INSTALLATION MANUAL
IN-LINE FIBER MDU DROP CABLE REPAIR SPLICE CLOSURE

GENERAL

This document will serve as a guidance for installation method of the product "IN-LINE FIBER MDU DROP CABLE REPAIR SPLICE CLOSURE".

List of products that this manual covers:

- **FCLO-HO-01E-1-PFMX-MDU:** HORIZONTAL 1F SPLICE CLOSURE, 1 SPLICE SLEEVE PREL RD 3MM.

- **FCLO-HO-01E-1-PSCA-MDU:** HORIZONTAL 1F SPLICE CLOSURE, 1 SC/APC ADAPTER PREL RD 3MM.

- **FCLO-HO-01E-1-PSCU-MDU:** HORIZONTAL 1F SPLICE CLOSURE, 1 SC/UPC ADAPTER PREL RD 3MM.

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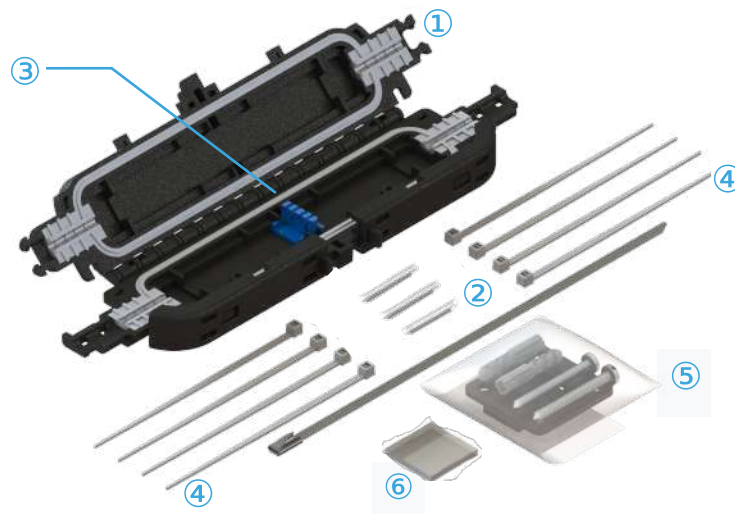
SPLICE KIT INSTALLATION

The "IN-LINE FIBER MDU DROP CABLE REPAIR SPLICE CLOSURE" by FUSIONGUARD® is preloaded with:

NUMBER	CODE	FCLO-HO-01E-1-PFMX-MDU DESCRIPTION	QTY
1	FCLO-HO-01E-R3	HORIZONTAL 1F SPLICE CLOSURE MDU 3 MM CABLE	1
2	FM-FO-ME-25-15	25 mm SPLICE SLEEVE WITH 1.5 mm GUIDE*	3
3	SSH-S4	SPLICE SLEEVE HOLDER	1
4	CN25100-NE	2.5mm x 100mm OUTDOOR PLASTIC CABLE TIE	8
5	FCLO-HO-01E-WKIT	WALL MOUNTING KIT HOR 01F SPLICE CLOSURE	1
6	FCLO-CV-20MM	VULCANIZING TAPE 20 MM X 20 MM X 2 MM	1

*Splice closure designed for 1 splice. Two 25 mm splice sleeve extra included (3 pcs total).

With our kit, any drop cable can be repaired quicker and easier than a complete last mile installation replacement.
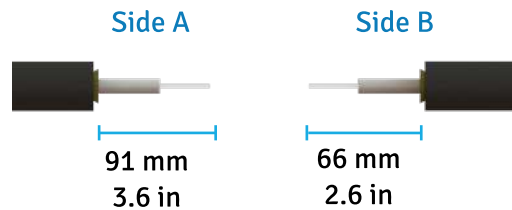
STEP 1: CABLE´S PREPARATION FOR SPLICING PROCESS

NOTE: It is important to carry out this process on a flat surface; in case of in line installations 2 people may be required.

1.1 Make sure you have the right cable to follow the steps.

In this case, use **MDU Drop Cable** (Φ3 mm).

