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#### **BUDI-FS-24**

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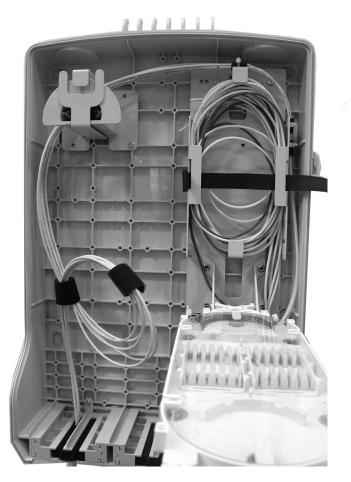
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#### 1. General product information

The BUDI-FS-24 wall mounted customer boxes provide splicing and patching at the customers premises.

### 2. Box components

Splice application



Patch/splice application

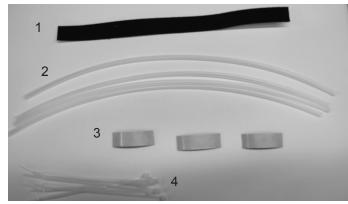


# 3. Cautions and warnings

Risk of injury! Hazardous light when fiber is exposed. Wear appropriate protective eyewear when installing or servicing fiber.

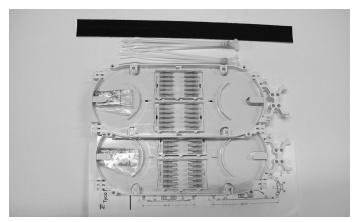
#### 4. Kit content

1	Felt tape
2	Transportation tube 36cm (x4)
3	Velcro strips (x3)
4	Cable ties
5	Wall mounting kit





- 5.2. Cable entry plate with slit foam
- 5.3. Prepack colored pigtails with tubing (50cm)
- 5.4. Set of 12 adapters

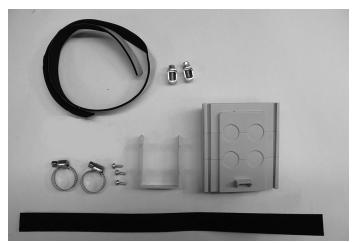


5.5. 2 extra FOSC trays.

# 6. Tools Required

Screw drivers: phillips, 216 tool Socket wrench 1/4" scissors, pincers All tools to prepare and clean cables

### 5. Accessory kits



5.1. Feeder cable accessory kit

### 7. Wall mounting and open the box



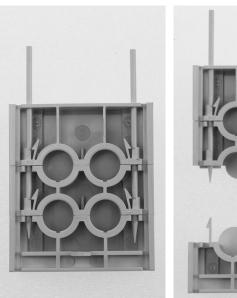
Note: Installation of the pigtail foam seal and the 4x15 round port seal components can be done before mounting the box on the wall. See Sections 8 and 11.

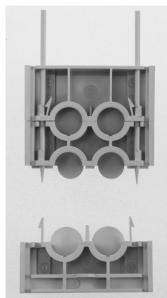
- 7.1. Place the base against the wall and mark the 4 mounting positions.
- 7.2. Mount per approved local practice (for example using  $\frac{1}{4}$ " x 1" lag screws, drill pilot holes for mounting screws). Flat washers should also be used to protect plastic housings.
- 7.3. Rotate quarter turn fasteners counterclockwise with a 216 tool to unlock, pull bottom of cover away from base and lift off cover.

#### 8. Prepare and install feeder cable

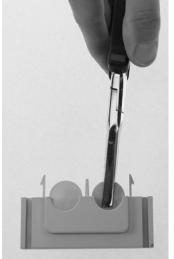


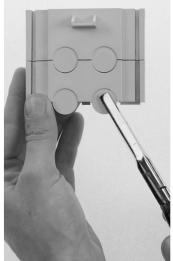
8.1. Two fiber guidance pins are stored in the cover of the box.





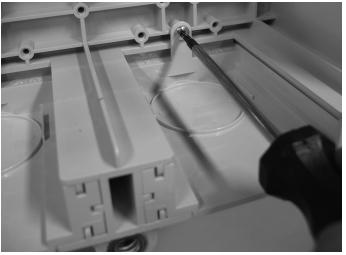
8.2. Obtain the cable entry plate from the feeder cable accessory kit and open the seal block with the 2 fiber guidance pins.



