COMMSCOPE®

Installation Instructions

TC-1425-IP-SP
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http://www.commscope.com

NOVUX™ Fiber Optic System
CC 100 Splice Application

About this manual

This manual describes the installation steps of the **splice application** of the Compact Closure 100 series. Installation steps in this document are limited to: drop cable installation, routing on and to the different trays , splicing on the different trays (at the front side), storage on the hinged tray, splitter application.

Installation steps of the feeder and branch cables are explained in manual TC-1425-IP: CC 100 Basic Instructions.

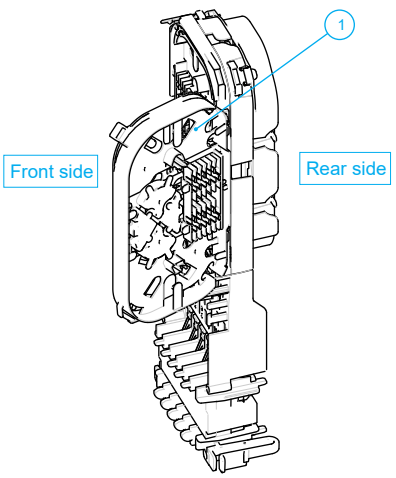
The document starts with providing an overview of the tools required to perform the installation. Also warnings and cautions are indicated, which should be observed before starting the product installation.

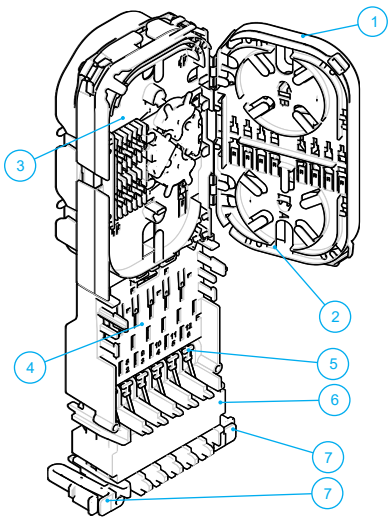
Images in this manual are for reference only and are subject to change.

General product information

	Quantity
Drop cable entry ports	up to 12
Splice capacity	up to 48 Smouv protectors (Smouv protectors length is up to 45 mm (1.77 Inches))

Overview organizer





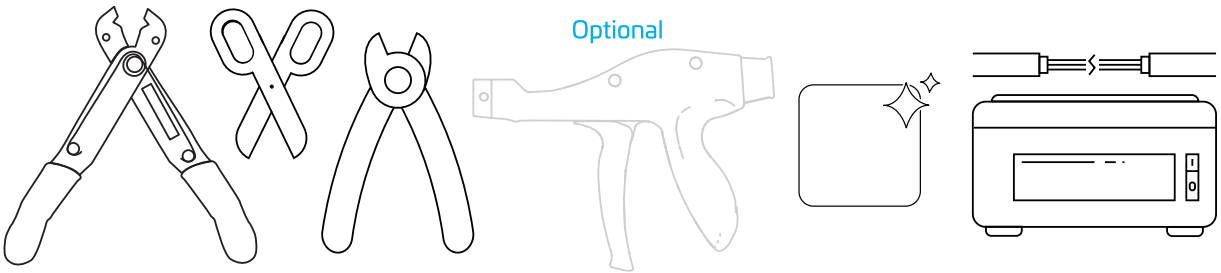
1 Hinged tray, B tray
2 Storage zones A and B on hinged tray
3 Front tray, A tray
4 Cable attachment interface plate
5 Drop cable strain relief T-shapes
6 Octopus™ gel seal
7 Locking features

1 Abbreviations

CC: Compact Closure

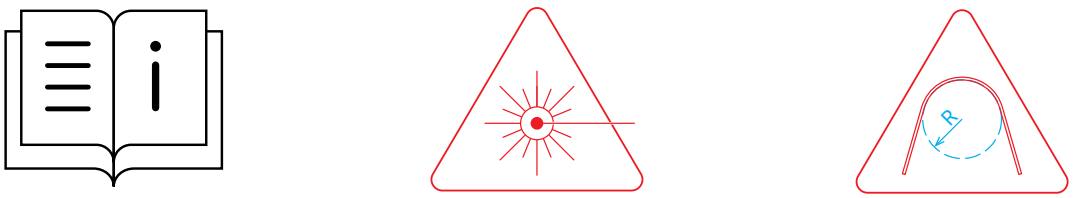
POC: Passive Optical Component

2 Tools



- Cable preparation tools
- Scissors (to cut aramid yarn if present)
- Small side cutter or Cable Tie Gun (to cut excess cable tie)
- Fiber splice equipment and fiber cleaning tools

3 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.