First, strip the cable by removing the outer jacket up to 91 mm (Side A) and 66 mm (Side B) as it shown.

Side A   Side B

91 mm   66 mm
3.6 in   2.6 in
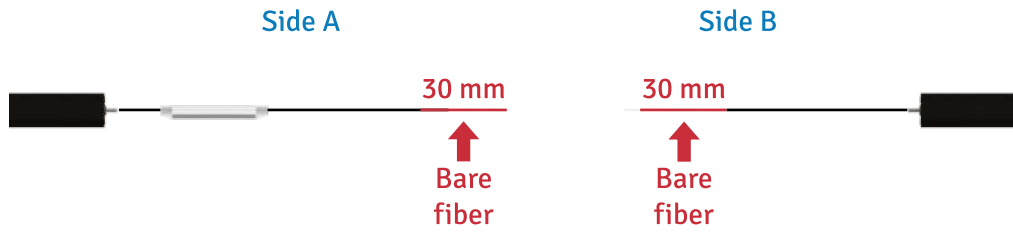
1.2 Cut the loose tube flush to the outer jacket.

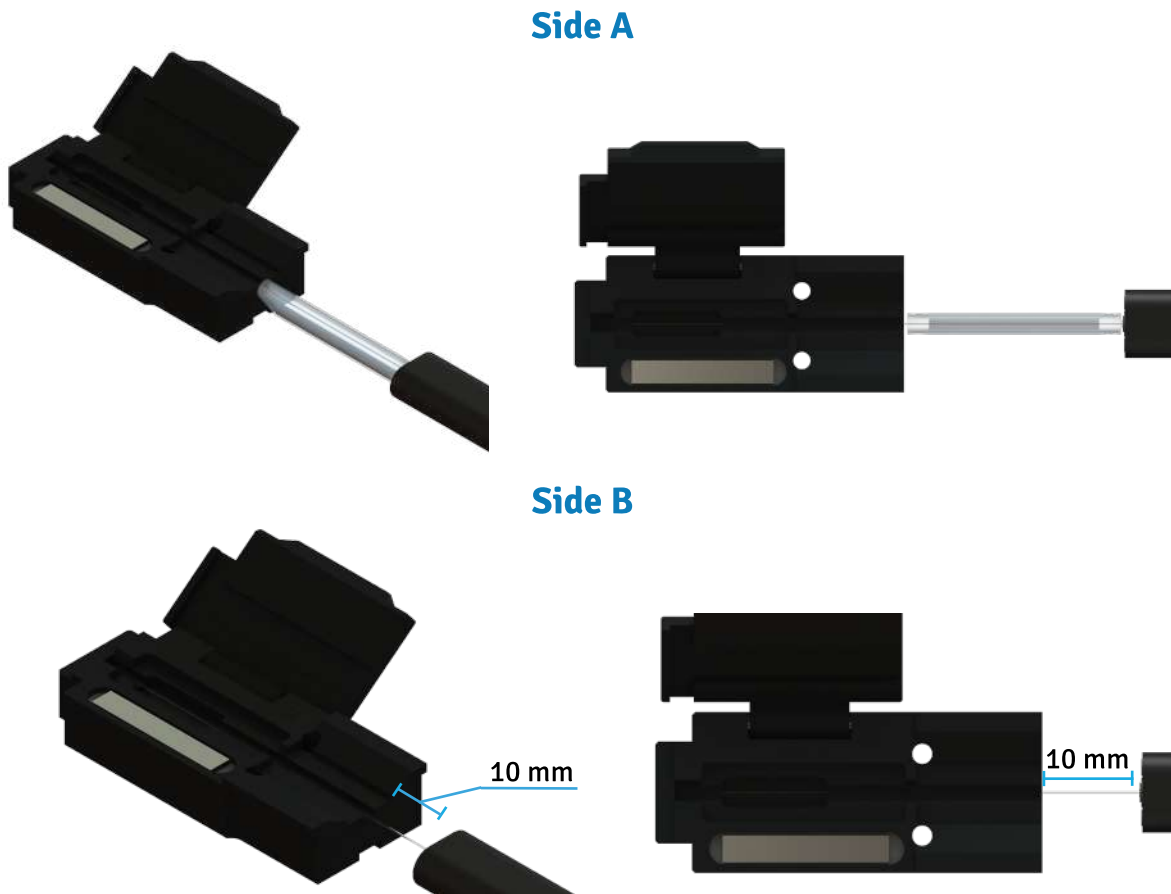1.3 Once the loose tub is cut, prepare the fiber and making sure that the cable ends are correctly stripped.

