

NOVUX™ Fiber Optic System CC 200 Drop Splice Application

About this manual

This manual describes the installation steps of the drop splice application of the Compact Closure 200 series. Installation steps in this document are limited to: direct drop cable installation, routing to and on the different trays, routing to and in the pocket zone and splitter application in the pocket zone.


Installation steps of the feeder cables are explained in manual TC-1547-IP: CC 200 Basic Instructions.

Installation steps of the branch applications are explained in manual TC-1547-IP-BR: CC 200 Branch Application.

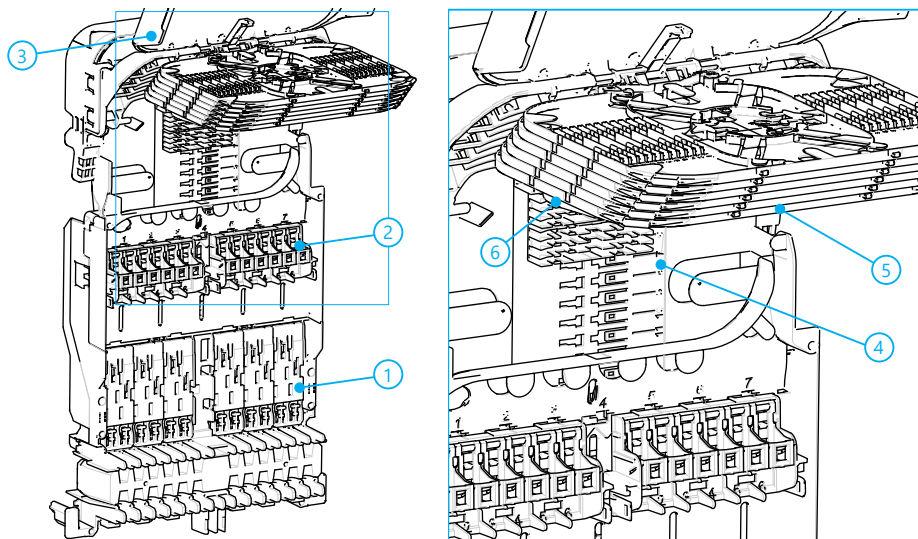
The document starts with providing an overview of the tools required to perform the installation. Also warnings and cautions are indicated, which should be observed before starting the product installation.

Images in this manual are for reference only and are subject to change.

General product information

| | Quantity |
|------------------------|--|
| Drop cable entry ports | 12 drop ports (up to 24 drop cables) |
| Splice capacity | up to 144 splice protectors (trays only) up to 168 splices protectors (pocket included)  Note: (splice protectors length is up to 45 mm / 1.77 Inches) |

Overview organizer

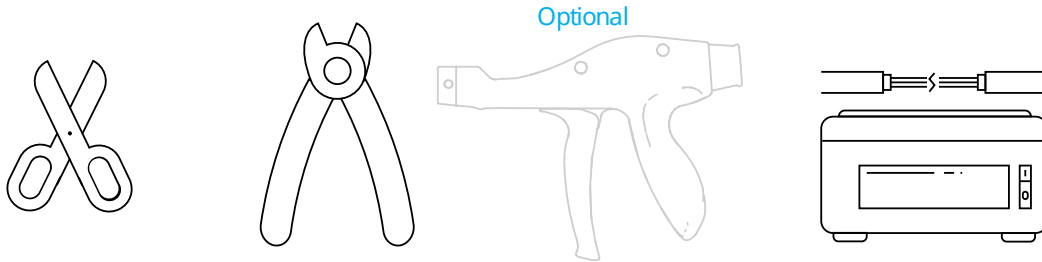


- 1 Drop cable positions
- 2 Subunit holders
- 3 Demarcation cover
- 4 Pocket
- 5 Splice trays
- 6 Storage trays

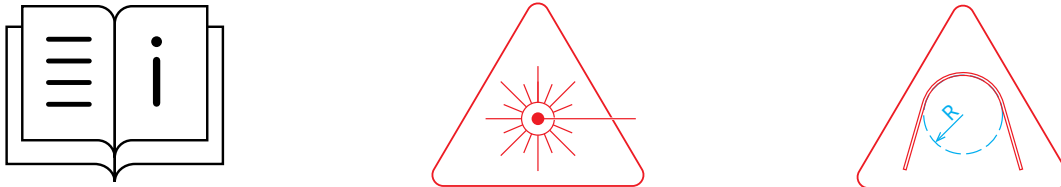
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1 Tools drop splice




2 Warnings and Cautions



- Follow the installation instruction steps to ensure the performance of the closure. It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not assume the laser power is turned off or that the fiber is disconnected at the other end. Looking into the ends of any optical fiber is entirely at your own risk. A protective cap or hood **MUST** be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the connector and adapter.
- Fiber optic cables may be damaged if bent or curved to a radius that is less than the recommended minimum bend radius. Always observe the recommended bend radius limit when installing fiber optic cables, subunits and patch cords.