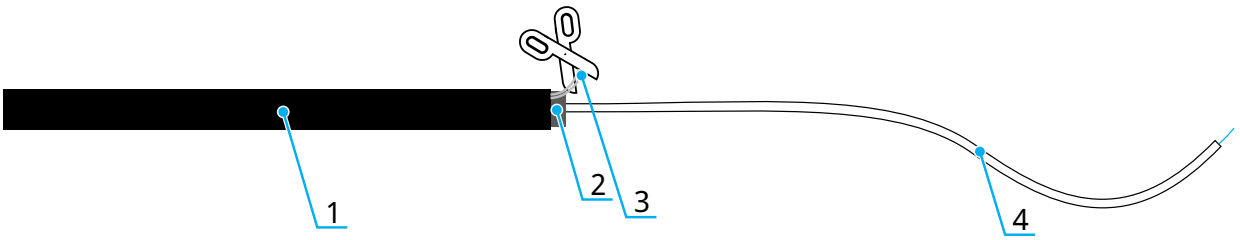
4 Install drop cable

Note: The separate cable retention kits: TC-1466-IP (Cable retention: Aramid), TC-1467-IP (Cable retention: Dual cable), TC-1468-IP (Cable retention: Jacket (Mclip)) or TC-1469-IP (Cable retention: Rigid strength member) are suitable to be used to install the drop cable in the CC 100.

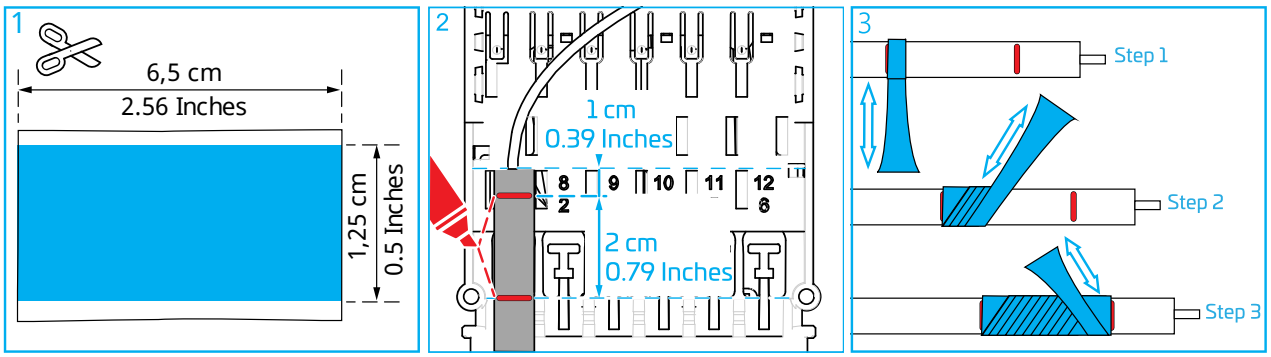
Important: For this closure (CC 100), the jacket of the drop cable should be removed in all cases over a distance of **130 +/- 5 cm (51.2 +/- 2 Inches)**.

4.1 Using T-shapes integrated in organizer

4.1.1 Prepare drop cable



N.°	Description	Preparation
1	Jacket	Remove the jacket over a distance of **130 ±5 cm / 51 ±2 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.



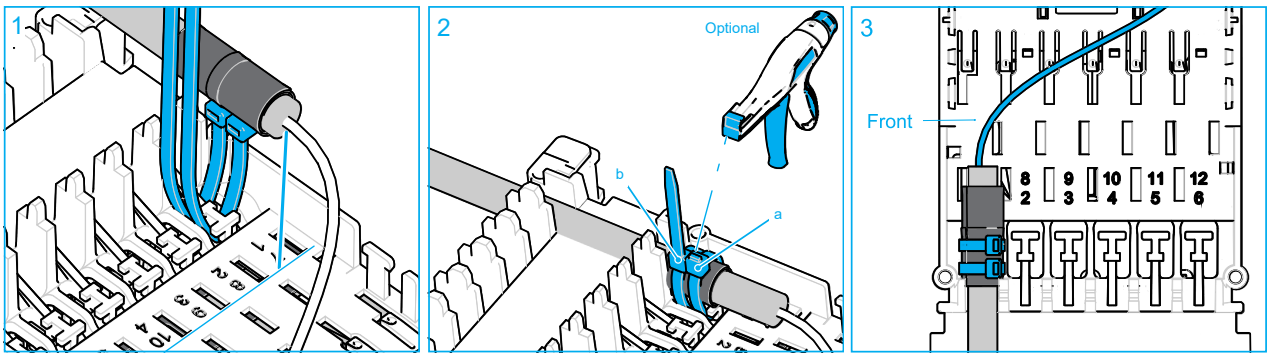
1 Take the strip of silicon tape with a width of 1,25 cm / 0.5 Inches and cut to a length of 6,5 cm / 2.56 Inches.

⚠ ***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.