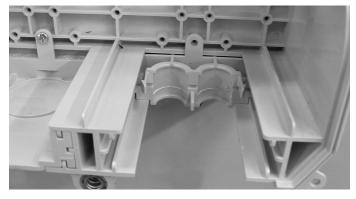


8.3. Remove the 2 punch-outs of the right bottom port for a stubbed cable.

Remove the 4 punch-outs for both bottom ports for a looped cable.



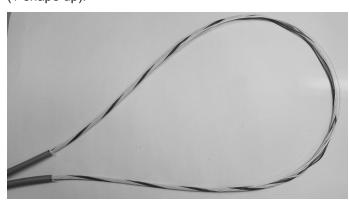
8.4. Remove he cable entry blind plate at the right side oft he box by using a Phillips screwdriver.



8.5. Insert the bottom part of the cable entry plate (prepared for looped cable in the example shown) and secure it.



8.6. Install the cable bracket with 4 screws. Verify the proper orientation of the cable bracket as shown (T-shape up).



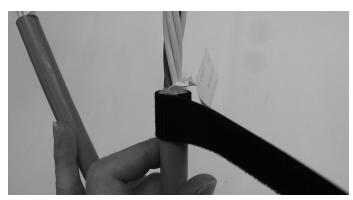


8.7. Remove <u>63" (1m 60)</u> of the cable jacket from both stubbed cable or looped cable. Make sure the oscillation point is in the middle of the window cut (looped cable).

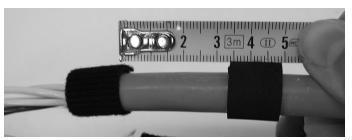




8.8. Cut the strength members to length of <u>2.17"</u> (<u>5.5 cm</u>) from the jacket end. For looped cable this is for both jacket ends.

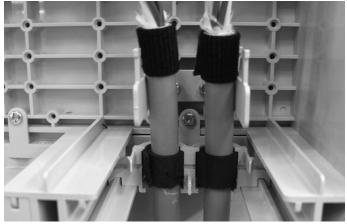


8.9. Wrap a piece of felt tape one turn around the jacket end(s). Cut the felt tape.



8.10. Cut a piece foam (length according to table below). Wrap it around the cable <u>1.2" (3 cm)</u> below the felt tape. At this place the cable will touch the cable seal.

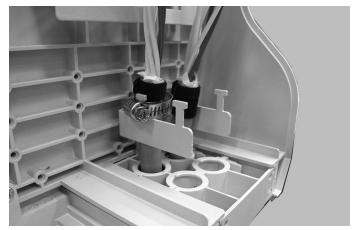
Cable diameter (mm)	Foam (± 5 mm)
9	125
10	115
11	105
12	95
13	85
14	70
15	60



8.11. Position the cable in the box. The foam in the seal area as shown above. For a stubbed cable, use the right port.



8.12. Close the seal.



8.13. Using hose clamps, secure the cable to the cable bracket.



8.14. Attach the strength member with the lug to the cable bracket. Make sure the strength member is positioned under the bracket. The strength member will be clamped between the lug and the bracket plate by securing the bolt.



8.16. Cut the required loose tube at the jacket end for a looped cable or take out the required loose tube for a stubbed cable.



8.17. Remove the Velcro, hinge the trays down, and store the feeder tubes in the storage basket.

8.18. Re-install the Velcro and hinge up the trays again. Close the Velcro around the trays.

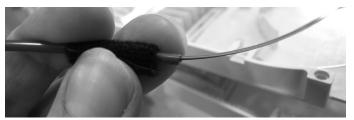
# 9. Route feeder fibers to the tray



9.1. Route the tube of the fibers to be spliced to the tray to mark the stripping point. First make one turn in the loop basket, then position the tube on the tray and mark the cable 1/4"-1/2" (6.35 mm- 12.7 mm) beyond the tie down slot. Remove the excess tube.

