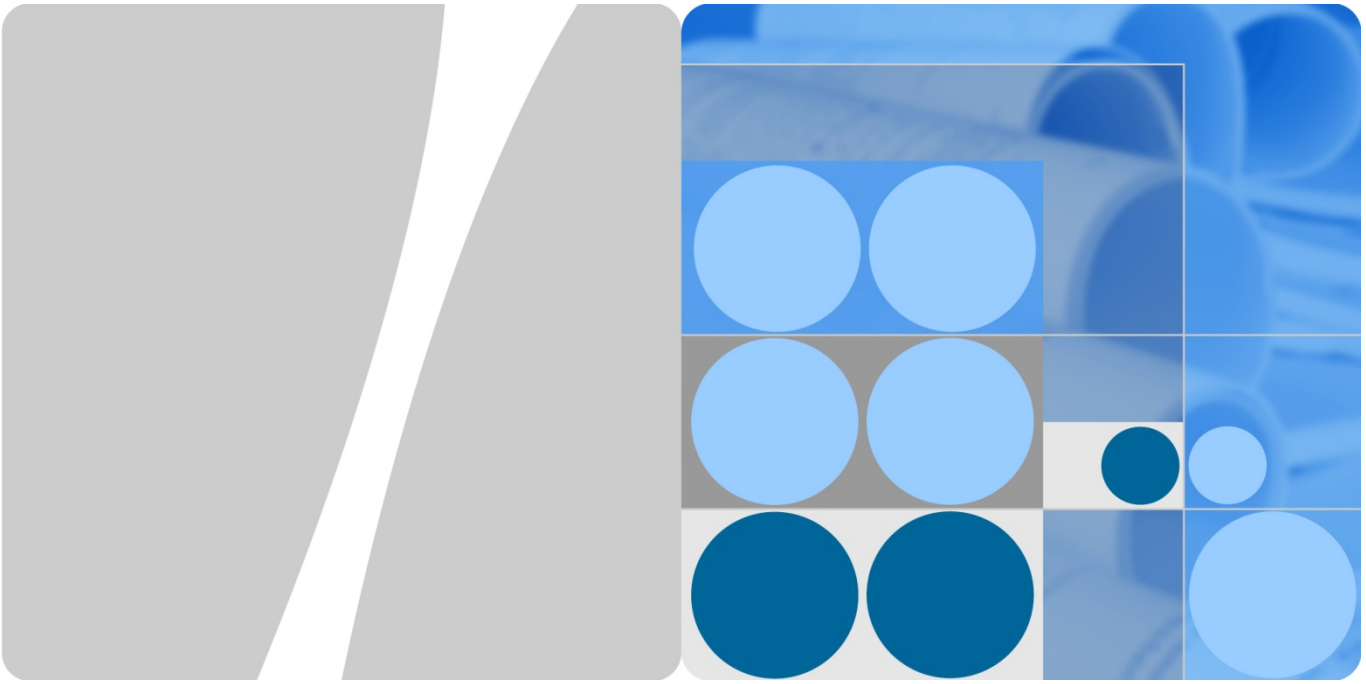


SSC2101&2102&2103-FH
V100R001C10
Quick Installation Guide

Issue: 03
Date: 2017-08-18

HUAWEI TECHNOLOGIES CO., LTD.

Safety Precautions

General safety precautions

To prevent personal injuries and damage to equipment, be familiar with all the safety precautions marked on the equipment and provided in this document. The WARNING, CAUTION, and NOTE marks in the document do not cover all the safety precautions that must be followed; they only supplement general safety precautions as a whole. Huawei is not liable for any consequence that results from customers' violation of universal operation requirements or equipment design, manufacturing, and usage safety standards.

Local laws and regulations

When operating a device, obey local rules and regulations.

Requirements on operators

Engineers that are responsible for installing and maintaining Huawei equipment must be trained and master the proper operation methods and safety precautions.

Symbols

WARNING	Indicates low to medium potential risk, which may lead to minor-to-moderate injury.
CAUTION	Indicates a potential hazard which, if not avoided, could cause equipment damage, performance degradation, or unexpected results.
NOTE	Provides additional information to emphasize or supplement the main text.