Place the splice sleeve into the largest fiber (91 mm) as in the next image, in this case, into the side A.

Side A   Side B

Largest fiber

1.4 Prepare the fiber for splicing by stripping 30 mm each side.

Side A   Side B

30 mm   30 mm

↑   ↑

Bare   Bare
fiber   fiber

1.5 Place the splice sleeve arrangement into the fiber clever leaving a distance of 10 mm (1 cm).

Side A

Side B

10 mm

10 mm

1.6 Once the cable is ready, make the splicing process.

Result:

STEP 2: SPLICE SLEEVE ARRANGEMENT

2.1 Begin by opening the **splice closure**, applying enough force on the hinges using a screwdriver.
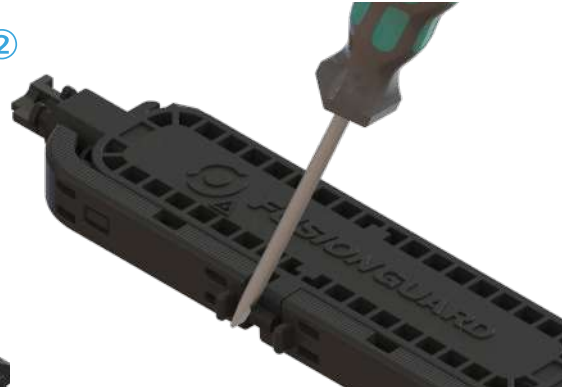As a reference, open it as shown in the next picture:
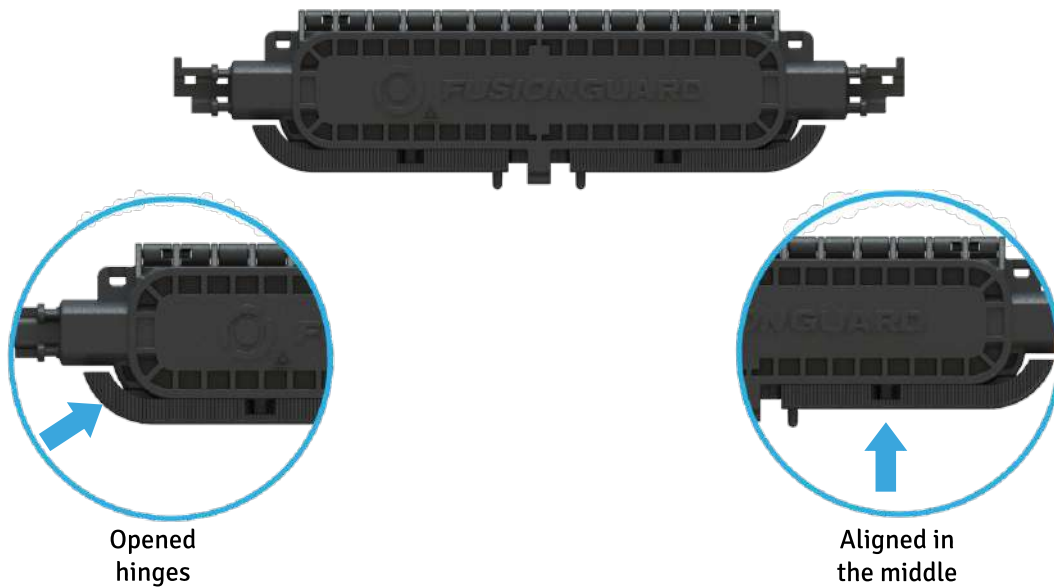
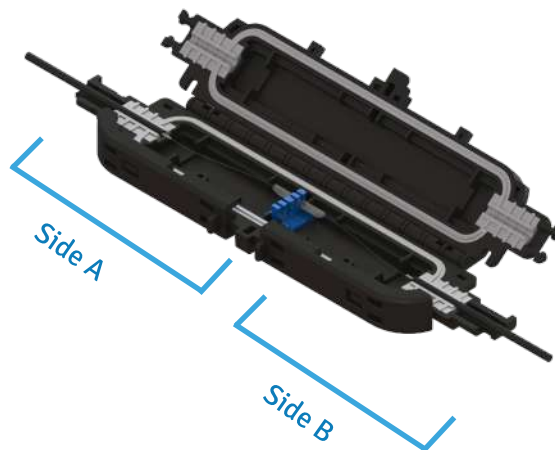## RIGHT SIDE