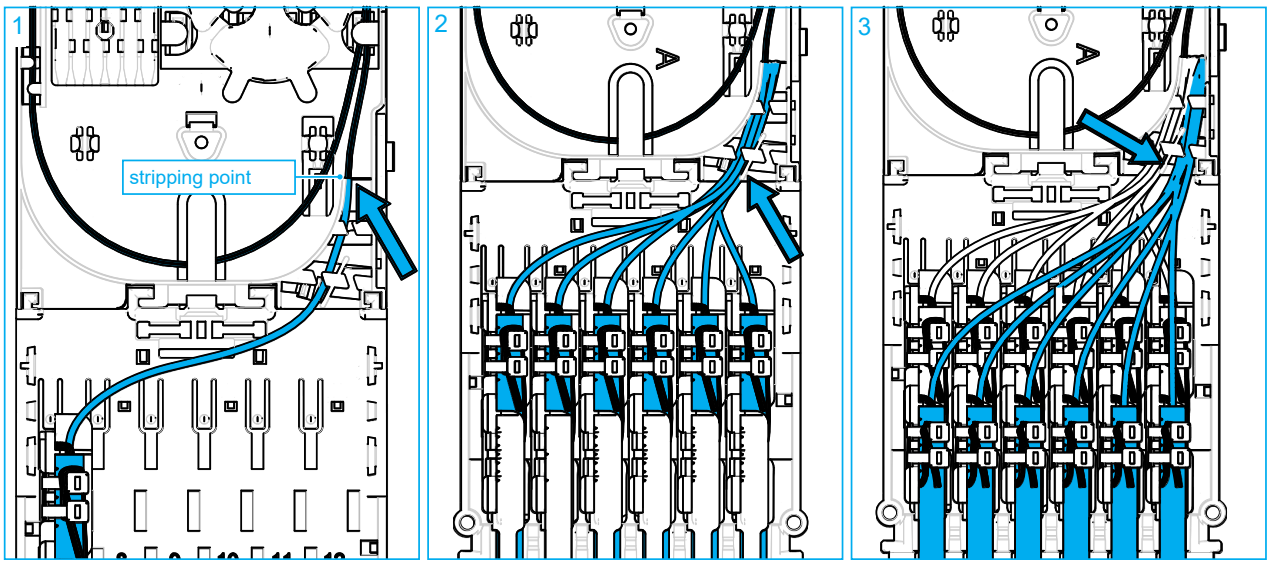
4.1.2 Install drop cable



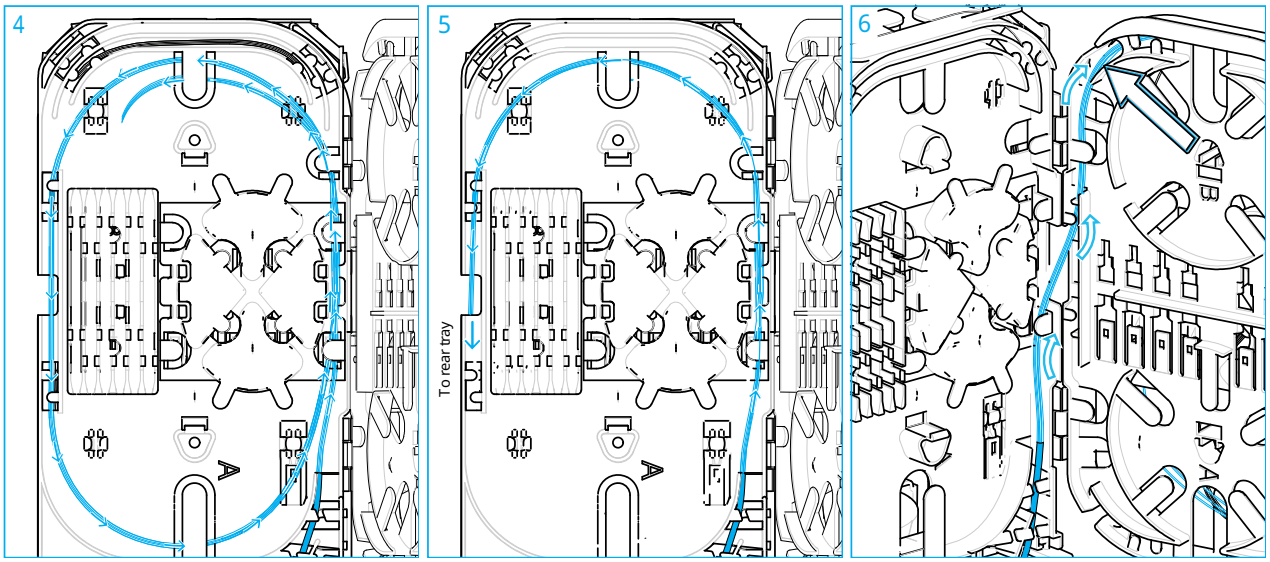
1 Install 2 cable ties around the T-shape on the front of the organizer. Position the cable with the taped area on top of the T-shape and secure the cable ties.

Note: Make sure to install the cable ties with the correct orientation (see figure above).

4.2 Route drop fibers to front splice tray



1 All drop subunits are routed to the right side. Bring the cut subunit to the splice tray (front) and mark the stripping point on the sheath. The line indicates the stripping point, however if the stripping point is located in the transition zone which is textured, this is acceptable. Strip the subunit to this mark and clean all fibers per standard practice.
2 First layer drops are routed left from the rib as indicated.
3 Second layer drops (if applicable, using the dual cable strain relief kit) are routed right from the rib as indicated.

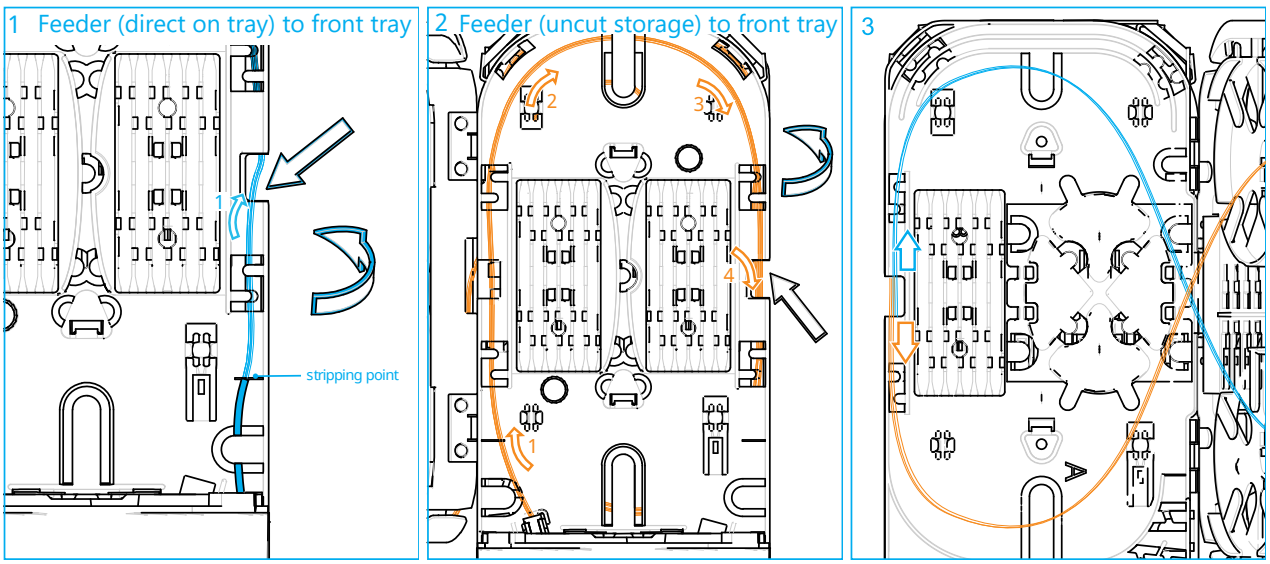


4 Drop fibers routed on the front tray, waiting for feeder fibers
5 Drop fibers routed to the rear tray. (This is not a standard procedure).
6 Drop fibers routed to the splice side on the hinged tray.

5 Splice drop cable (front tray - A tray)

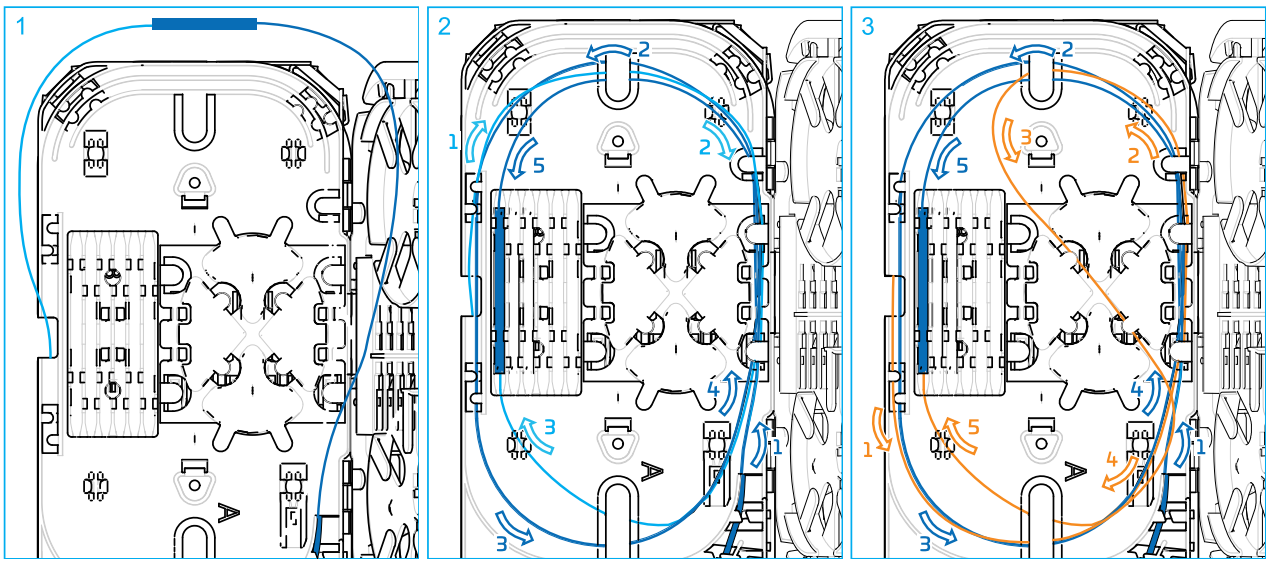
5.1 Routing feeder to front tray

The front tray is indicated with the letter A (see figure 3 below).



1 The feeder fibers directly entering the rear tray are routed through the slot above to the front tray.
2 The feeder fibers coming from the uncut fiber storage are first routed to the top of the tray before being routed through the slot through the front tray.
3 Note that the direction of the feeder fiber is different depending on which side the feeder fibers enter the rear tray.

5.2 Splicing on front tray



1 Make fusion splice per standard practice and store the splice protector in the splice protector holder. Start storing the splice protectors from left to right.
2 If fibers enter the tray from opposite sides, store over length in loops on the tray.
3 If fibers enter the tray from the same side, route one of the fibers through the channel in the island on the tray, then store over length in loops on the tray.

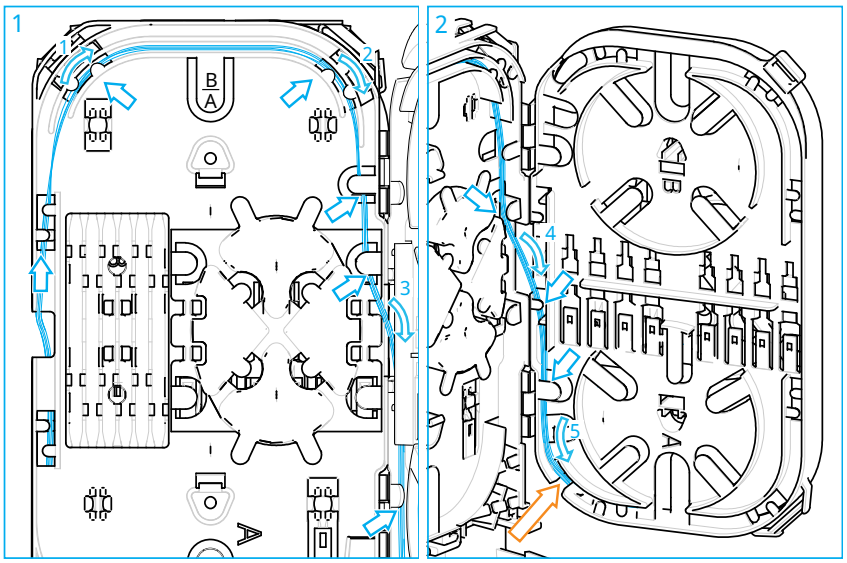
Note: Make sure all fibers are properly positioned under the lips and avoid bulging of the fiber.

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

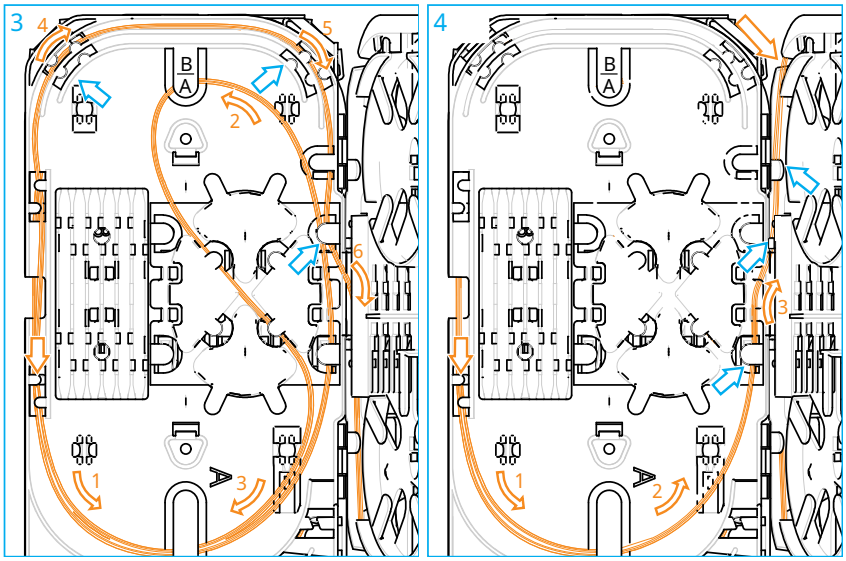
6 Splice drop cable (hinged tray - B tray)

6.1 Routing feeder and drop to hinged tray

The splice side of the hinged tray is indicated with the letter B.



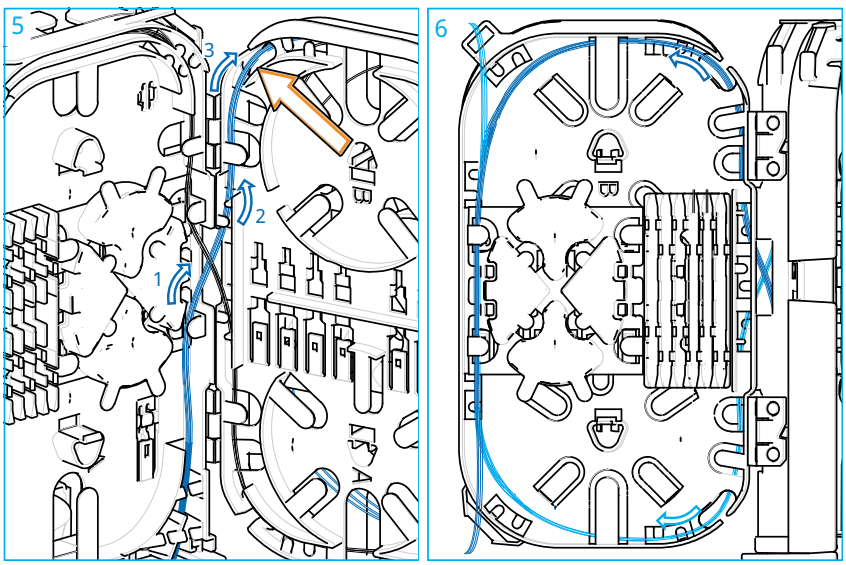
1 To route the feeder fiber to the splice side of the hinged tray, it is advised to use the two channels at the top of the front tray. This avoids disturbing the fibers already routed in the front tray.
2 Then route the fibers over the hinge to the slot at the bottom of the hinged tray.



3 To route the feeder fibers coming from the uncut storage zone through the channels at the top side of the front tray, the fibers first need to make a U-turn through the channel in the island.

Note: please note that this action requires more length of the fibers to still be able to splice with the splice equipment.

4 Feeder fibers coming from the uncut storage can also be routed via the bottom side of the tray to the slot at the top side of the hinged tray.

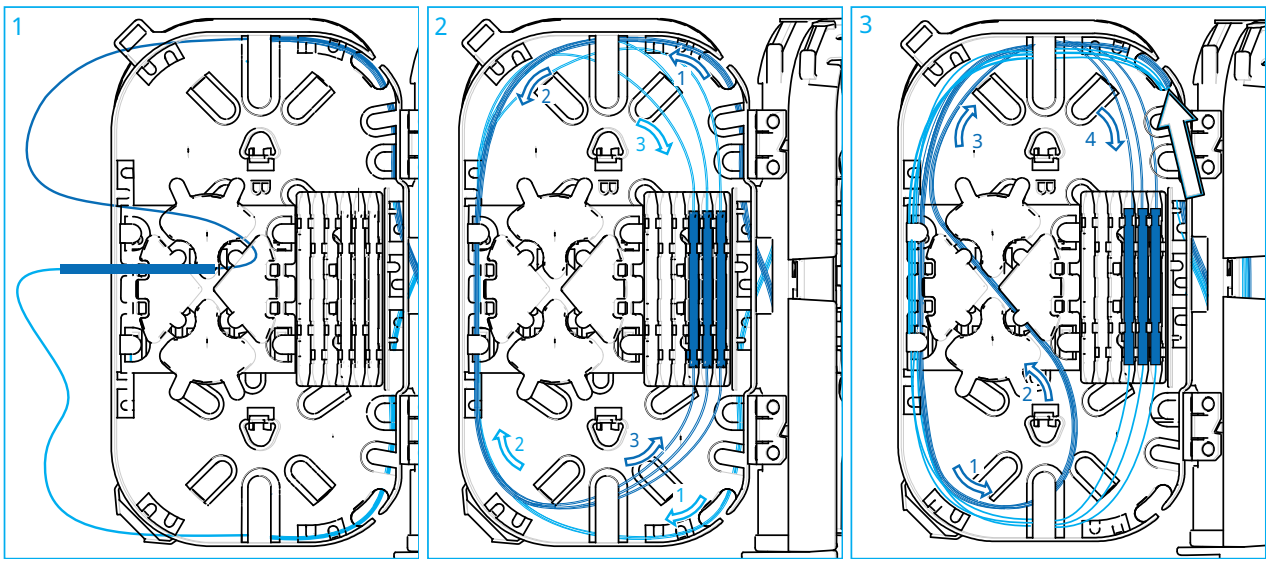


5 Drop fibers are routed through the slot at the top side of the hinged tray.
6 Result of fibers of the feeder cable and fibers of the drop cable on the front side (splice side) of the hinged tray.

Note: Make sure all fibers are properly positioned under the lips and avoid bulging of the fiber.

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

6.2 Splicing on hinged tray



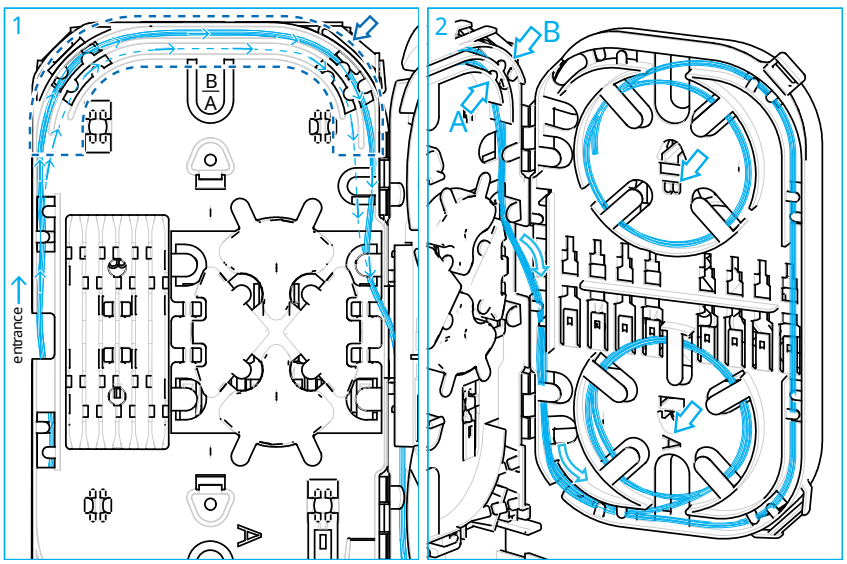
1 Make fusion splice per standard practice and store the splice protector in the splice protector holder. Start storing the splice protectors from right to left.
2 If fibers enter the tray from opposite sides (one through the slot at the bottom and one through the slot at the top), store over length in loops on the tray
3 If fibers enter the tray from the same side (example, both through the slot at the top side), route one of the fibers through the channel in the island on the tray, then store over length in loops on the tray.

Note: Make sure all fibers are properly positioned under the lips and avoid bulging of the fiber.

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

7 Storage zones on hinged tray (B tray)

Feeder fibers or drop fibers can be stored (temporarily) on the rear side of the hinged tray. It is possible to separate the fibers in two zones depending on which tray they will be routed to in a later stage.

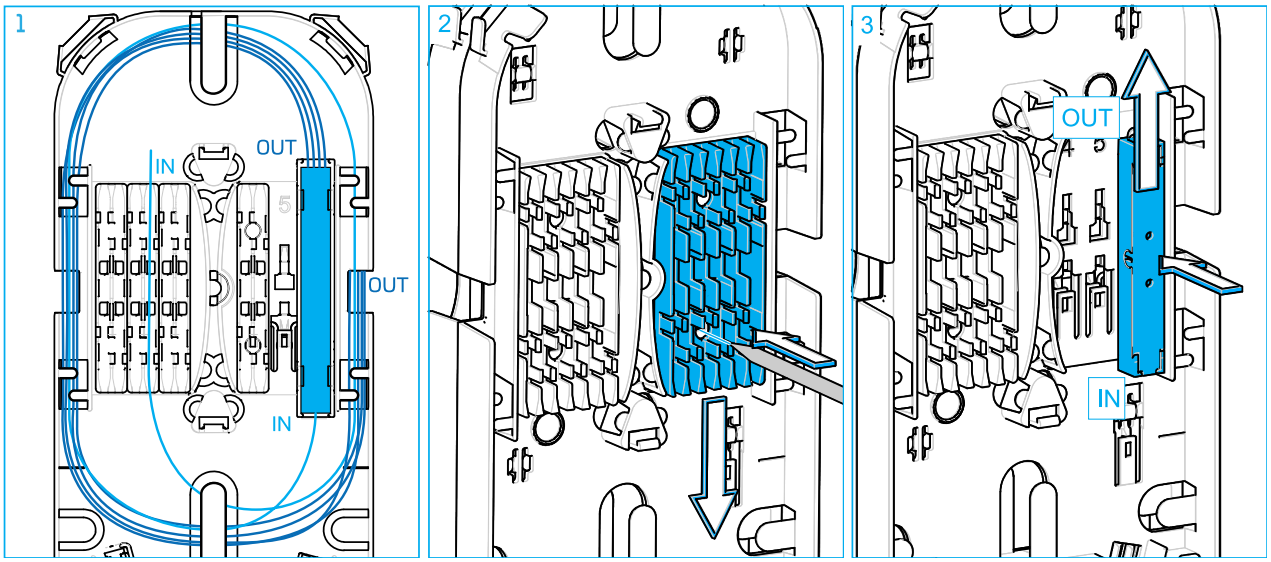


1 To store feeder fibers on the storage zone at the rear side of the hinged tray, use the channels at the top side of the front tray. A letter on the lip indicates which channel correspond to which storage zone.

