

## NOVUX™ Fiber Optic System SEC 100 Splice Application

### 1 About this manual

This manual describes the installation steps of the drop splice application of the SEC 100 series. Installation steps in this document are limited to: drop cable installation (push through), routing on and to the different trays, splicing on the different trays and the splitter application.

Installation steps of the inline feeder cable are explained in manual TC-1557-IP: SEC 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.

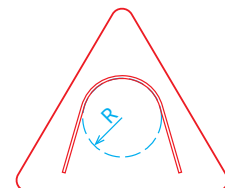
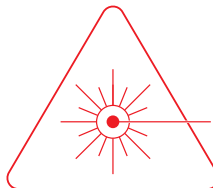
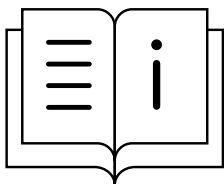
### 2 Cable range drop cable

	Cable range (mm)	Position in closure
Drop cable (Push through)	3-7	2, 3, 4

### 3 Tools

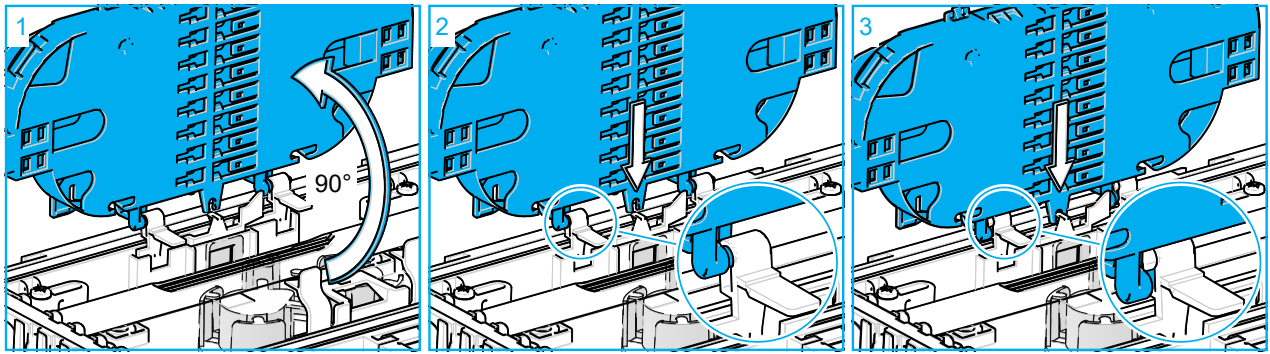
- Cable stripping and cleaning tools
- Cable tie gun (optional) or small side cutter (to cut excess cable tie)
- Fiber splice equipment and fiber cleaning tools
- Scissors (to cut the silicon tape)

### 4 Warnings and Cautions



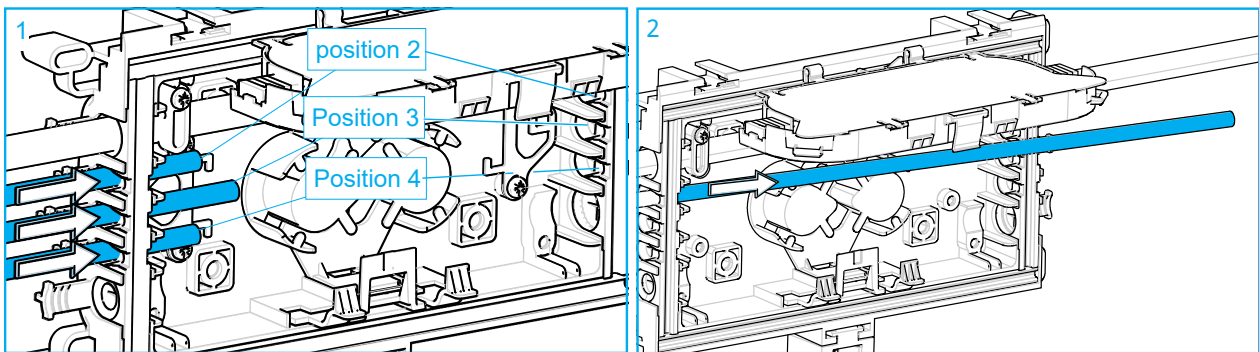
- Follow the installation instruction steps to ensure the performance of the closure. It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the 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.