①

②

LEFT SIDE

①

②

Opened splice closure

Opened
hinges

Aligned in
the middle

2.2 Once the splice closure is opened, the next step will be holding the cable in place for better splice sleeve arrangement.

2.3 Place the longest side of the splice sleeve arrangement (Side A) on the longest side of the splice closure as it shown in the next picture.

NOTE: Pre-lubricated item. Avoid leaving the splice closure open. For IP68 improvement add silicone grease at the gasket before closing it.

Side A

Side B

2.4 Once the cable is placed, apply vulcanized tape to the cable **on both** sides in order to completely seal the entry.

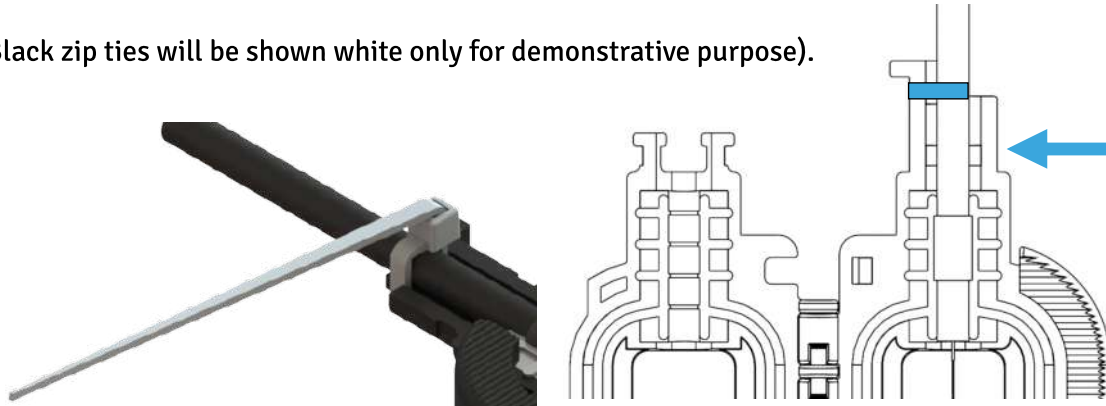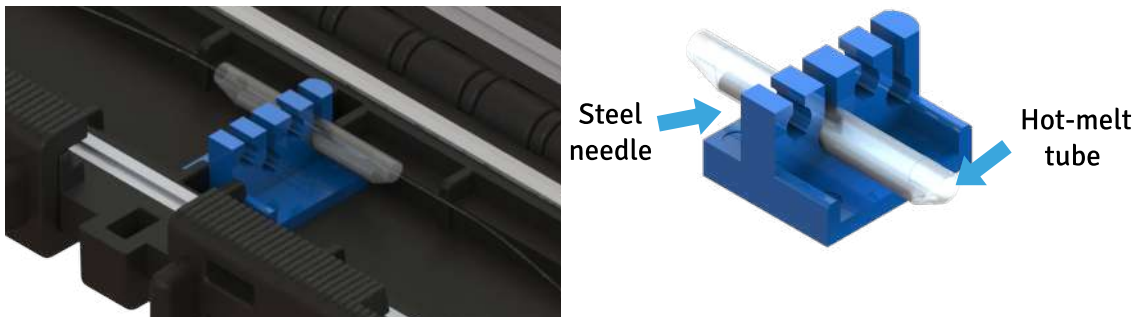Apply the vulcanized tape to the grommets top to the grommets buttom as it shown.