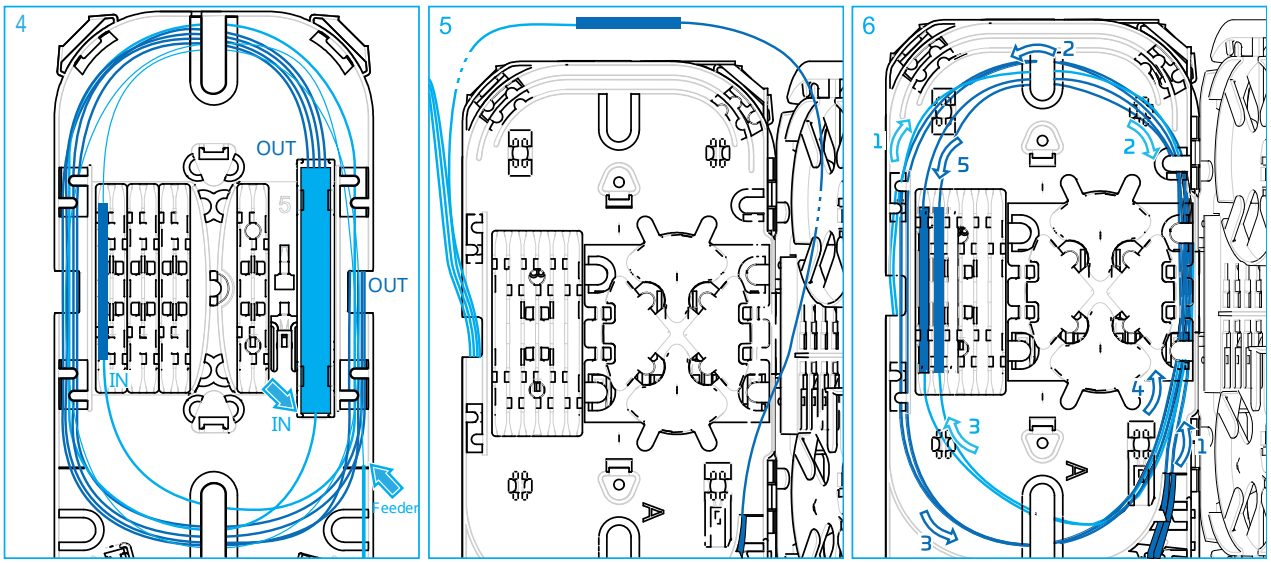
Important: if the fibers are spliced on a later stage on the A tray, the fibers should be removed from the channel to proper route over length when spliced. For splicing on the B tray, fibers can stay in the channel.

2 Route the fibers via the transition area as indicated on the figure to the storage zones A or B as required.

8 Splitter application



1 A splitter can be factory installed on the **rear tray**.
2 It is also possible to install the splitter in the field. First remove one of the splice protector holders. Use the tip of the fiber guidance pen to unlock the splice protector holder, then slide the splice protector downwards.
3 Slide the field installable splitter into one of the dove tails. Make sure the output of the splitter is oriented to the top.

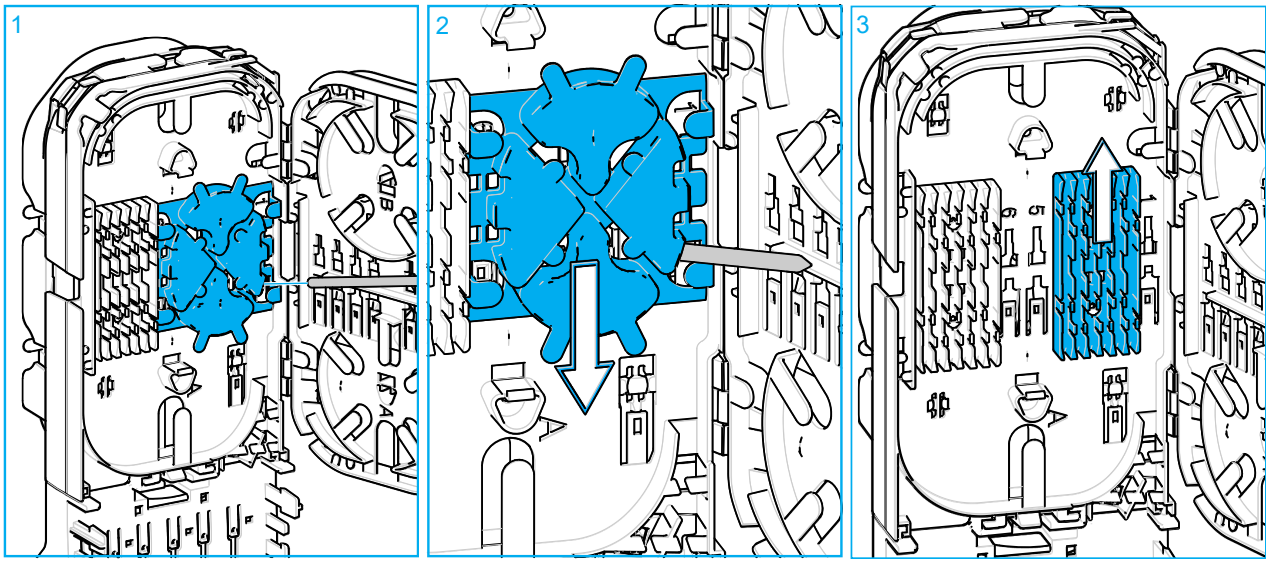


4 Splice the input of the splitter to the feeder fiber (entering directly on the rear tray) by making a fusion splice: make fusion splice per standard practice, store the splice protector in the splice protector holder and store over length in loops on the tray. Route the output to the front side as shown.
5 Turn the organizer and splice the output of the splitter to the drop cable fibers.
6 Store the splice protector in the splice protector holder and store over length in loops on the tray.

Note: Make sure all fibers are properly positioned under the lips and avoid bulging of the fiber.

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

9 Splice tray components manipulation



1 The island and splice protector holders can also be removed in the field to create a customer specific set up. Example above illustrates how to replace the island on the front side with a splice protector holder.
2 Use the flat side of the fiber guidance pen to push the lock on the tray to the unlock position. Push the component downwards.
3 To insert a new component, slide it bottom up until it locks.