# 9.2. Cut the fibers to length: minimum 24" (0.61 m) and maximum 42" (1.07 m).

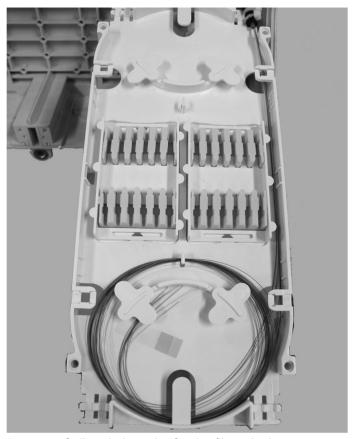
For <u>900 micron fibers</u>, the fibers must be cut over a length closer to the lower end of this range due to storage capacity. <u>With a maximum of 31.5" (0.8 m)</u>.



9.3. Wrap a piece of felt tape at the tube end.



9.4. Route the tube under the tower to the right side. Secure the tube with two cable ties as shown above. The end of the tube is <u>1/4"-1/2" (6.35 mm- 12.7 mm)</u> beyond the tie down slot.



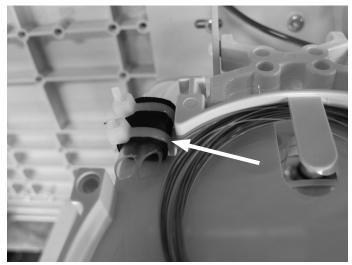
9.5. Coil and place the feeder fibers in the tray as shown above. Install the tray tabs (stored in a plastic bag on the tray) to help contain the fibers.

9.6. Cover the splice tray with its protective plastic cover, hinge up the tray and attach again with the Velcro strap.

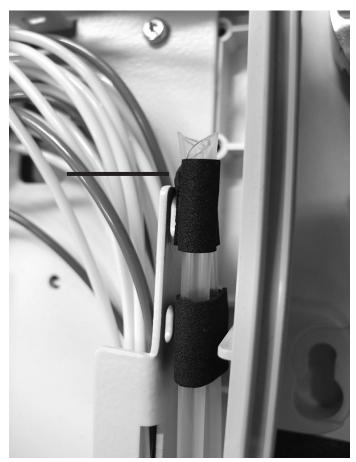
# 10. Install the transportation tubes

Install the transportation tube for both applications: splice application and splice/patch application.

Up to four transportation tubes can be installed. Two for each tray with a maximum of 6 900µm fibers per tube.



10.1. Wrap a piece of foam around the tube ends of the two tubes. Secure the tubes with two cable ties on the tie down slot on the left side of the tray.



10.2. Bring the other end of the tubes to the right side of the loop storage basket. Position the tubes end at the same height as the loop basket edge as shown in the picture.

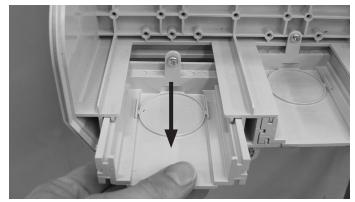


10.3. Wrap a piece of foam around the tubes ends and secure the tubes with two cable ties to the T-shapes on the loop basket. For the first 2 tubes take the position at the backside.

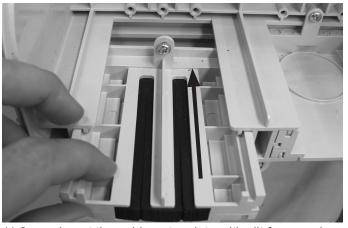
10.4. Install the second 2 tubes on the second tray and bring the tubes ends to the remaining T-shapes on the loop bracket.

# 11. Install the cable entry plate with slit foam.

Install the cable entry plate with slit foam for both applications: splice application and splice/patch application.