Result:

STEP 3. ZIP TIES

3.1 Place the cable and apply just **one** zip tie as shown to keep the cable properly placed as it shown.

(Black zip ties will be shown white only for demonstrative purpose).

3.2 Place the splice sleeve in the splice sleeve holder as it shown in the next image.
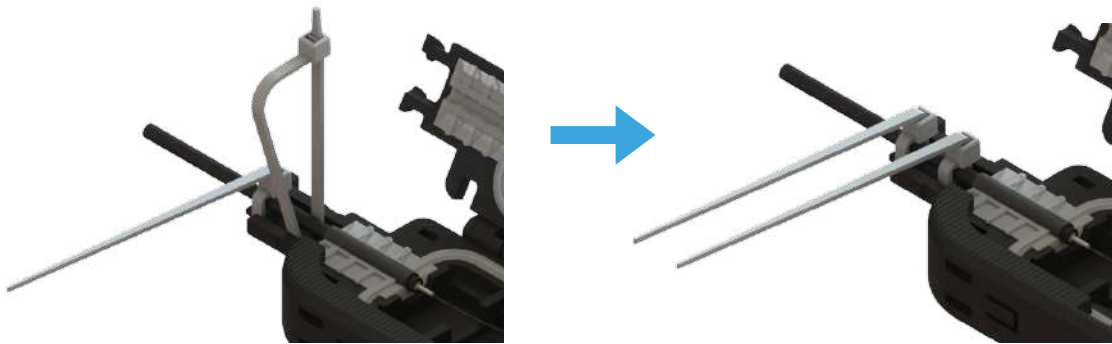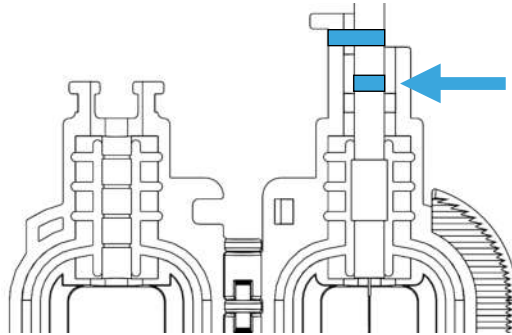

Steel needle

Hot-melt tube

3.3 Now that the splice sleeve is in its place, **proceed to secure the other side of the cable** and secure it with the black zip ties to hold it as shown.

Result:

3.4 Next, apply the zip ties one on each side as it was shown **before closing the splice closure**. Cut off the surplus.

Result:

Note: Be careful that the splice is correctly located inside the in line splice closure before closing it as it shown in the image.
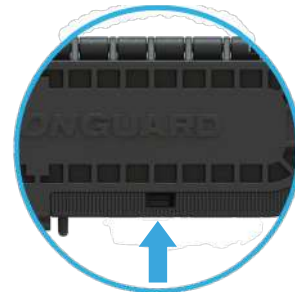
3.5 Proceed by closing the splice closure, putting the base and top together, and pushing the hinges.
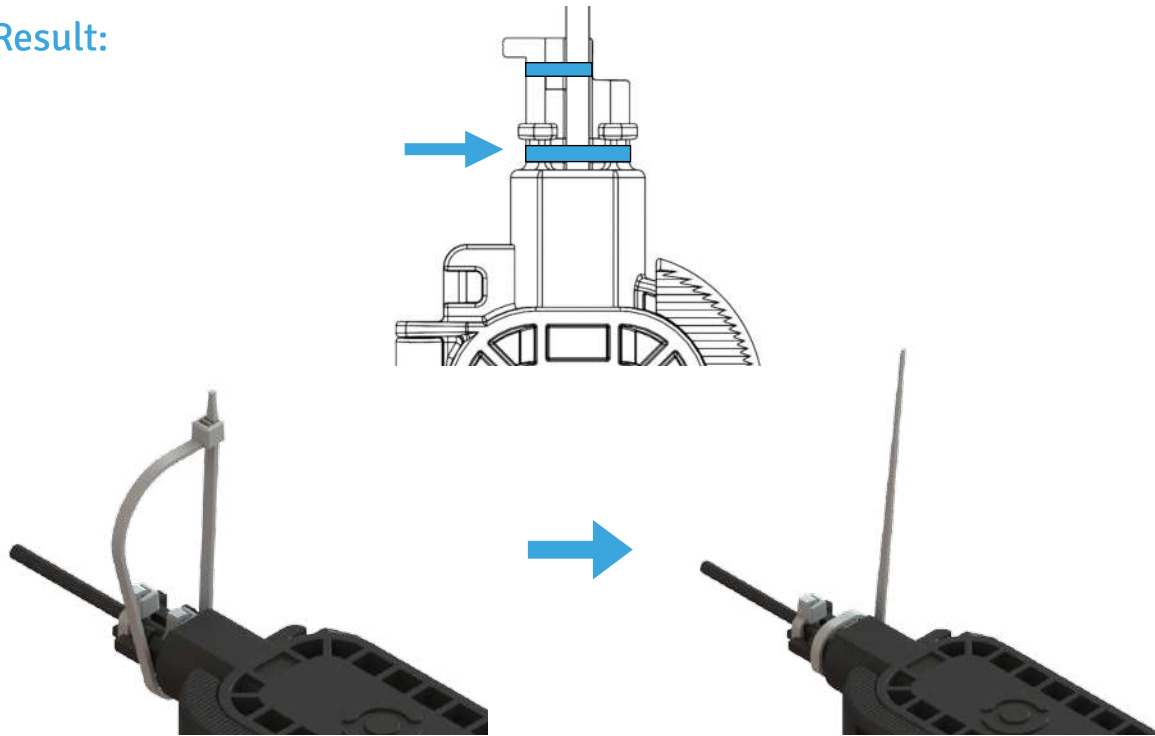

Closed splice closure

Closed
hinges

Not visible
mark

3.6 Apply two more zip ties, **one on each side** as shown. This will help by applying force on the sides.

Result:

Result:

MECHANICAL CONFIGURATIONS:

FCLO-HO-01E-1-PSCA-MDU: SC/APC ADAPTER KIT.
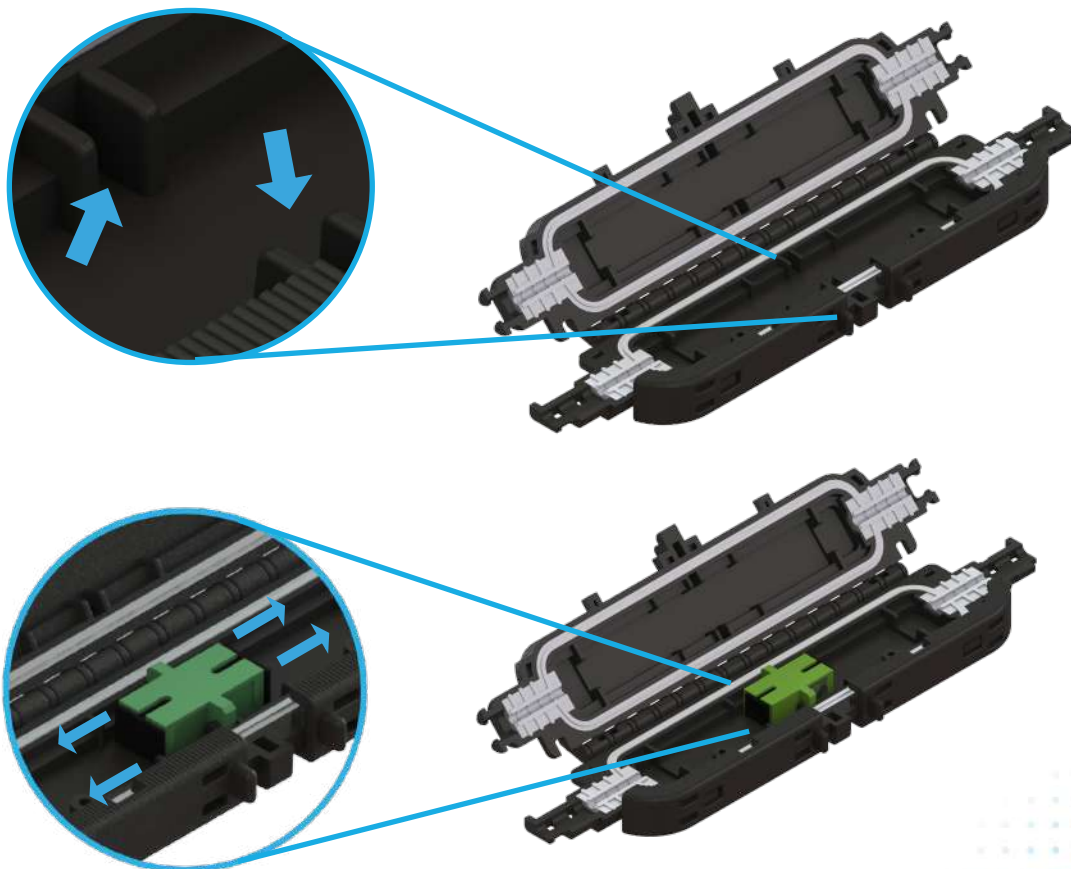
FCLO-HO-01E-1-PSCU-MDU: SC/UPC ADAPTER KIT.