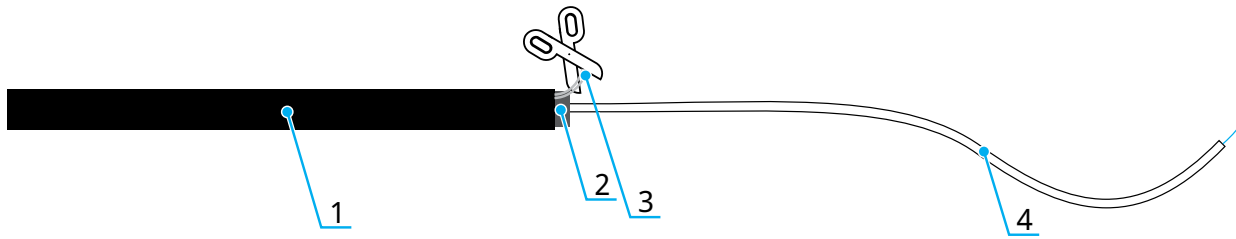
3 Install drop cable

 **Note:** The separate cable retention kits: NVX-CR-TI-SM-NN (Cable retention: Aramid), NVX-CR-DU-FL-NN (Cable retention: Dual cable), NVX-CR-MC-RD/FT-NN (Cable retention: Jacket (Mclip)) or NVX-CR-SA-SM-NN (Cable retention: Rigid strength member) are suitable to install the drop cable in the CC 200.

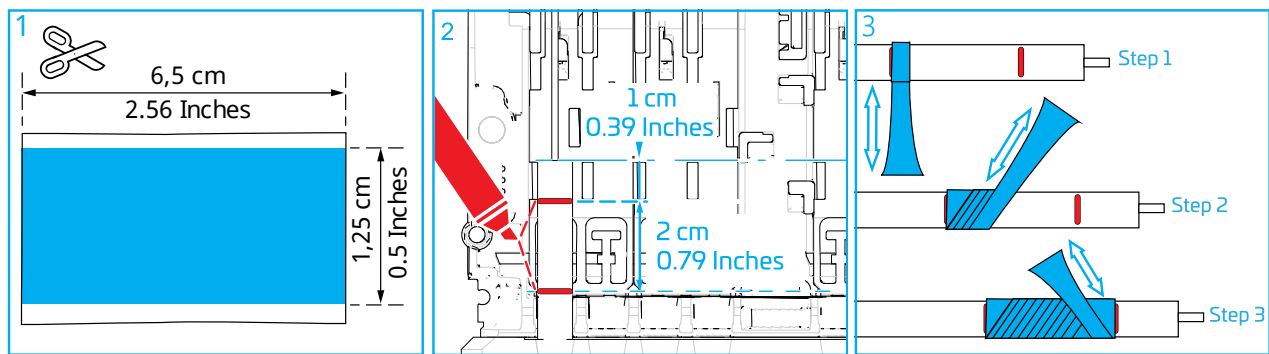
 **Important:** For this closure CC 200, the jacket of the drop cable should be removed in all cases over a distance of **135 ±2,5 cm / 53 ±1 Inches**.

3.1 Using T-shapes integrated in organizer

3.1.1 Prepare drop cable



| N.º | Description | Preparation |
|-----|------------------------------------|--|
| 1 | Jacket | Remove the jacket over a distance of 135 ±2,5 cm / 53 ±1 Inches |
| 2 | Dual jacket (if present) | Strip the dual jacket to a length of 1 ±0,2 cm / 0.4 ±0.08 Inches. Remove the aramid yarn inside this second jacket. |
| 3 | Aramid yarn/ Rigid strength member | Aramid yarn and rigid strength member are not used within this method. |
| 4 | Subunits | Clean the subunits, remove all grease. |



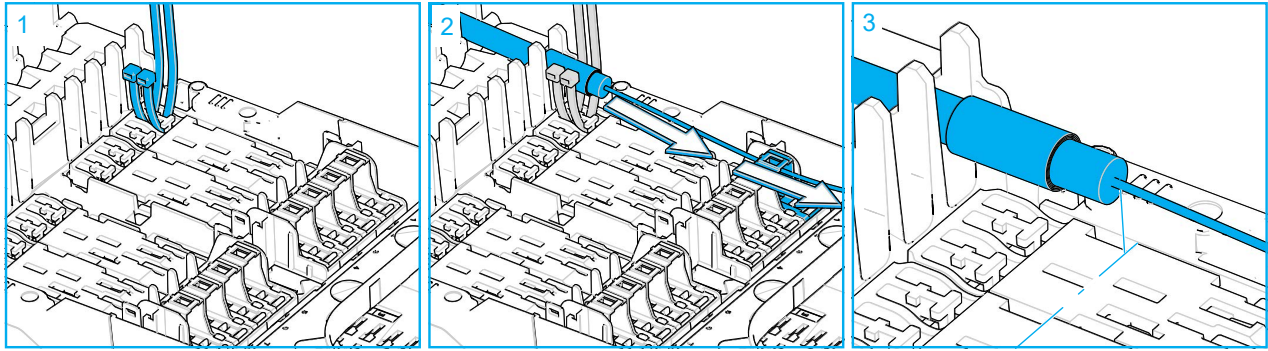
1 Take the strip of silicone tape with a width of 1,25 cm / 0.5 Inches and cut to a length of 6,5 cm / 2.56 Inches.

⚠ Attention: Make sure your hands are clean and degreased before preparing and installing the cables.