Human safety

When handling optical fibers, do not stand close to or look directly at an optical fiber outlet without proper eye protection.
When drilling holes, take proper protection measures to avoid inhaling dust and prevent dust from falling into your eyes.
When working at heights, take proper measures to prevent objects from falling down.

Appearance and Structure

a Appearance

SSC2103-FH SSC2102-FH SSC2101-FH

NOTE

1. The SSC2101&2102&2103-FH series includes the SSC2101-FH, SSC2102-FH, and SSC2103-FH.
2. The SSC2101&2102&2103-FH provides straight-through trays and splicing trays. Nevertheless, the SSC2103-FH provides straight-through areas but no straight-through tray.
3. This document uses the SSC2101-FH as an example to describe the product structures and installation procedures.

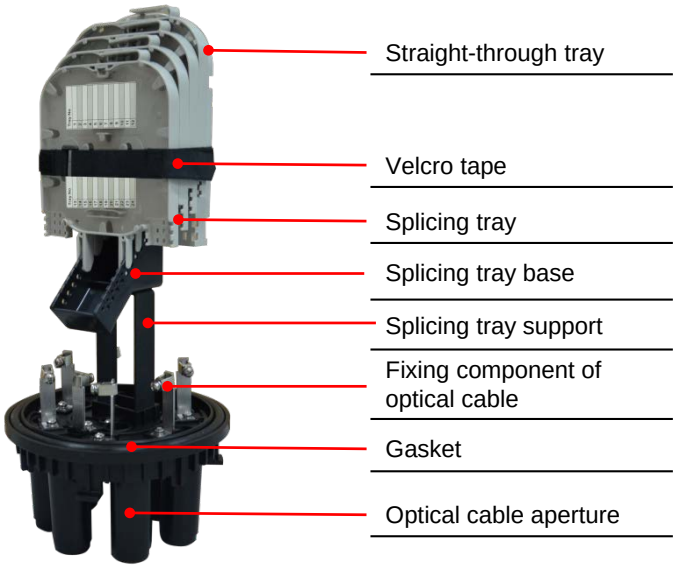
Appearance and Structure

b Structure

Front view

Rear view

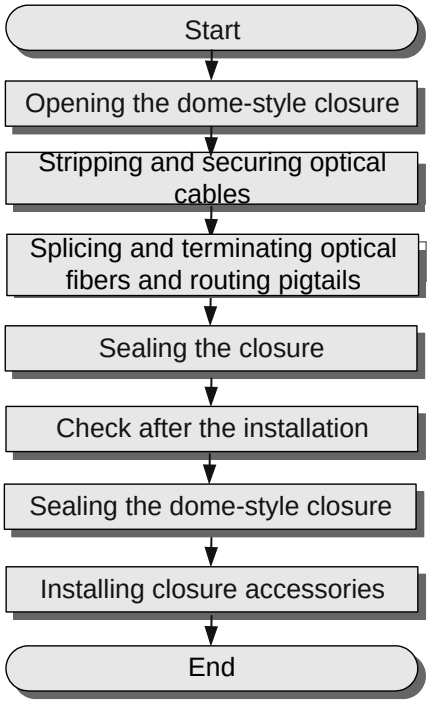
SSC2101-FH



Tools

Marker	3-m measuring tape	Hacksaw	Scissors	Claw hammer
Phillips screwdriver (M3–M6)	Flat-head screwdriver (M3-M6)	Splicing tool kits (fusion splicer, cutter, detergent)	Optical cable/fiber stripper	Diagonal pliers
Hex key	Torque wrench	Pliers	Hammer drill	Chisel
Ø10-mm drill bit	Protective gloves	Stripping knife	heat gun	

Installation Process



⚠ CAUTION

1. Put away materials that are not used during installation for future use.
2. Put away components that are removed during installation and protect them against contamination.
3. Clean components before installation.

1 Opening the Dome-style Closure

1. To open the closure, do as follows: a) Hold the latch on the staple bolt outwards. b) Open the staple bolt. c) Remove the staple bolt, the cap of the closure, and the velcro tape.