IMPORTANT: These steps can be used only for FCL0-H0-01E-1-PSCA-MDU and FCL0-H0-01E-1-PSCU-MDU.

STEP 1: SCU/SCA ADAPTER´S PLACEMENT

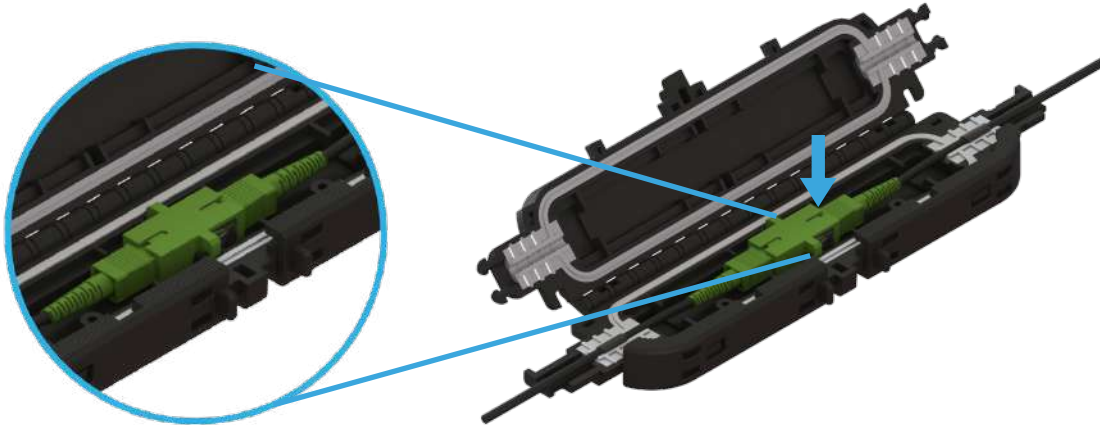1.1 Begin by opening the splice closure.

1.2 Once the splice closure is opened, the next step will be holding the adapters in the case as shown.

1.3 Put the adapter and remove the caps in its sides.

STEP 2: FIELD CONNECTOR

2.1 Insert the field connector into the adapter until it it stops.

2.2 Once the cable is placed, apply vulcanized tape to the cable **on both** sides in order to completely seal the entry.

Result:

Result:

2.3 Repeat the steps as mentioned in the section: Step 3. Zip ties, page 7 to secure the cable with zip ties.

AERIAL INSTALLATION:

Use a metallic messenger wire already installed:

Two zip ties should remain after the closure sealing. Use them to hang the closure over a messenger wire.

