

INSTALLATION INSTRUCTIONS FOR THE NAF FTTH JOINT CLOSURE



Introduction

NAF FTTH joint closure can be placed directly in the ground. The purpose is to enable branching of distribution or FTTH cables to 2 or 3 FTTH cables.

Joint closure features:

- Suitable for extending and branching FTTH cables
- Simple and sturdy construction
- Cable glands are sealed with vulcanized tape
- Can be opened and closed after first installation
- Capacity for 24 splices
- Dimensions 240 x Ø 110 mm
- Includes two rubber cable glands at both ends which open
- Suitable for different cable structures
- IP 68
- Can be placed directly on the ground

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Equipment for the joint closure

- Frame tube, \varnothing 110 x 240 mm
- End piece with 2 openable cable glands, 2 pcs
- Hose clamp, 2 pcs
- Splice tray with plex cover
- Vulcanized tape, 1 pc
- Equipment bag
 - o Splice protection holder for 12-k, 2 pcs
 - o Cable ties 3 x 100 mm, 6 pcs
 - o Grounding connector, 2 pcs
 - o Cable clamp for grounding and fastening, 4 pcs
 - o Fixing screw M4x12, 8 pcs
 - o Fixing screw M4x8, 4 pcs
 - o Cleaning wipe, 1 pc
 - o Silica gel bag 25g, 1 pc



Equipment for NAF FTTH joint closure

Installation of joint closure

Clean the cables and mark the starting points for the peeling and peel the cables. If you are installing central tube cables like FYO2PMU, FYO2PMU Mini, FYO2RMU 3.5 kN, FYORMU FTTH 3.5 kN or FYOVD2PMU, do not cut their central tubes!

The length to be peeled, regardless of the type of cable, is 100 cm.



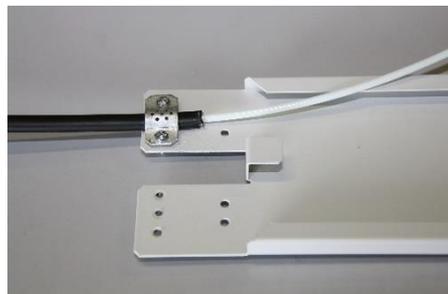
Note. If one or all the connecting cables contain metal, the joint closure must be grounded. This is done by connecting 16 mm² grounding copper cable outside the joint closure to one of the FTTH cables. The connection is done with Oetiker 9 – 11 mm hose clamp.



The hose clamp has been installed loosely to one of the FTTH cables.



Open the needed cable glands of the end pieces and push the cables through them. Push the frame tube and hose clamps over the cables on one side.



Fasten the cables with the cable clamps for grounding and fastening to the splice tray.

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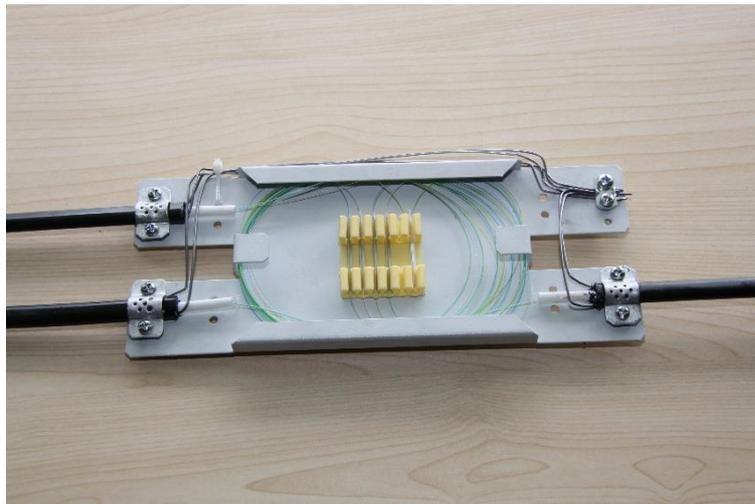
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FTTH cables connected to the splice tray.

If there is a corrugated steel sheet on the cables, expose it and connect it with the cable clamps for grounding and fastening to the splice tray.

If there are steel traction elements on the cable. Fasten the elements as a bundle to free corner on the splice tray using the provided grounding connector. Alternatively, use the grounding bar under the splice tray.