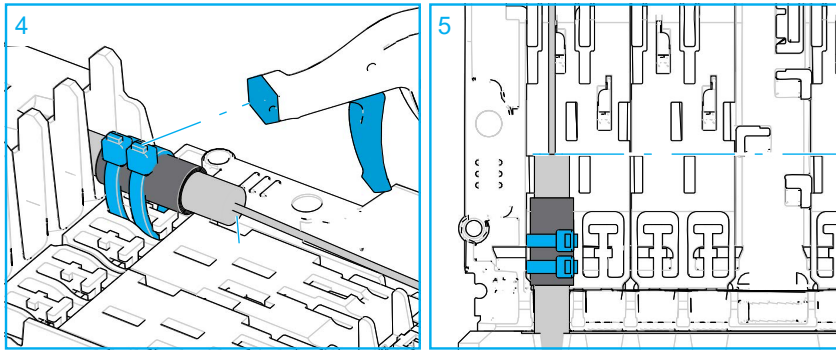
2 Position the cable on the organizer: The end of the jacket must be aligned with the top of the rectangular hole (Figure 2). Make a mark where the two ribs hold the cable and a second mark 2 cm / 0.79 Inches from the first.

3 Apply the silicone tape between the two marks. Remove the protective paper. Stretch the tape minimum 50% while wrapping the tape around the cable. First apply a full turn around the cable, then continue to cover up to the second mark. Make one turn at the end point and come back with the remaining tape.


3.1.2 Install drop cable



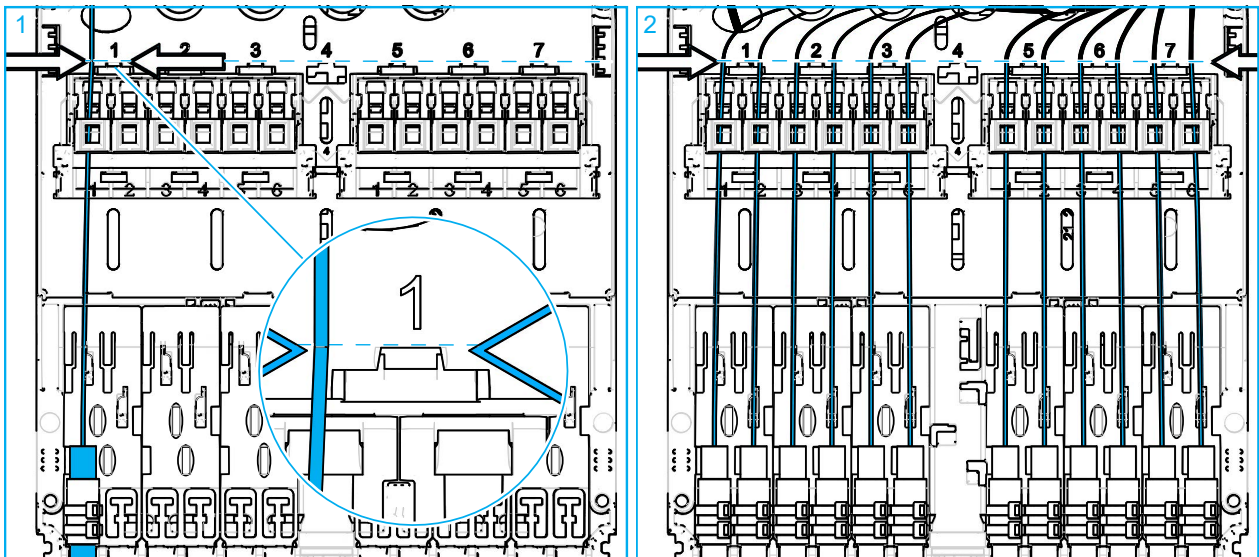
- 1 Open the demarcation cover, hinge open the trays to reach the full area to install the drop cables. Install 2 cable ties around the T-shape.
- 2 Slide the subunit(s) trough the subunit holder.
- 3 Position the cable with the taped area on top of the T-shape.



- 4 Secure the cable ties. (A cable tie gun can be used, recommended force is 85N.)
- 5 Make sure to install the cable ties with the correct orientation (see figure 4 and 5 above).

 **Note:** To keep the cables in place, the external drop cable fixation bracket is recommended.


4 Stripping point




- 1 Mark the stripping point on the subunit as shown.
- 2 Strip the subunit per local practice.

5 Pocket zone

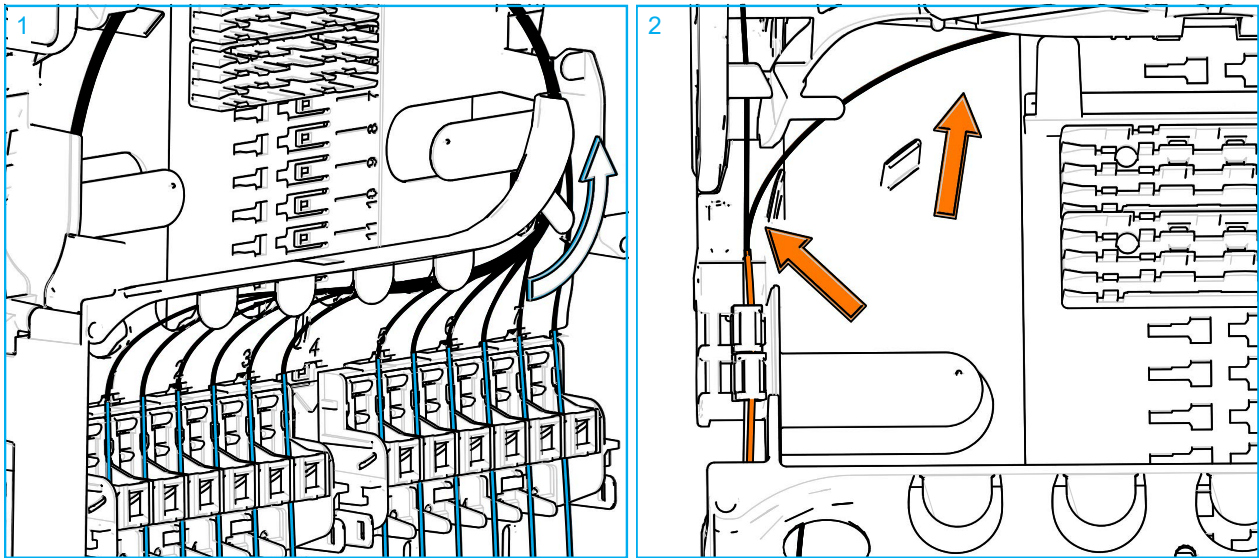
Under the trays an area is available for splicing and passive optical components (POC) storage. This area is the pocket.