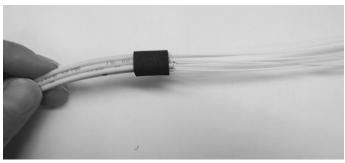


11.1. Remove the blind plate on the left side of the box. Use a Phillips screwdriver to unscrew.



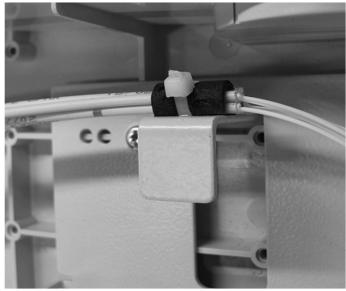
11.2. Insert the cable entry plate with slit foam and secure it with a Phillips screwdriver.

# 12. Splice application



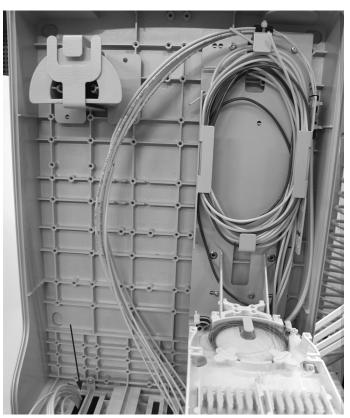
12.1. Remove the jacket of the drop cables/pigtails over a length of <u>57" (145 cm)</u>.

12.2. Wrap a piece of foam around a bundle of up to 12 drop cables/pigtails.

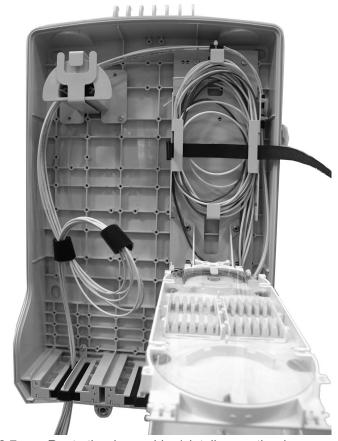


12.3. Secure the bundle of drop cables/pigtails at the top of the loop basket as shown above.

- 12.4. Two bundles of up to 12 drop cables/pigtails can be secured to the loop basket. When attaching the first bundle, make sure the second one can still be easily secured to the loop basket.
- 12.5. Mark the drop cables/ pigtails 45"-25" (114-63.5 cm) from their jacket end, where the longest length provides slack storage and the shortest length doesn't.



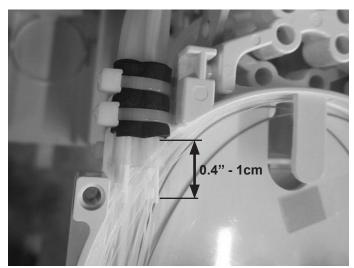
12.6. Slide the drop cables/pigtails in the slit foam with the mark on the jacket positioned just above the foam. If the slit foam is not installed yet, follow the steps as described in Section 11.



12.7. Route the drop cables/pigtails over the drum. Store any excess length (slack) as shown and use the pieces of Velcro from the kit to secure cables.



12.8. Feed the 900µm fibers through the transportation tube already attached to the loop bracket. Max 6 900µm fibers per tube.



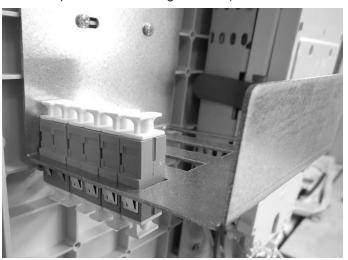
12.9. If 250 micron fibers are stored on the tray, strip the 900µm fibers <u>0.4"(1 cm)</u> from the tube end. Cut the fibers to a length of <u>minimum 24" (0.6 m) and maximum 42" (1.07 m)</u>.

- 12.10. Or if 900 micron fibers are stored on the tray, the fibers must be cut over a length closer to the lower end of this range due to storage capacity. **With a maximum of 31.5"(0.8 m)**.
- 12.11. Make fusion splice per standard practice and store over length (see section 14).

# 13. Splice/patch application



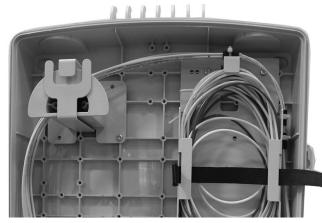
13.1. Install the adapter in the patch panel as shown above. Verify the orientation of the adapter (springs under the metal plate and slit facing forwards).



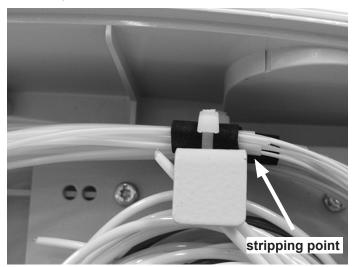
13.2. Install 6 adapters in one slot.



13.3. Remove the dust caps. Clean the connector and install the connector with the correct orientation (as shown above). The connector is properly installed if you hear a click sound.

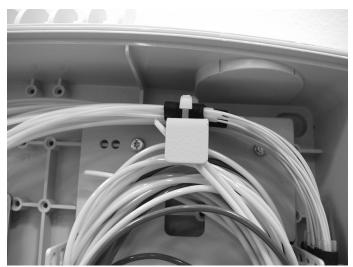


13.4. Route the tubes above the hook to the right side of the loop basket.

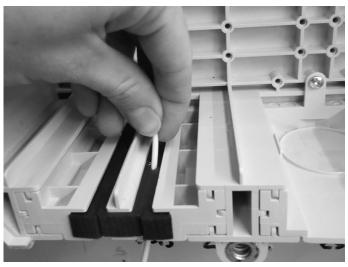


13.5. Mark the tubes beyond the tie down slots in the loop bracket hook.

- 13.6. Remove the excess tube.
- 13.7. Wrap a piece of foam around a bundle of up to 12 tubes. Secure the bundle of tubes at the top of the loop basket as shown above.



13.8. Two bundles of up to 12 tubes can be secured to the loop basket. When attaching the first bundle, make sure the second one can still be easily secured to the loop basket.



13.9. Slide the patch cord in the slit foam. If the slit foam is not installed yet, follow the steps as described in section 11.



13.10. Remove the dust caps. Clean the connector and install the connector with the correct orientation (as shown in picture above). The connector is properly installed if you hear a click sound.



13.11. Store any excess length (slack) as shown in the picture and use the pieces of Velcro from the kit to secure them.

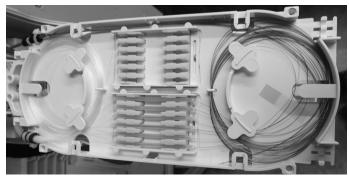


13.12. Route the 900µm fibers to the tray as explained in section **12.8 to 12.11**.

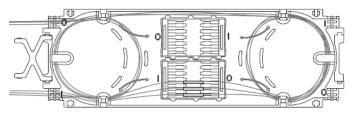
# 14. Splice and route the fibers in the FOSC tray



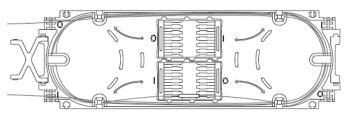
14.1. Splice the drop fiber to the feeder splice per standard practice and store the splice sleeve in the splice module. Following the sequence of the splice sleeves in the splice module as shown above.



14.2. Gather slack fiber to be stored at one end of the tray. Fold the fiber loops over on themselves to form a coil roughly 3" (75 mm) in diameter. Lay the coil on the tray around the arcs. Maintain minimum 0.12" (30 mm) bend radius.



**End Storage Routing** 

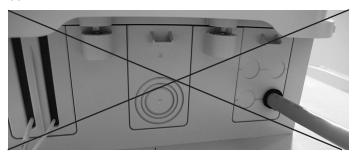


Perimeter Storage Routing

- 14.3. Correct Fiber routing patterns
- 14.4. When all splices are completed, cover the splice tray with its protective plastic.
- 14.5. Hinge the tray back against the loop basket and install the Velcro strap again.

#### 15. Close the box

15.1. Re-install the guidance pins in the top cover and store all parts of the kit and the accessory kits in the box.





15.2. Re-Mount the top cover on the box. Verify that the cover is appropriately installed with no space between the top and bottom covers, as shown above.



15.3. Lock the box again by turning the wrench in the direction of the arrow.

#### 16. Trademarks

Velcro is a trademark of Velcro Industries

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#### 17. Contact information

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