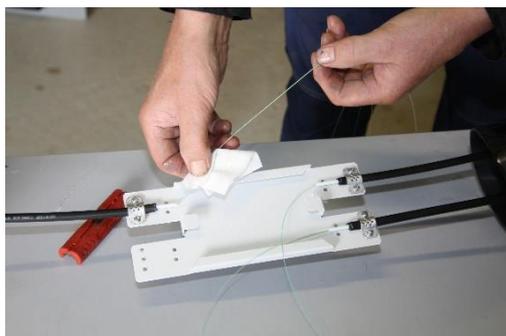
The steel traction elements of the cables are attached to one corner of the splice tray.



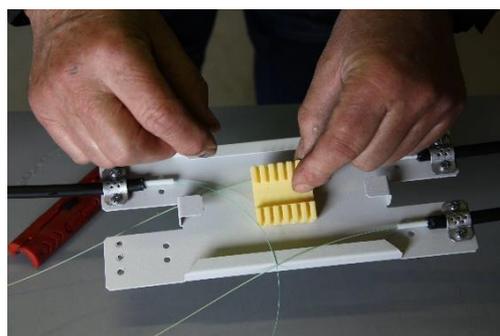
Cut the central tubes of the cables with a tool for this purpose.



Pull out the central tube.



Clean the fibers thoroughly.

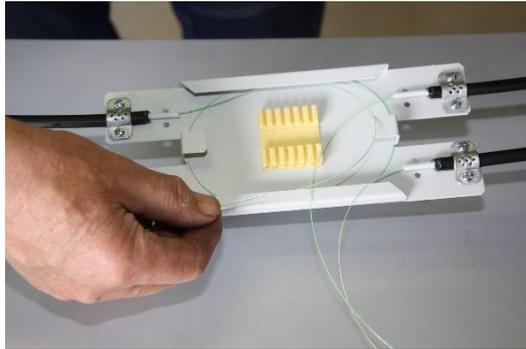


Clean the surface of the splice tray from any dust and grease and place the splice holder in place.

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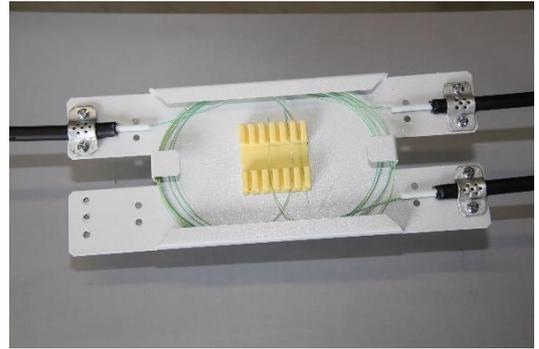
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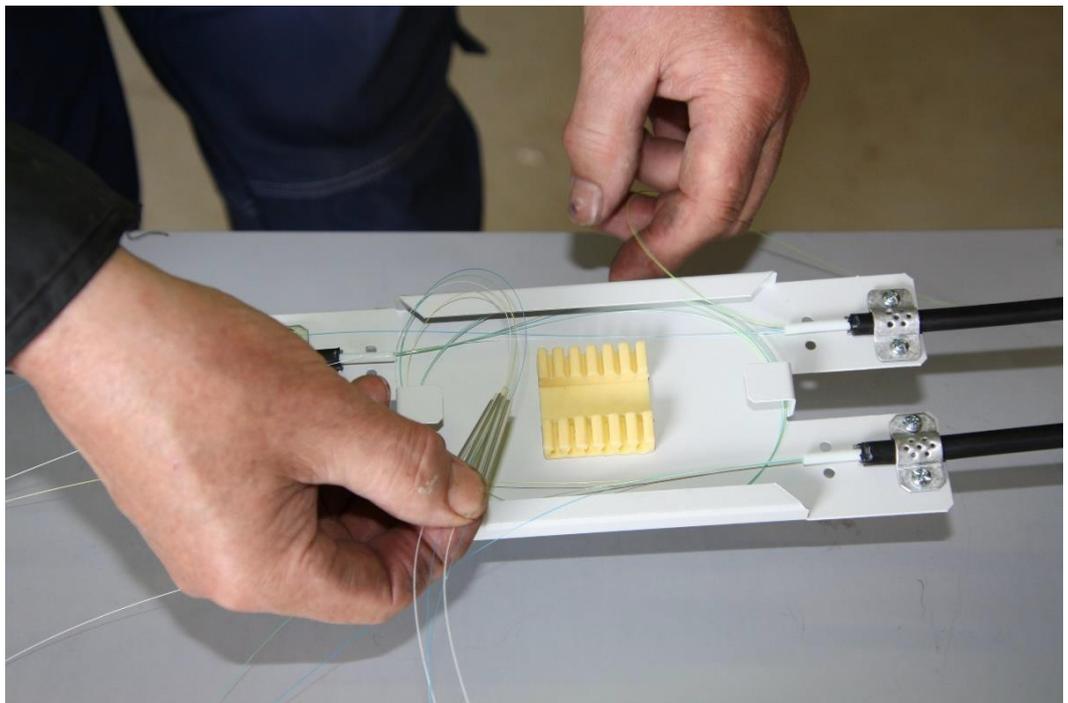


Measure the fibers on the splice tray. It is recommended that the fibers be provided with two full loops on the plate, which means that their length is sufficient for further work.