 **Note:** Fibers stored in this area are non transient free.

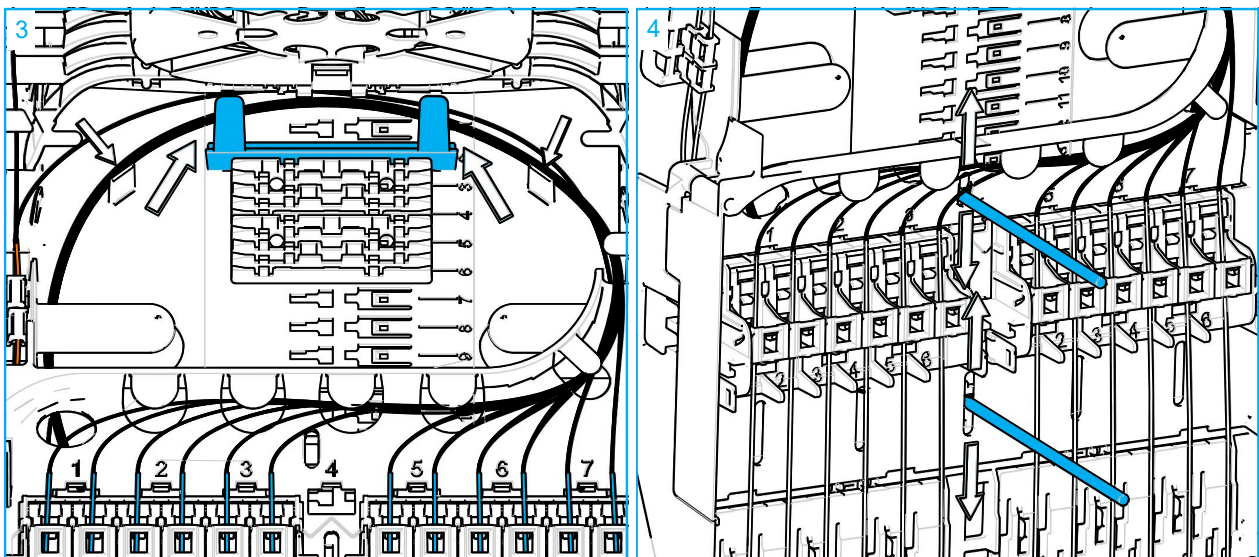
| | Quantity | specifications |
|--------------------------|-------------------|---|
| Splice protector holders | up to 24 | Splice protectors length is up to 45 mm / 1.77 Inches |
| Splitters | up to 3 splitters | Factory installed or Field installable |

 **Note:** The configuration of the pocket is very flexible. The illustrations in the next sections are for reference only and can differ from ordered configuration.

5.1 Routing to the pocket zone



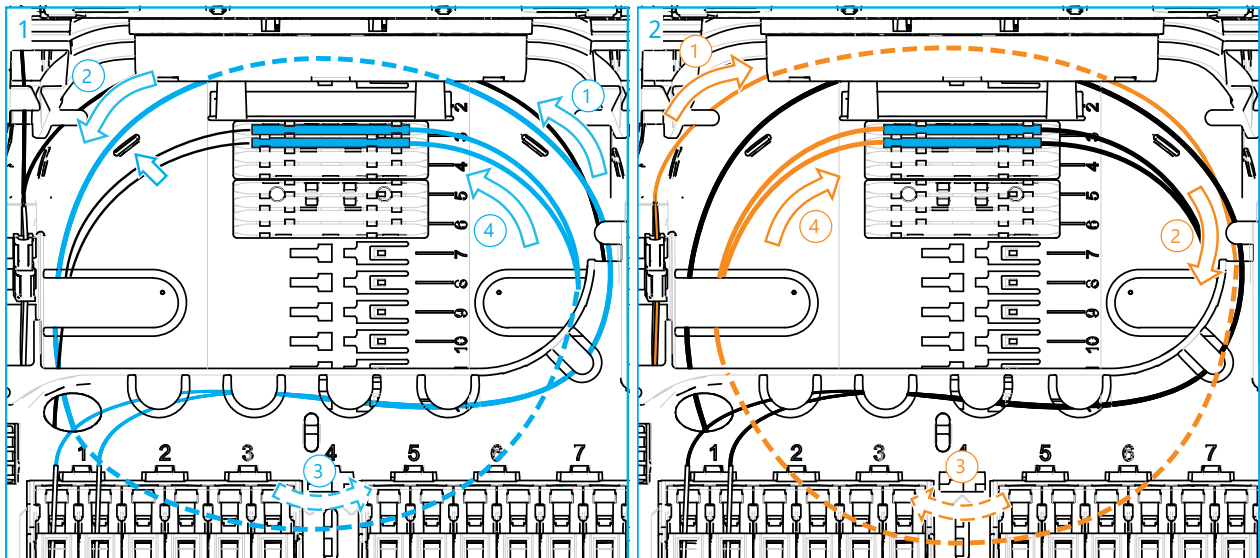
- 1 Route the drop fibers over the interface plate to the pocket zone. Make sure the fibers are positioned under the lips.
- 2 Route the feeder fibers to the pocket via the opening **above** the stud.