## 5 Lock the tray

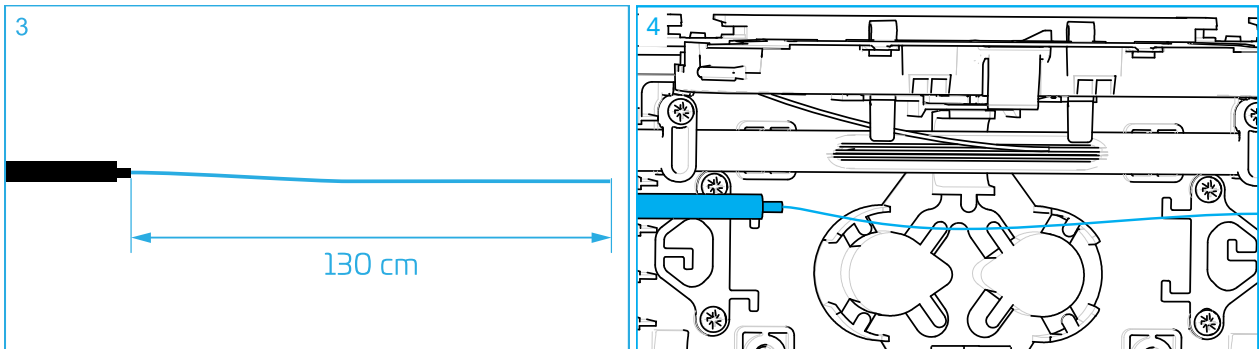


- 1 Make sure the tray is positioned 90° relative to the bottom to lock the tray.
- 2 Slide the tray downwards.
- 3 The hinges of the tray will lock now into the squared cavities of the bottom.

## 6 Install drop cable

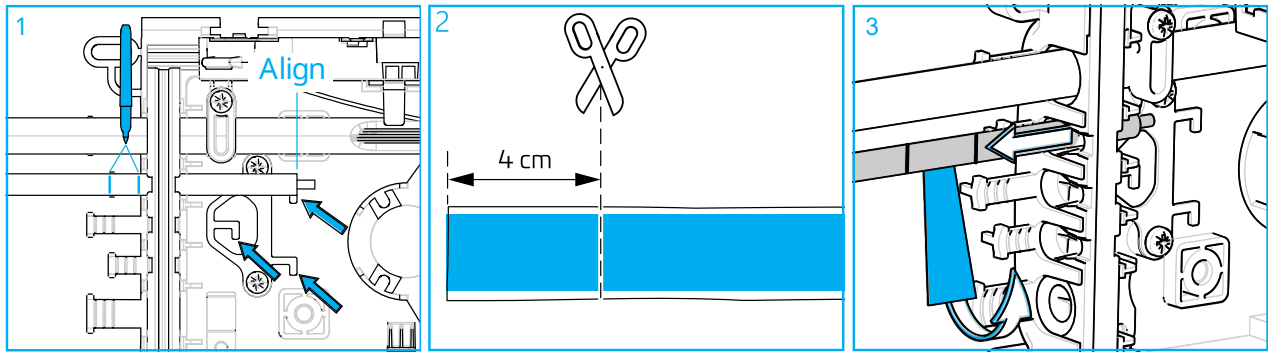


- 1 Push the cable through the rubber seal. Position 2, 3 and 4 are available for this application.
- 2 Make sure to push through enough cable to be able to strip the cable.



- 3 Strip the cable per local practice over a length of 130 cm. Clean the 900µm fiber per local practice.
- 4 Align the cable jacket with the cable bracket.

## 7 Secure drop cable

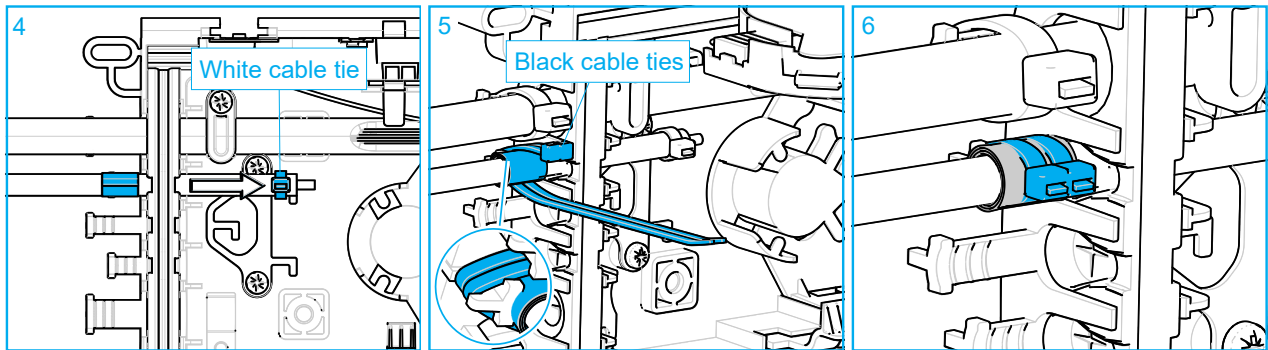


1 Align the end of the cable jacket with the end of the L-shape of the bracket. The arrows indicate the position of the cable jacket end for positions 2,3 and 4. Mark the position of the silicone tape.

2 Cut the silicone tape to a length of 4 cm.

 **Note:** Make sure your hands are clean and degreased before preparing and installing the cables.

3 Pull back the cable a bit to have more access. Remove the protective paper. Apply the silicone tape on the cable between the marks. 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.

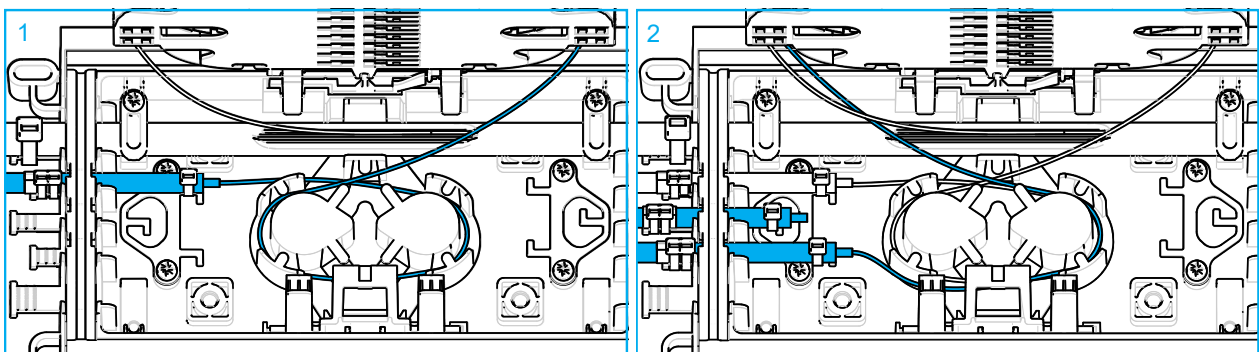


4 Secure the cable **at the inside** with a **white** cable tie onto the L-shape.

5 Secure the cable **at the outside** with **2 small black** cable ties onto the T-shape over the silicon tape. Make sure the cable tie grips into the recess at the bottom side of the T-shape.

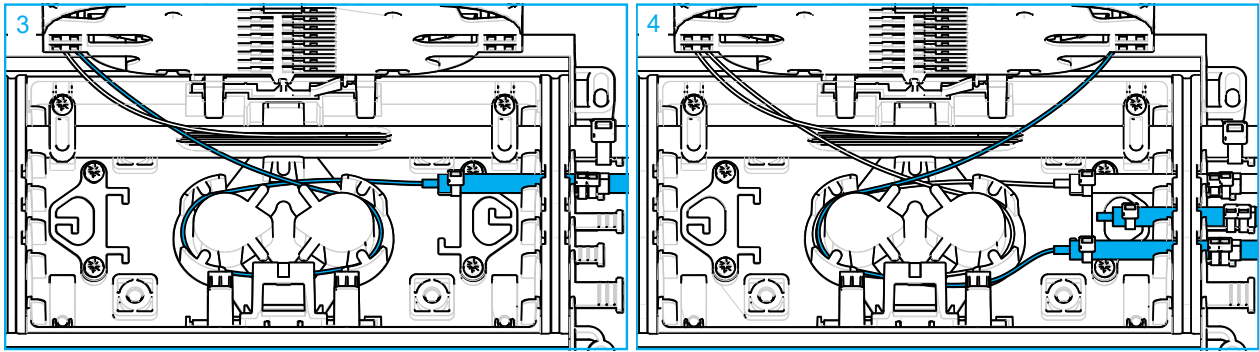
6 The 2 small black cable ties secured at the outside.

## 8 Route to tray



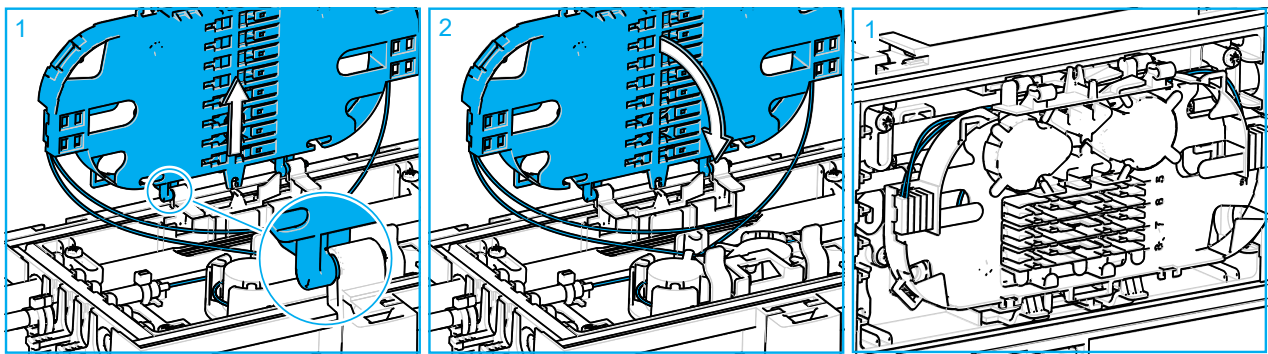
1 For the drop cable in position 2, guide the 900  $\mu$ m around the island and enter the tray as shown.

2 The drop cable installed in position 3 can turn around the island in both senses. Best practice is to choose the entrance of the tray opposite of the feeder fiber entrance to avoid crossings on the tray. For the drop cable installed in position 4, guide the 900  $\mu$ m around the island and enter the tray as shown.



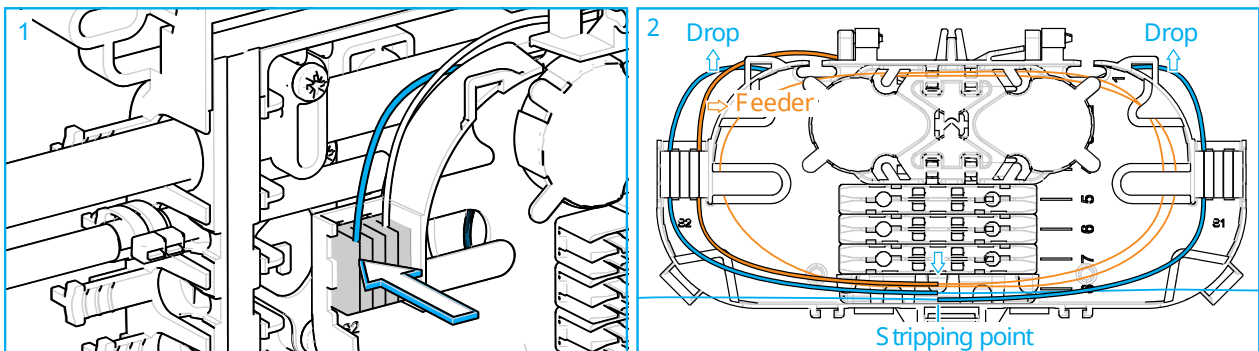
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## 9 Close the tray



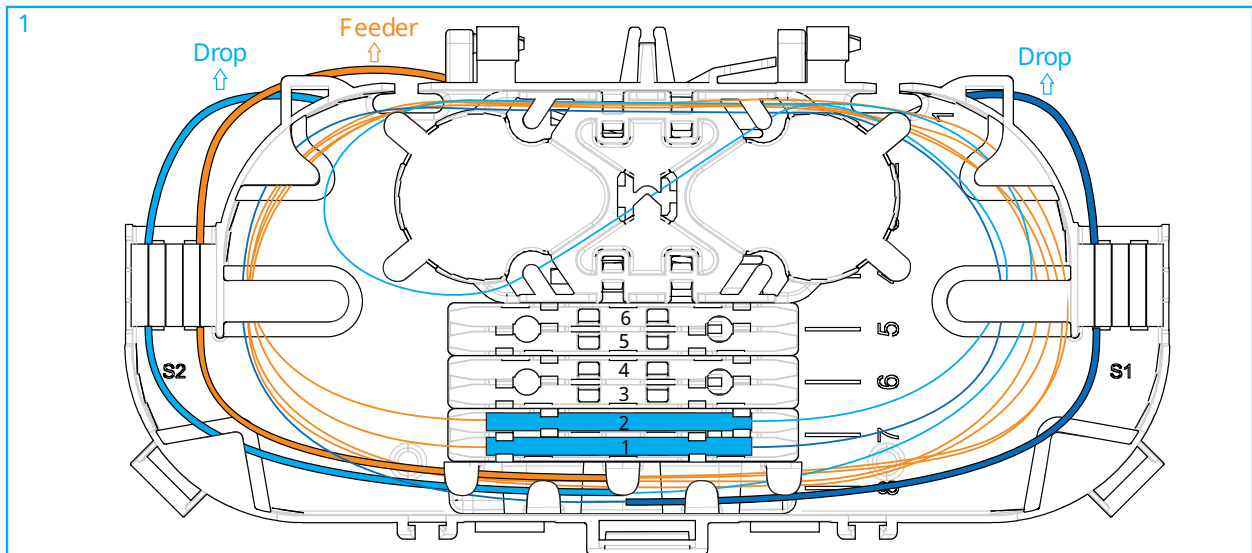
- 1 To close the tray, the tray should first be lifted upwards. The hinges fall into the free openings.
- 2 Turn the tray towards the bottom cover.
- 3 Tray closed with feeder fiber routed to the tray.

## 10 Routing on the tray





- 1 Push the 900  $\mu\text{m}$  fiber in the foam on the entrance of the tray.
- 2 Indicate the stripping point in the middle of the fiber guide and strip the buffer tube of the fiber per local practice.

**Note:** Note that the fiber from the drop cable can enter the tray either at the same side of the feeder fiber or the opposite side.

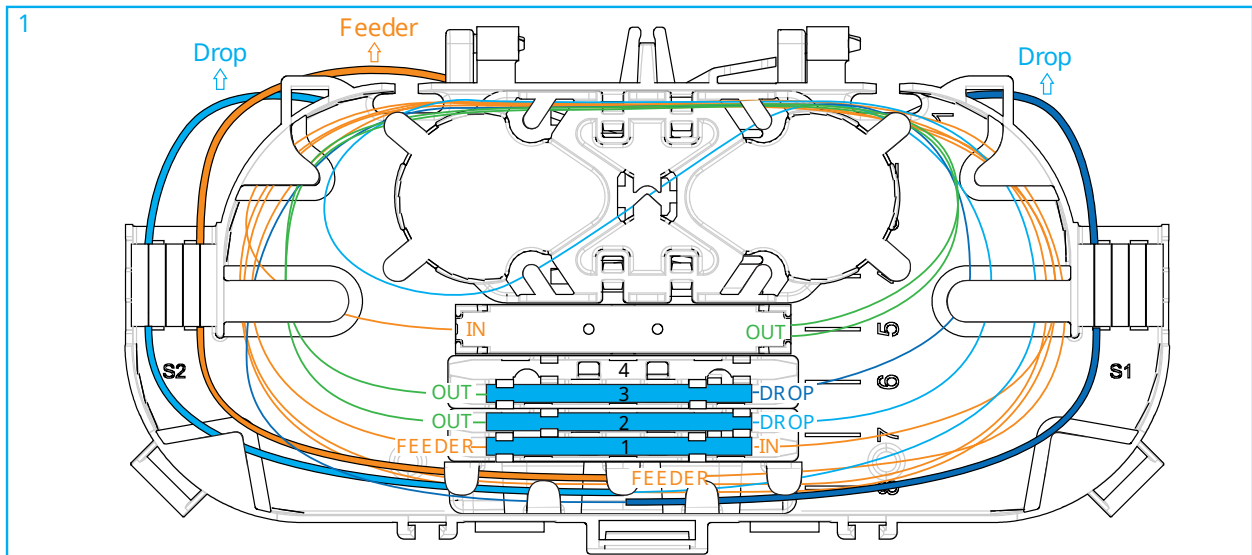


- 1 Make fusion splice per standard practice and store the splice protector in the splice protector holder (position 1 to 6). Every position can hold up to 3 splice protectors.
  - a If fibers enter the tray from opposite sides, store over length in loops on the tray (full tray width).
  - b If fibers enter the tray from the same side (light blue), route one of the fibers through the channel in the island on the tray, then store over length in loops on the tray (full width).


 **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.


## 12 Splitter application




- 1 Splice the feeder fiber to the input of the splitter with a fusion splice per standard practice and store the splice protector in the splice protector holder. Every position can hold up to 3 splice protectors. Store over length in loops on the tray (full tray width).

 **Note:** The configuration of the splitter tray can differ depending on the order.

- 2 Splice the drop fiber to one of the output fibers of the splitter with a fusion splice per standard practice.
  - a Store the splice protector in the splice protector holder and if the fibers enter the tray from opposite sides, store over length in loops on the tray (full tray width).
  - b If fibers enter the tray from the same side (light blue), route one of the fibers through the channel in the island on the tray, then store over length in loops on the tray (full tray width).

 **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.