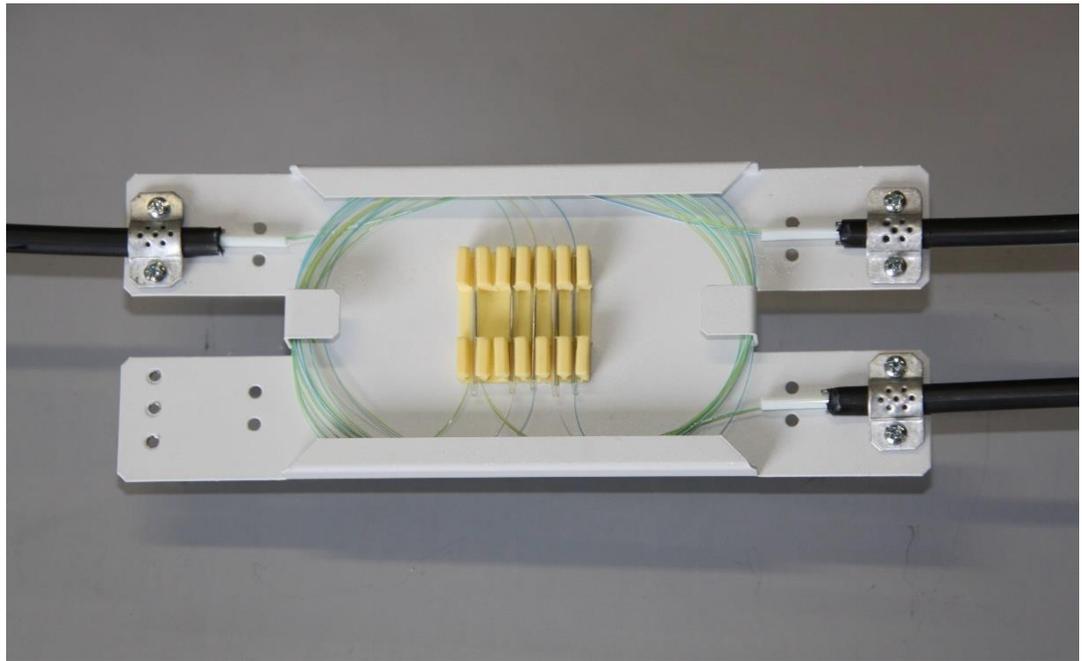
The peeling length of 1 meter ensures that.



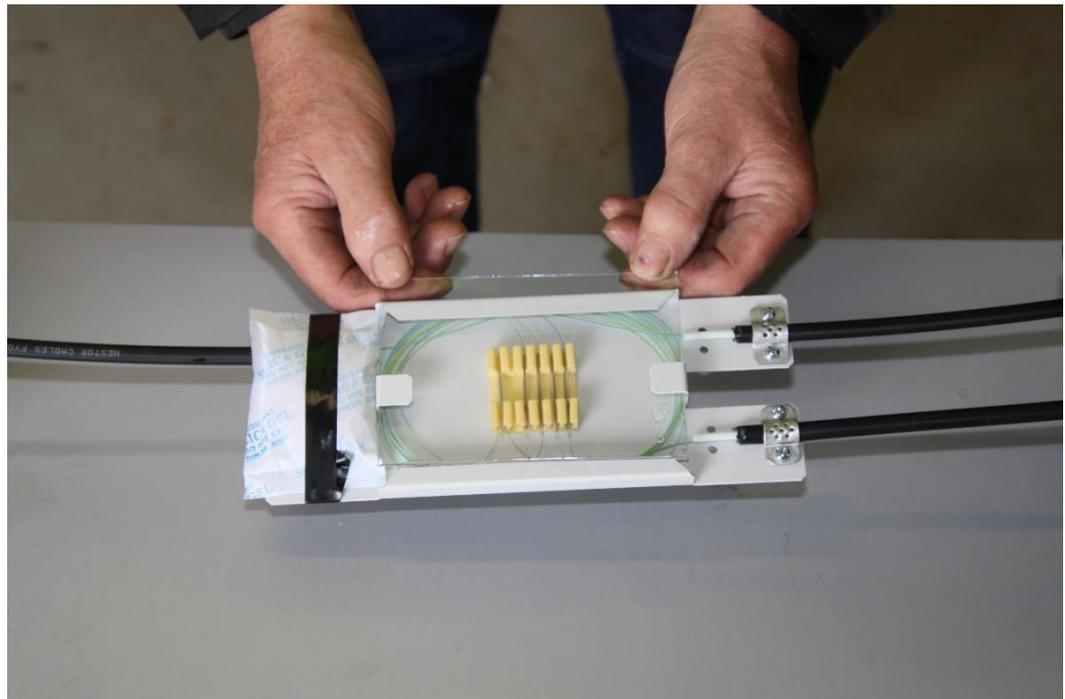
The fibers are measured and pre-installed on the splice tray before splicing. Note that the fibers of one cable in the outbound direction are wrapped on the tray in a different direction from the other fibers!



Perform splicing and then place the fibers on the splice tray. First place the fibers of the incoming direction and set the splice protection sleeves on the holder. Only after that place the outbound fibers on the tray. But note that some of these are wrapped on the tray in a different direction than other fibers.



Spliced fibers installed on the splice holder



Before closing the joint closure, attach the silica gel bag from the equipment bag to the end of the splice tray and insert the plex cover on.

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Pull the frame tube on the splice tray along with the rubber cable glands.



Push the end pieces over the frame tube all the way to the end.



Lock the end pieces to the frame tube with the hose clamps that come with the joint closure. When installing the hose clamps, note that they are straight and between the raised stripes at the ends of the frame tube!



Seal the cable glands with vulcanized tape that comes with the joint closure. A piece of tape about 15 cm long is sufficient to seal the cable glands. When the end of the tape sticks, stretch the tape and turn it over the cable gland, pressing it tightly against the exit point of the cable.



Cable gland sealed with PVC-surfaced vulcanized tape.



Finally, the tightness of the frame tube and end piece seam is ensured with a layer of vulcanizing tape.



The tape is rotated with the protective paper a turn around the housing, leaving a small overlap and cutting the required length.

Suitable tape length is about 40 cm.



When the beginning of the tape sticks, turn the tape around the case while slightly stretching and pressing it into place.



The tape is installed by stretching it into place.



An installed NAF FTTH joint closure

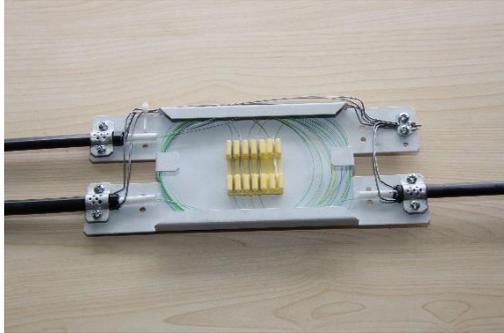
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The grounding of the joint closure

If there is metal in the cables coming into the joint closure, like steel traction elements, aluminum foil or corrugated steel sheet, the joint closure must be grounded according to the Finnish regulations. The grounding is carried out by connecting all the metal parts of the cables to the splice tray and grounding the joint closure from the outside. It is done by connecting a 16 mm² clear copper grounding wire to one of the FTTH cables with steel traction elements.



The steel traction elements of the cables are attached to one corner of the splice tray.



Mark the place for grounding to one of the cables coming into the joint closure with steel traction elements.



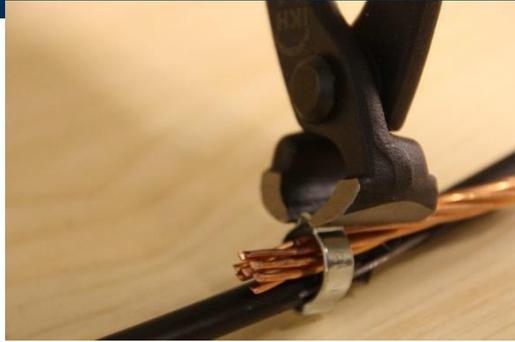
Carve out the steel elements at the marked point for 30 to 50 mm in length.



Place the hose clamp to that point.



Position the hose clamp in a way that makes sure sufficient connection is made. Flatten the end of the grounding wire and place it between the cable and the hose clamp.



Squeeze the fastener on the hose clamp with pincers.



The grounding wire is connected to one of the FTTH cables entering the joint closure.



Protect the joint with the vulcanized tape that comes with the joint closure.

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