Messenger wire   Zip tie
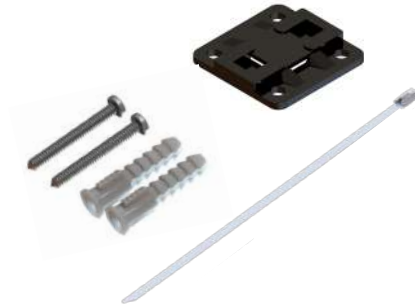

Use fiber clamps

For uses under tension, it is recommended to use HGS-ICO-13-NY Fiber Clamps. (Sold separately)

NOTE: In this installation, is not recommended to use the zip ties added to the messenger wire.

WALL INSTALLATION

Wall mount installation requires the kit: FCLO-HO-01E-WKIT. This kit is included in each configuration.

FCLO-HO-01E-WKIT

FCLO-HO-01E-WKIT		
CT-13604	8"X.18" STAINLESS STEEL CABLE TIE	1
1131314	#8 X 1 1/2" ZINC PAN PHILLIPS SHEET METAL SCREW	2
5014-PE-0000-006	CLOSURE MOUNTING BASE FCLO 1	1
PEB8-38	WHITE #8 X 37.5MM WALL ANCHOR	2
Note: Installation tools are not included		

We begin the installation by inserting the wall anchors in their place. Use a 7.5 mm drill bit to drill into the wall.

These anchors will fix the mounting base on the wall. Place them and the screws in diagonal as it shown in the next image.
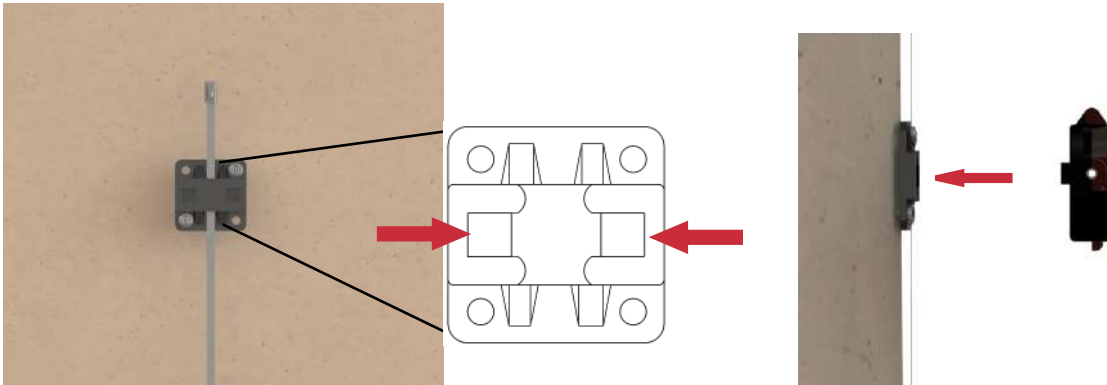
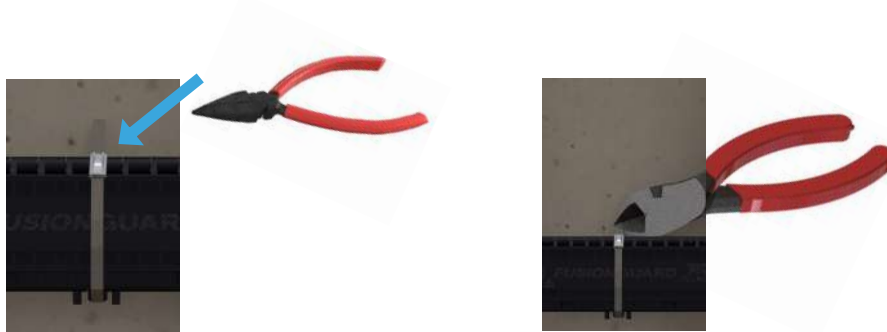Be careful to keep the horizontal leveled.

Horizontal

Next, insert the metal cable tie through the wall base, as shown.

The mounting base has two extrusions that serve as insertion points for the repair splice closure:

Finally, secure your installation by applying tension to the metal cable tie.

Cut the excess of the metal cable tie.

Result: