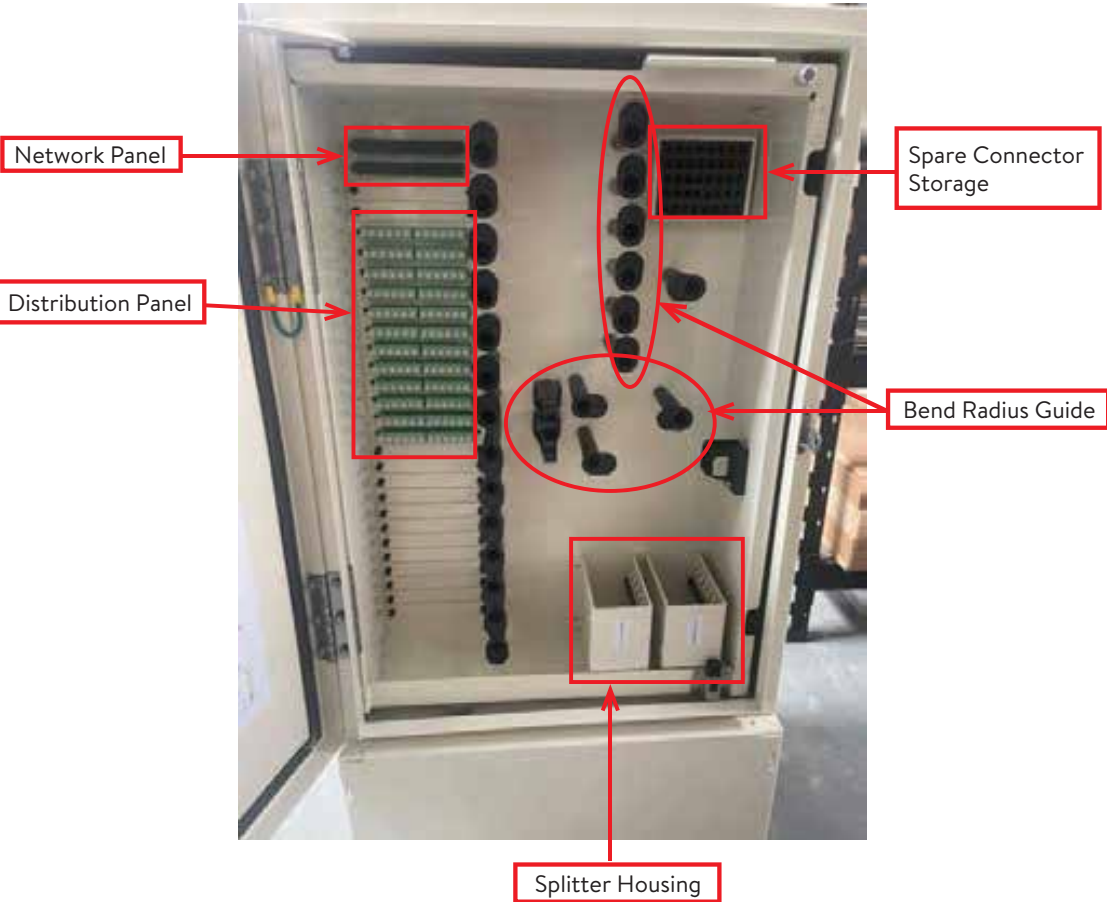**Mounting The Cabinet On A Grade Level Vault With Shield Lid (continued)**

1. Remove the detachable cover by lifting it up from the bottom edge or sliding it with slight upward pressure.

2. Determine which direction to work from, ensuring that the opening faces the correct direction for ease of working access.

3. Feed the input and output cables through the plug in the Shield lid, eventually easing the cabinet down flat.

4. Line up the four holes located on the bottom outside edge of the cabinet with the corresponding holes on the Shield lid.

5. Insert the 1.5" bolts into the back two mounting holes, with the back being the edge farthest from the removable panel.

   a. Attach two of the 1/2" washers (included) to each of the 1.5" bolts.
   b. Attach two of the 1/2" washers (included) to each of the 5" bolts and feed them into the front edge of the cabinet.
   c. Apply four washers (one for each) to the four cabinet mounting holes.
   d. Apply the four 1/2" nylon lock nuts to each bolt, and tighten.

Mounting On Alternative Surface

Use 3/8" bolt with washer to mount to surface.

Cabinet Interior Layout

Network Panel

Distribution Panel

Spare Connector Storage

Bend Radius Guide

Splitter Housing

CABLE INSTALLATION

1. Open cabinet using can wrench or nut driver.

All specifications subject to change without notice.

2. Loosen swing panel fastener and lift the front panel swing stop.
    -Open swing panel until rear swing stop engages.

Swing Panel Fastener

Front Panel Swing Stop

3. Remove cover plate and select cable entry port.

Plug

Cable Entry Ports

4. Remove seal by loosening bottom nut.

5. Slide the bottom nut from cable seal over cable.

6. Pull cable through cabinet skirt opening.

7. Feed the cable through cable entry port.

8. De-Sheath 12 feet of cable and trim strength member to 2 inches.

Strength Member

All specifications subject to change without notice.

9. if cable diameter is under 22mm (.86") apply included foam tape with a mininmum of one wrap, depending on cable diameter.

10. Slide the remainder of the cable seal assembly over the end of prepped cable.

11. Attach strength member to attachment point using can wrench or nut driver.

12. Align top portion of cable seal assembly with cable entry port, ensuring thread sits inside the port.

13. Slide bottom nut up the prepped cable and tighten to secure cable seal to cabinet body.

14. Tighten top portion of cable seal by twisting cap until seal is secure against cable sheath.

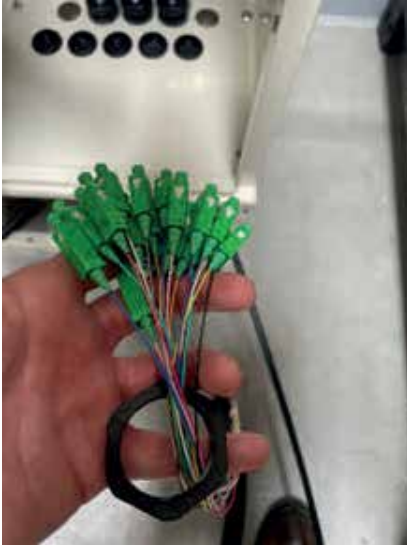### Installing Pre-Terminated Input

1. Disassemble cable gland, and discard CTM bracket.

2. Remove rubber grommet from cable gland assembly and slit both the cable gland grommet and provided 03116101-78 grommet.

Slit both grommets.

3. Carefully feed connectors through bottom cable seal nut, then slide over the rest of the cable assembly, beyond furcation.

4. Feed connectors and cable through cable entry port

5. Feed connectors and cable through the the 2 pieces of the cable gland,
   then slide them beyond the furcation to the cable entry port.

6. Wrap slit cable grommets around cable, and push it back into place in the cable gland,
   then screw the assembly back together.

7. Secure cable gland to cabinet by tightening bottom nut to threaded portion of cable gland assembly.
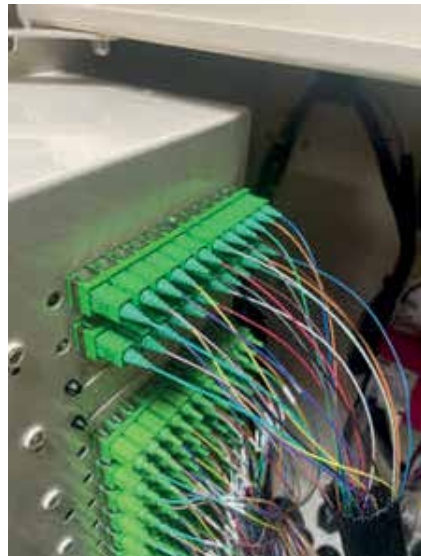
8. Feed the cable into the cable gland assembly, and tighten until the grommet is fully engaging the cable.

9. Remove Bulkhead Cover by pulling out 4 Push-Pins and 2 Bolts using a can wrench or nut driver.

10. Remove caps from input adapters, then install connectors into adapters in the order shown.

Routing and Splicing

1. Remove the horizontal hook and loop straps securing tray bundle.

Lift up to un-hook tray bundle

Remove Loop Strap.

Routing and Splicing

2. Unwind pre-installed cable slack, bundle input cable together with pre-installed cable and secure every two feet as shown.

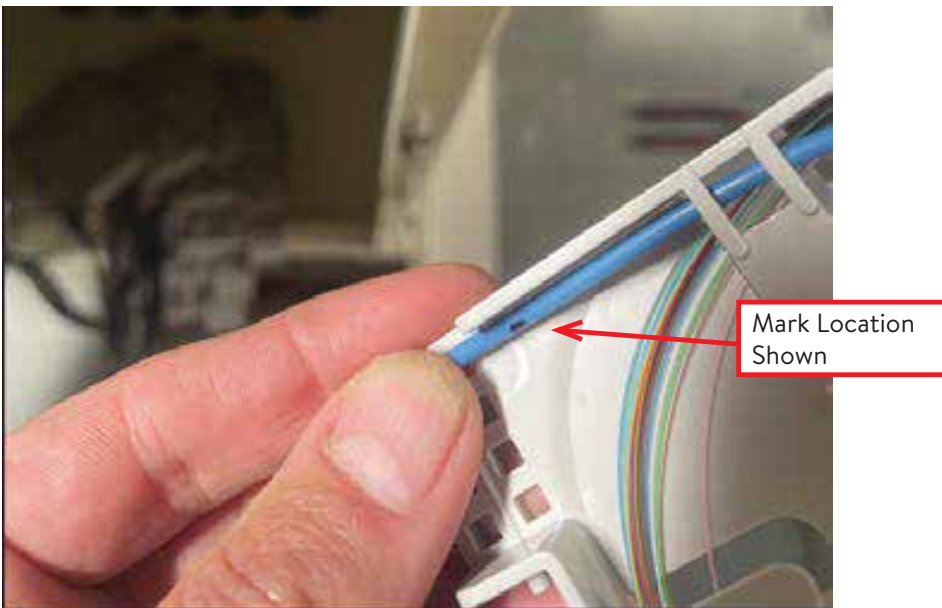3. Route buffer tubes inside the slack basket nearest the entry port using the large cable routing rings.
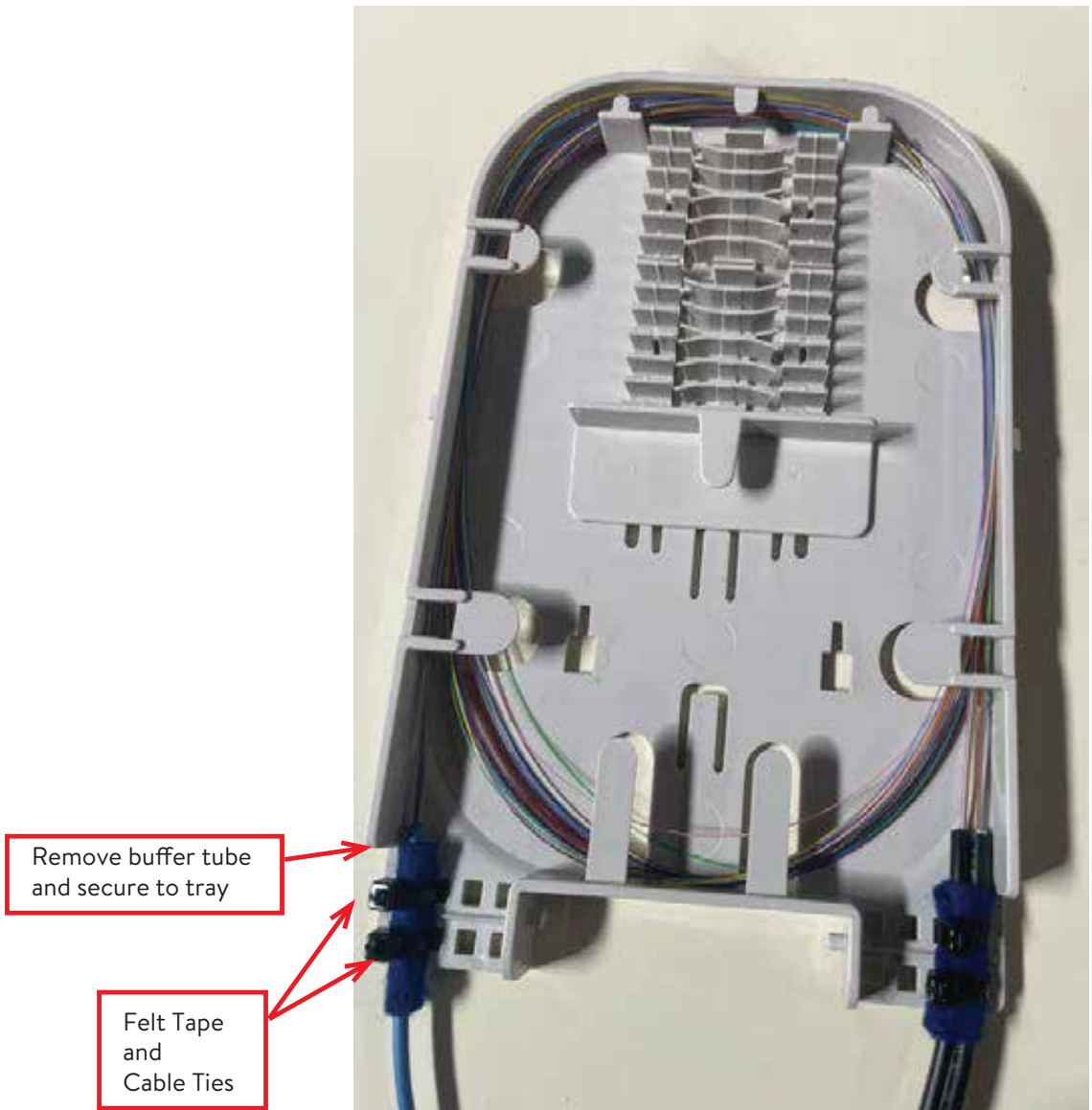
Cable Routing Ring

4. Remove trays from stack as required.

5. Remove tray cover, then measure and mark buffer tubes in location shown.

Mark Location Shown

6. Remove buffer tube at marked location and apply felt tape to buffer tube to secure tube to splice tray with two cable ties.

Remove buffer tube and secure to tray

Felt Tape and Cable Ties

All specifications subject to change without notice.

7. Splice installed cables onto installed pigtails and replace cover.
   Place tray holder back into cabinet securely with hook and loop straps
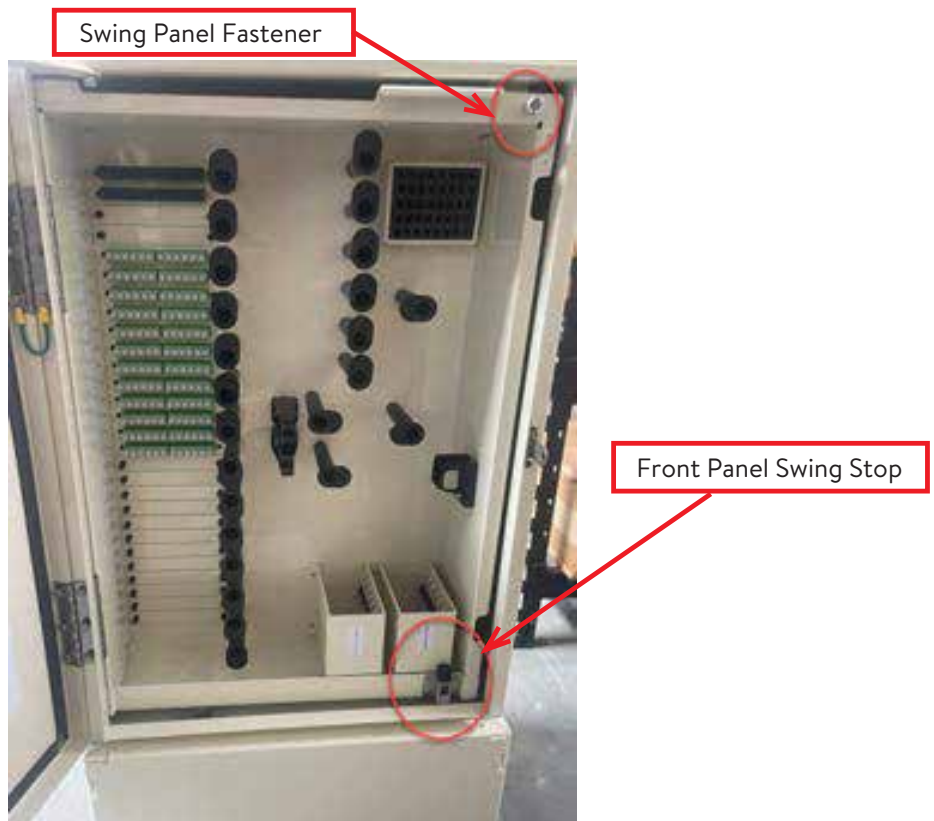
CLOSING UP CABINET

1. Lift rear swing panel stop and close the swing panel until front swing panel stop engages

2. Secure swing panel with swing panel fastner.

Swing Panel Fastener

Front Panel Swing Stop

All specifications subject to change without notice.

3. Close outer door and lock using can wrench or nut driver

All specifications subject to change without notice.

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