- 3 Always route the fibers above the studs and the fiber hanger before continuing routing in the pocket.
- 4 Fibers in the pocket can be re-arranged by inserting a fiber guidance pen in the slots and moving the fibers up or

down.

5.2 Splicing in the pocket zone



1 Make splice per local practice and store the splice protector in the top position of the splice protector holder.

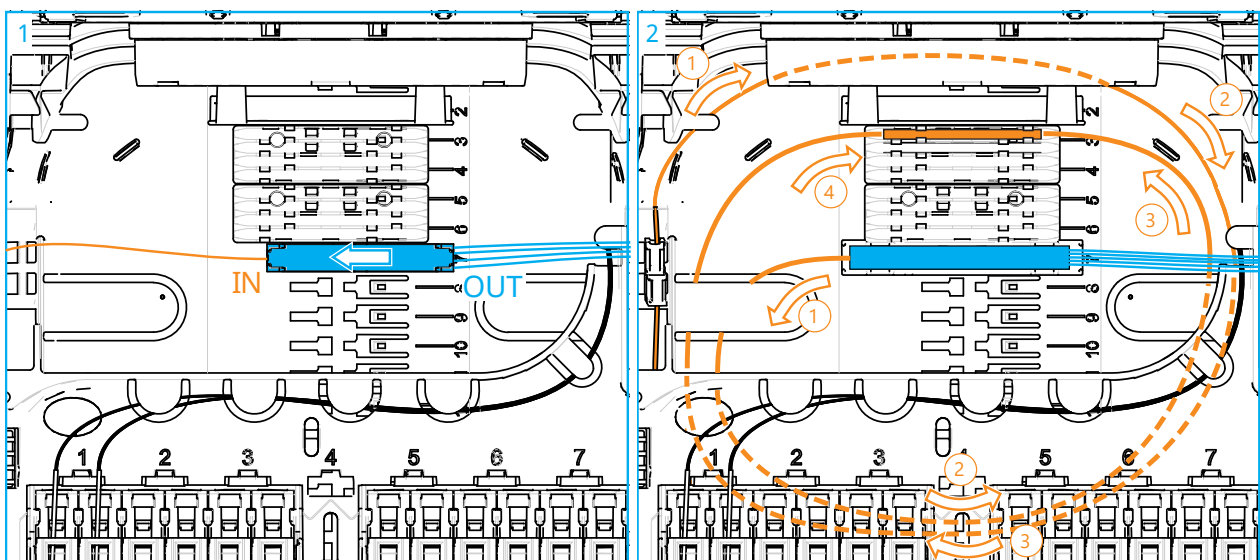
Note: One position can hold 3 splice protectors.

2 Store the over lengths in loops in the pocket respecting following rules:

- Always start routing the fibers above the studs and the fiber hanger.
- The fibers may not be routed too tightly around the fiber hanger, the splice protector holders and the splitter (holders).
- Avoid bulging of the fiber.
- Make sure all fibers are properly positioned under the lips.

Note: The fiber guidance pen can be used to position all the fibers under the lips. Also using the holes in the pocket.

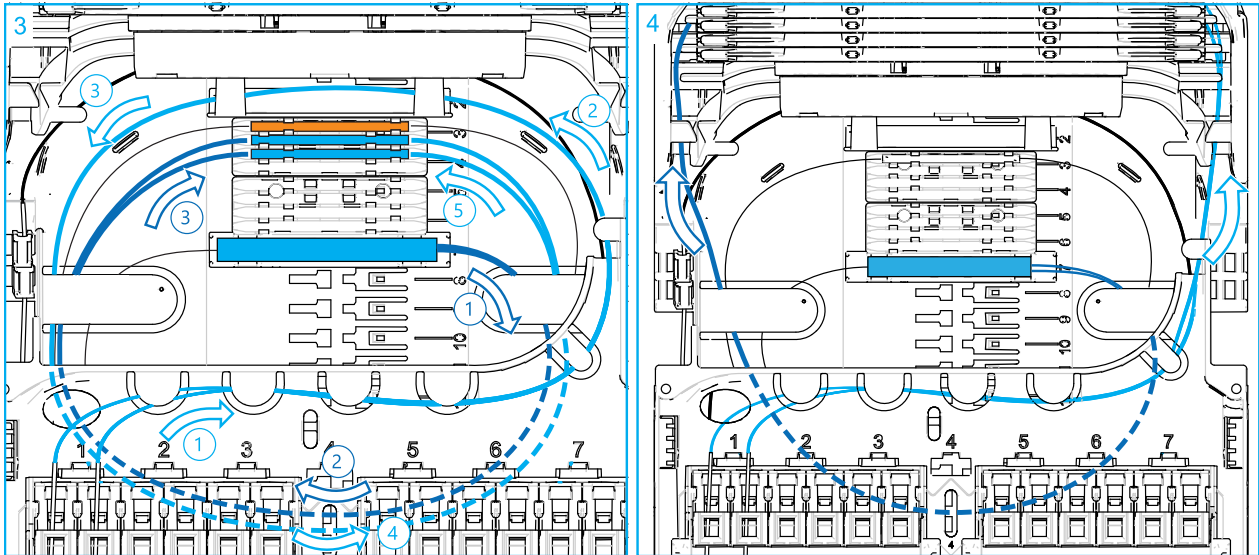
5.3 Splitter installation in the pocket zone



1 Splitters can be factory installed or be installed in the field. Slide the splitter in the dove tail on the pocket from left to right until a clicking sound is observed. Make sure the input of the splitter is at the left side.

2 Splice the input of the splitter to the feeder fiber. Store the splice protector in one of the holders in the pocket area

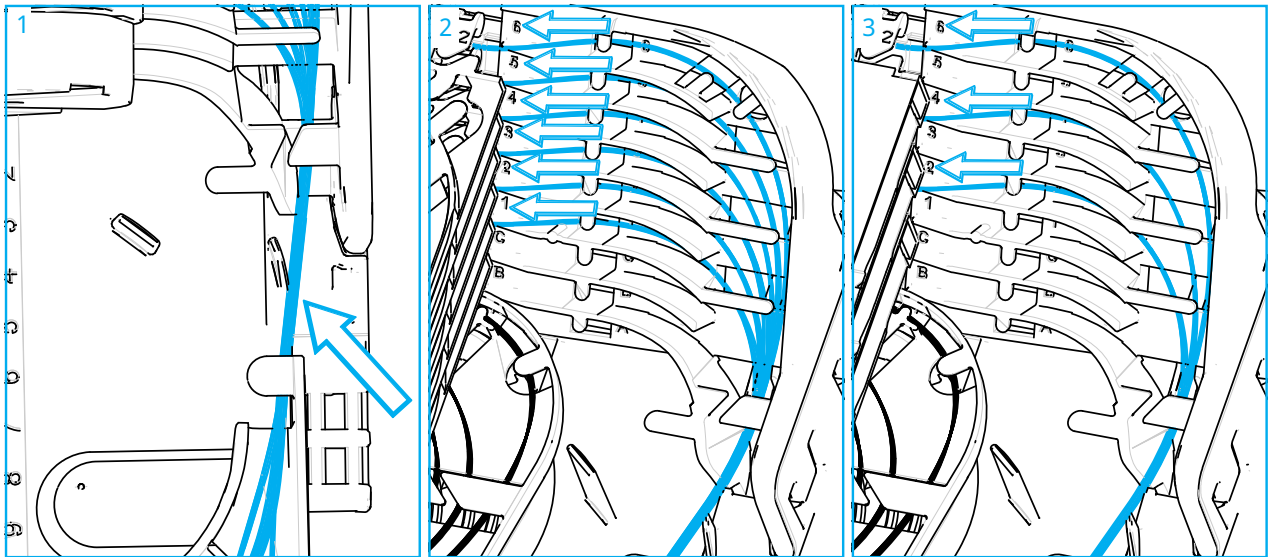
and store over length in loops as shown.



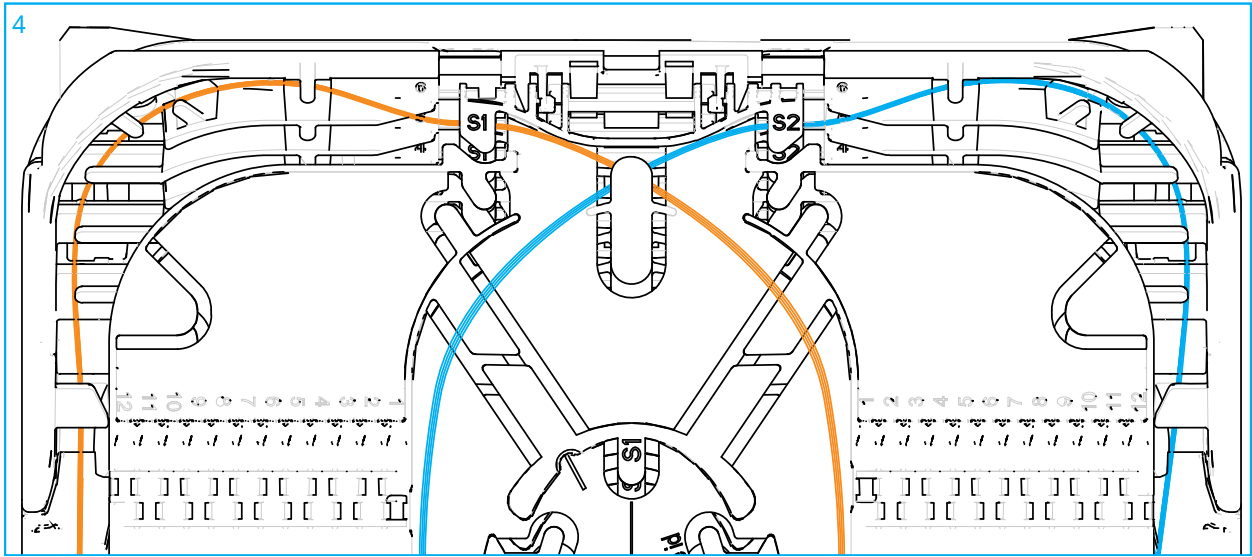
- 3 Splice one of the outputs of the splitter to the drop fiber. Store the splice protector in one of the holders in the pocket area and store over length in loops as shown.
- 4 The output fibers of the splitter can also be routed to the tray to be spliced there.

6 Splicing on the trays

6.1 Routing to splice tray

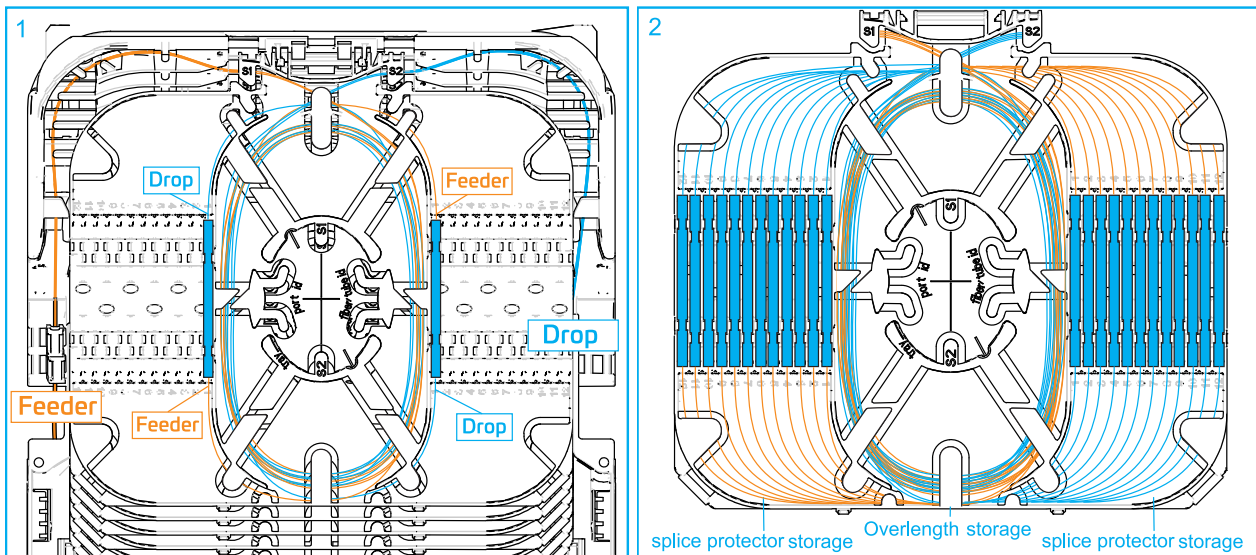


- 1 Route the fibers from the interface plate, under the lips, to the tray using the corresponding groove.
- 2 For the 4 mm tray, use every groove. Groove 6 corresponds with the top tray, groove 5 with the tray below and so on.
- 3 For the 8,5 mm tray, leave a groove open between two trays. Groove 6 corresponds with the top tray, groove 4 corresponds with the second tray and groove 2 corresponds with the third tray.



4 Overview of feeder fibers and drop fibers entering the top tray.

6.2 Splice 4 mm tray

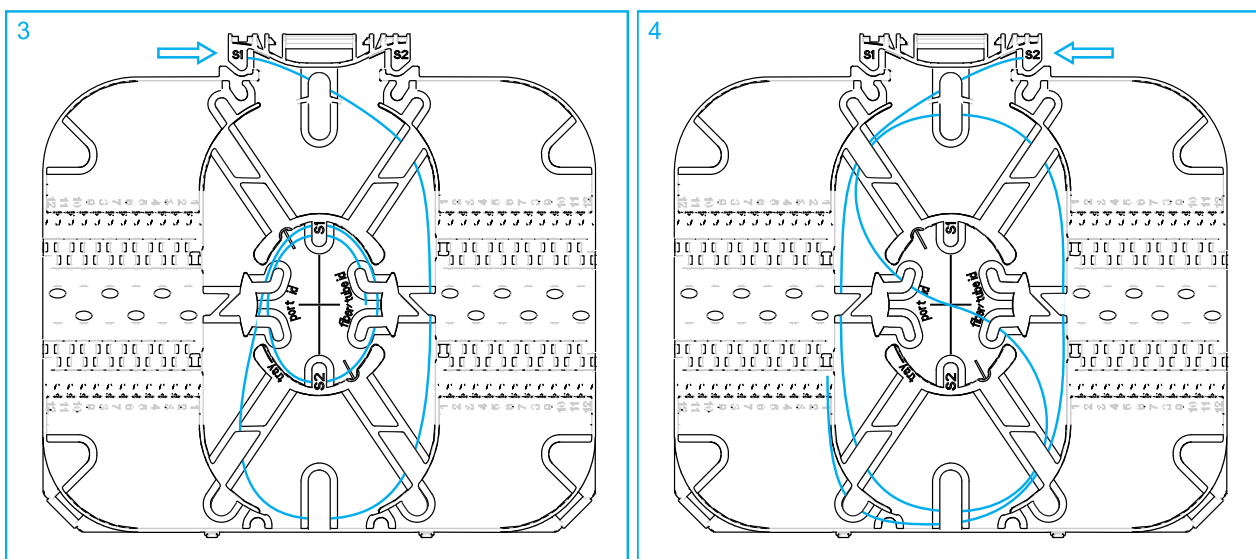


1 Make splice per local practice and store the splice protector in the first splice protector holder location (left or right). Store the over lengths in loops in the over length storage area respecting following rules:

- The fibers may not be routed too tightly around the middle circle.
- Avoid bulging of the fiber.
- Make sure all fibers are properly positioned under the lips.

2 This tray has following specifications:

- The tray entrance can hold **maximum 2 900µm fibers**.
- The tray can hold 1 layer of **24 splice protectors length 45 mm / 1.77 Inches**.
- In the middle area of the over length storage, there is the possibility **to mark port id and fiber/ tube id** with a permanent marker.



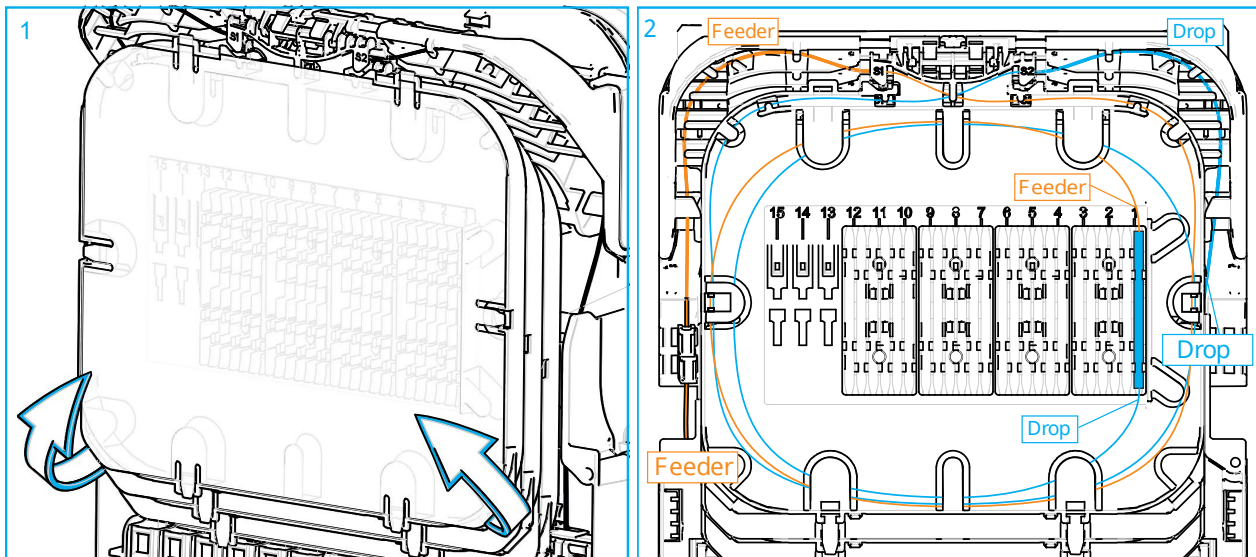
3 The middle circle can also be used to store dark fiber.

4 Crossings on the tray are possible as shown in illustration 4.




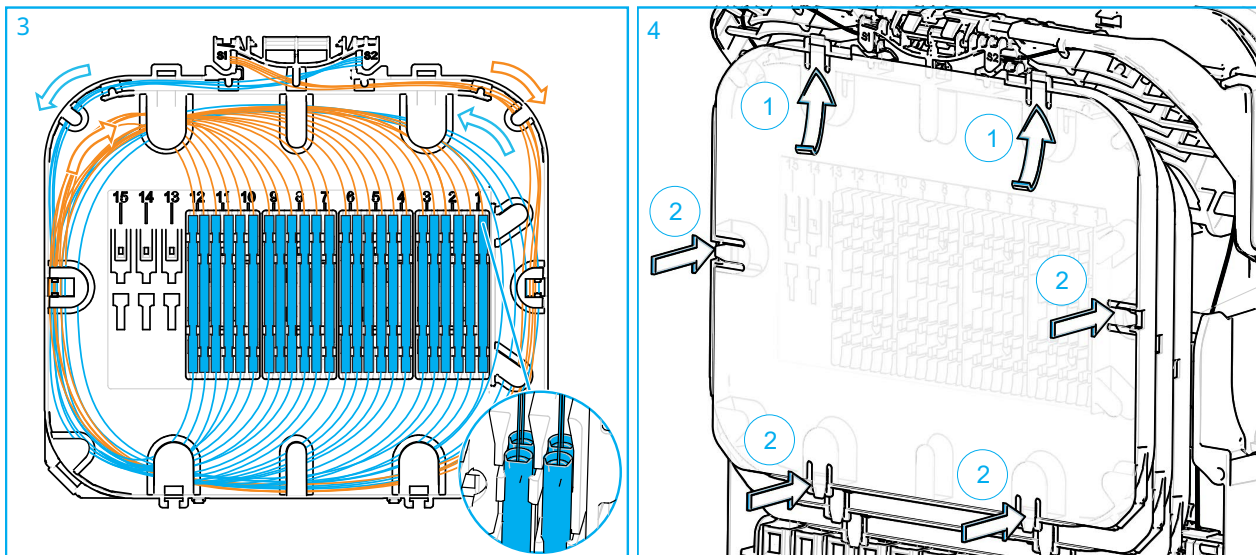
Note: The fiber guidance pen can be used to position all the fibers under the lips.

6.3 Splice 8,5 mm tray



- 1 These trays come with a protection cover. Remove the protection cover to access the splice area.
- 2 Make splice per local practice and store the splice protector in the first splice protector holder location (right). Store the over lengths in loops in the over length storage area respecting following rules:
 - Make sure fibers are not routed too tightly around the splice protector holder(s).
 - Avoid bulging of the fiber.
 - Make sure all fibers are properly positioned under the lips.

 **Note:** The fiber guidance pen can be used to position all the fibers under the lips.



- 3 This tray has following specifications:
 - The tray entrance can hold **maximum 8 900 μ m fibers**.
 - The tray can hold up to **48 splice protectors length 45 mm / 1.77 Inches** (2 layers of each 24 splice protectors).
- 4 Reinstall the protection cover.

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