2 Stripping and Securing Optical Cables

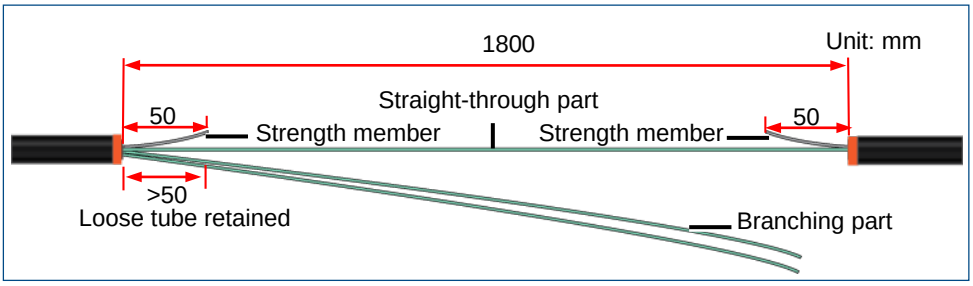
a Stripping a Straight-through Optical Cable

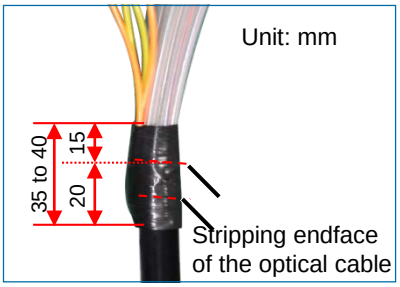
1. Mark the position where the optical cable will be stripped.
2. Determine the length to be stripped for each section of the optical cable, and strip the optical cable.

WARNING

Handle the strength members carefully as they are sharp and may cause bodily injuries.

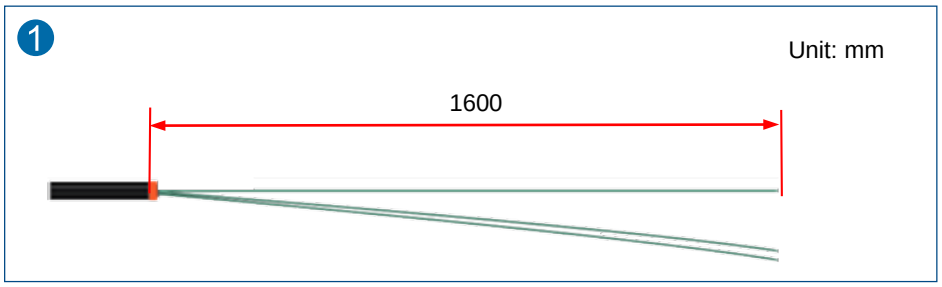
3. Strip the branching part by 1800 mm. a) Strip the loose tubes using a stripping knife. b) Cut off the loose tubes at both ends. c) Put the bare optical cable into a protection tube.
4. a) Use insulation tape to cover the stripped part of the optical cable. b) Ensure that the tape covers an extra length of 18 to 20 mm from the stripping point.

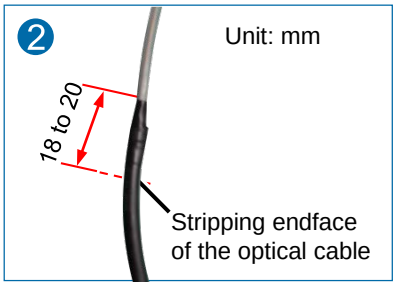




b Stripping the Branching Optical Cable

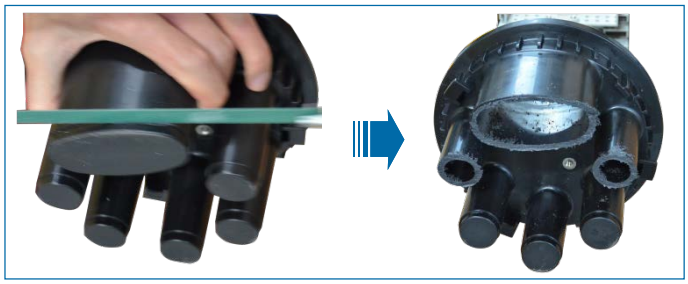
1. Determine the length to be stripped from each section of the optical cable.
2. a) Strip the optical cable by the required length, and clean the loose tube. b) Put the bare optical cable into a protection tube. c) Use insulation tape to wrap the stripping point of the optical cable.





c Routing and Securing the Straight-through Optical Cable

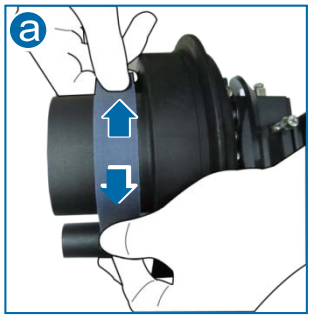
1. Use a hacksaw to cut off the endpoint of the lead-in aperture of the closure.

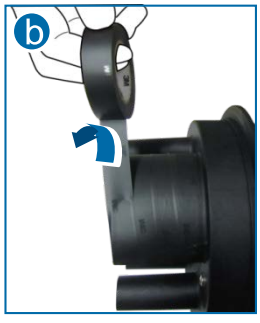


NOTE

1. An optical cable with a diameter of 10 mm to 25 mm can be routed through the cable aperture.
2. Determine the number of cable apertures, and cut off and polish the endpoints of all the cable apertures.

2. Polish the cable apertures as follows: a)Polish the cable apertures using abrasive papers. b) Use insulation tape to wrap the cable apertures.





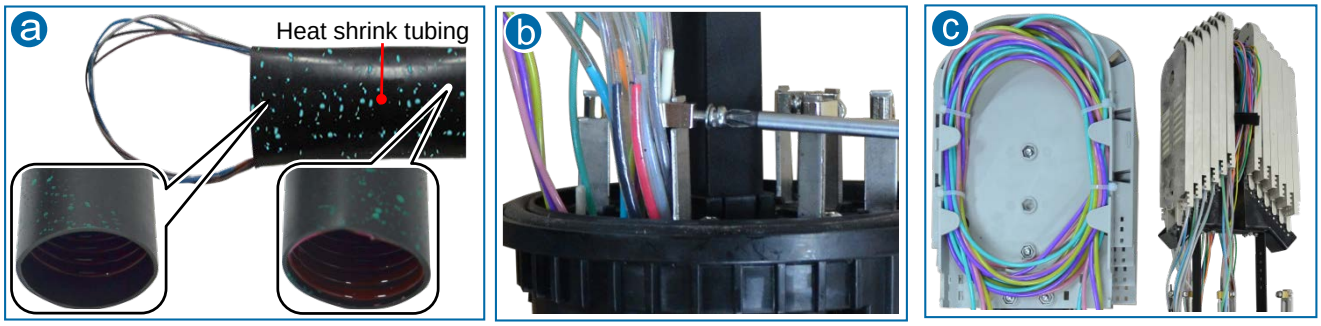
NOTE

To prevent the polished cable apertures against dust, remove the insulation tape before installing the heat shrink tubing.

2 Stripping and Securing Optical Cables (Continued)

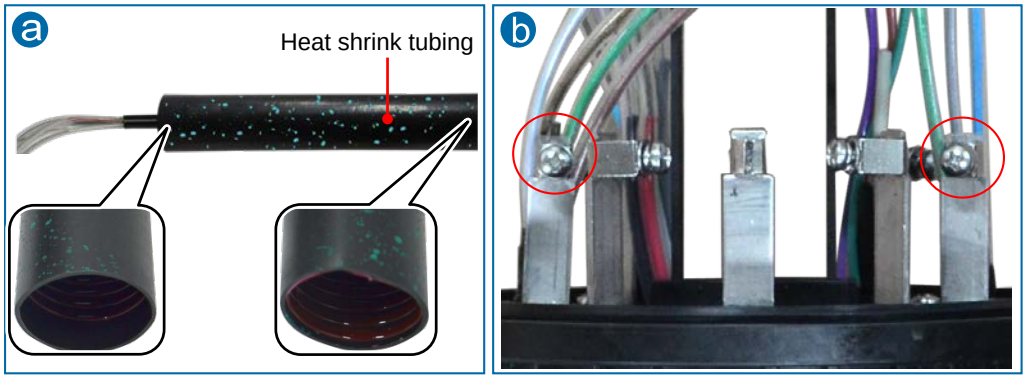
c Routing and Securing the Straight-through Optical Cable

3 a) Route the optical cable into the heat shrink tubing from the end with more hot melt adhesive. b) Route the optical cable and secure the strength members. c) Coil the straight-through optical cable. (Straight-through optical cables for the SSC2103-FH are coiled in the straight-through area. For details, see the following figure.)



d Routing and Securing Branching Optical Cables

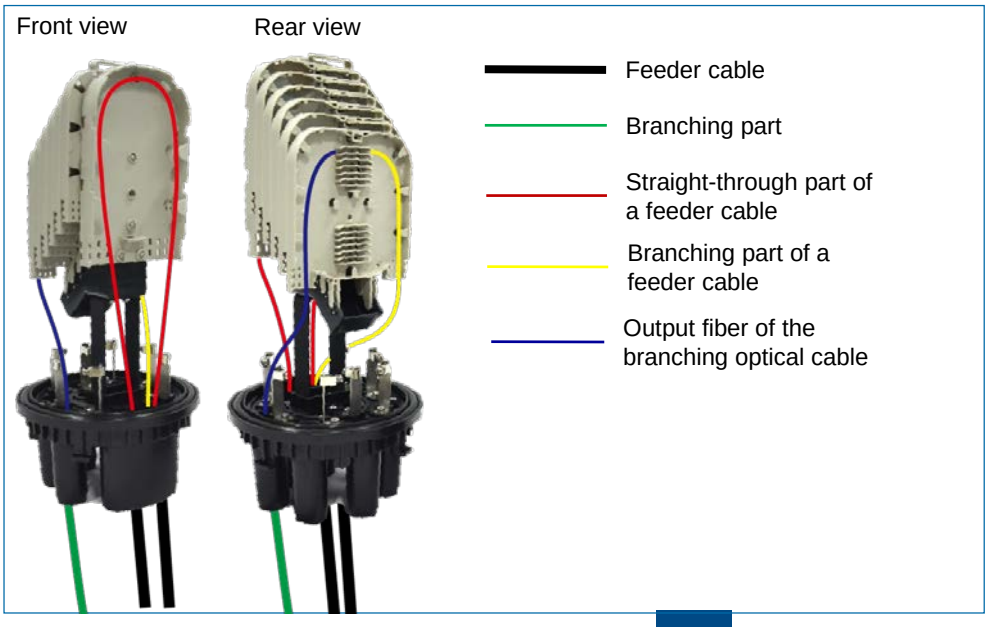
1 a) Route the optical cable into the heat shrink tubing from the end with more hot melt adhesive. b) Route the optical cable and secure the strength members.



3 Splicing and Terminating Optical Fibers and Routing Pigtails

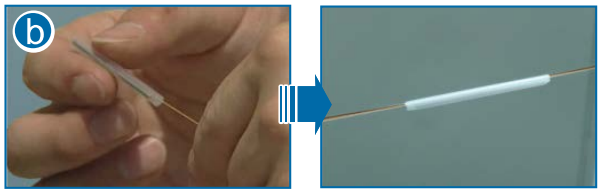
a Direct-splicing closure without SPL9102

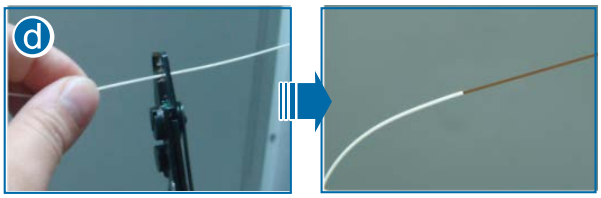
1 The following figure shows the routing of the straight-through and branching optical cables.



3 Splicing and Terminating Optical Fibers and Routing Pigtails (Continued)

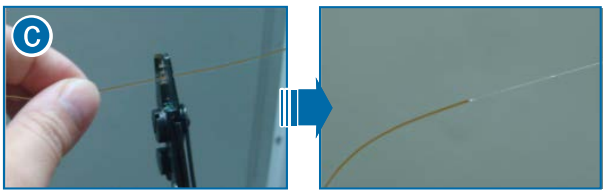
1 Splice the optical fibers. a) Strip optical fiber A until the bare fiber is exposed. b) Put the pigtail into a splicing protection tube. c) Strip the bare fiber until the fiber core is exposed. d) Strip optical fiber B until the bare fiber is exposed. e) Strip the bare fiber until the fiber core is exposed. f) Splice the protection tubes in heat shrink mode.

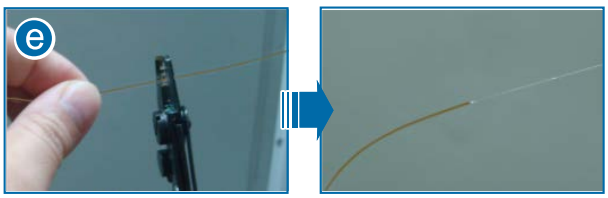




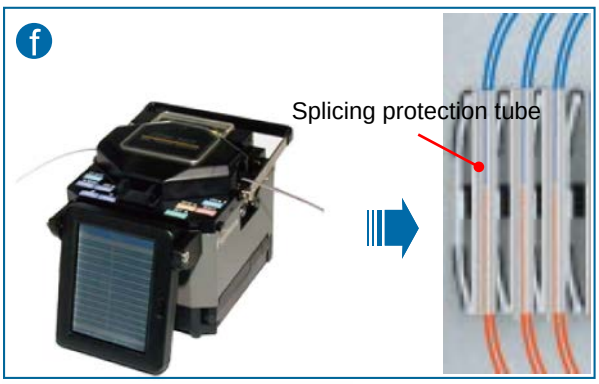
⚠ CAUTION

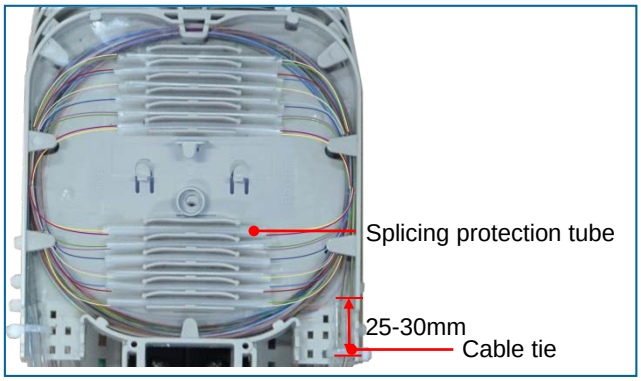
Place a splicing protection tube in each slot in a thin splicing tray, and place two splicing protection tubes in each slot in a thick splicing tray.





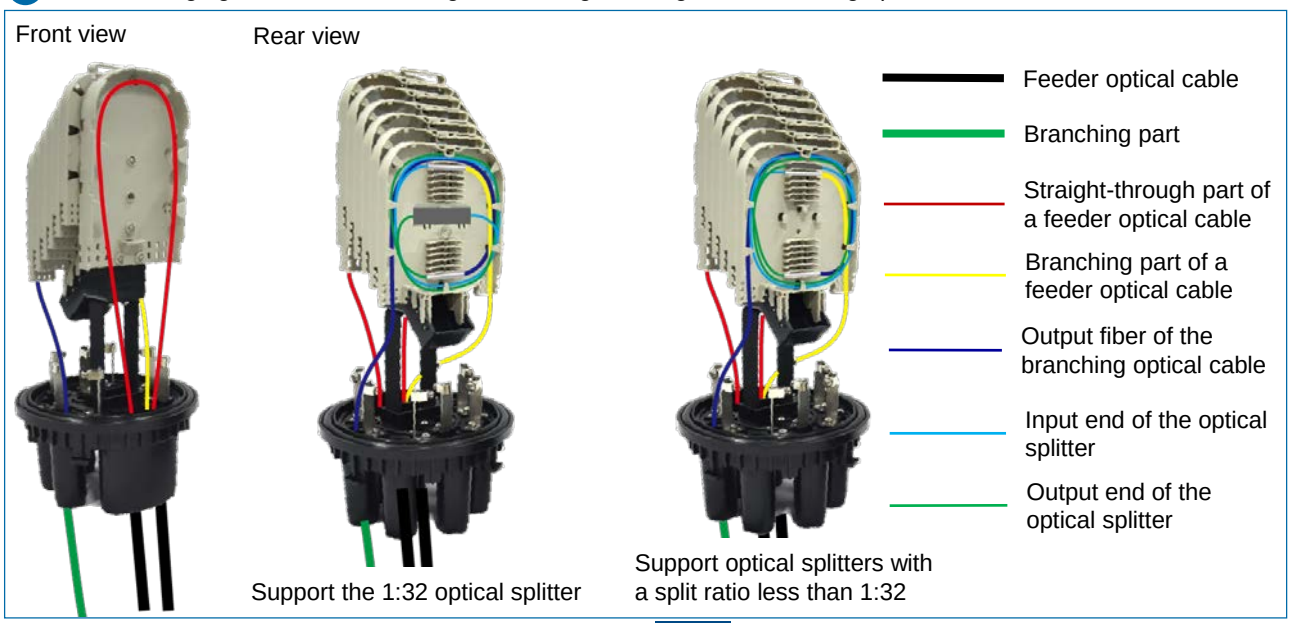
2 Coil the optical fibers.





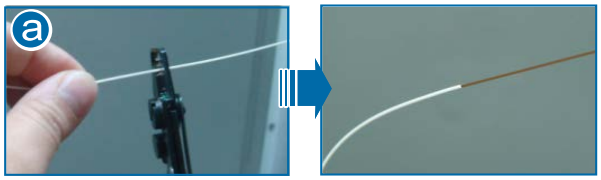
b Direct-splicing closure with SPL9102

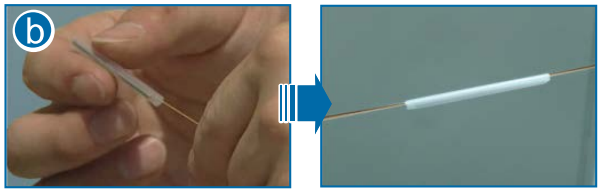
1 The following figure shows the routing of the straight-through and branching optical cables.

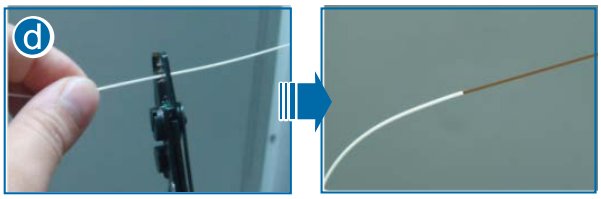


3 Splicing and Terminating Optical Fibers and Routing Pigtails (Continued)

1. Splice the branching optical fiber of the feeder cable and the input fiber of SPL9102, and splice the optical fiber of the branching cable and the output fiber of SPL9102. a) Strip optical fiber A until the bare fiber is exposed. b) Put the pigtail into a splicing protection tube. c) Strip the bare fiber until the fiber core is exposed. d) Strip optical fiber B until the bare fiber is exposed. e) Strip the bare fiber until the fiber core is exposed. f) Splice the protection tubes in heat shrink mode.

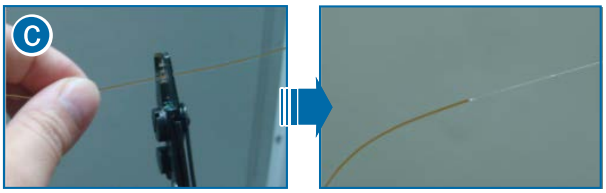


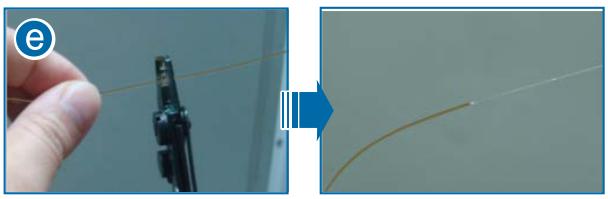


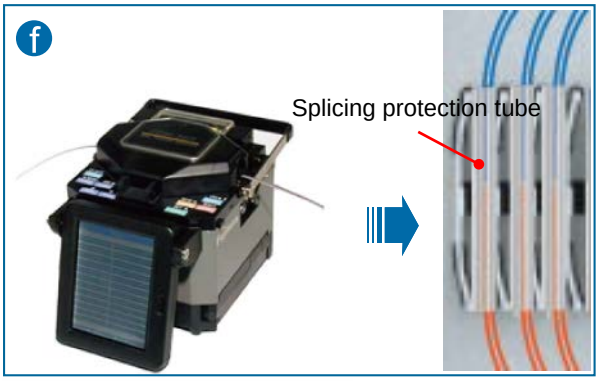


⚠ CAUTION

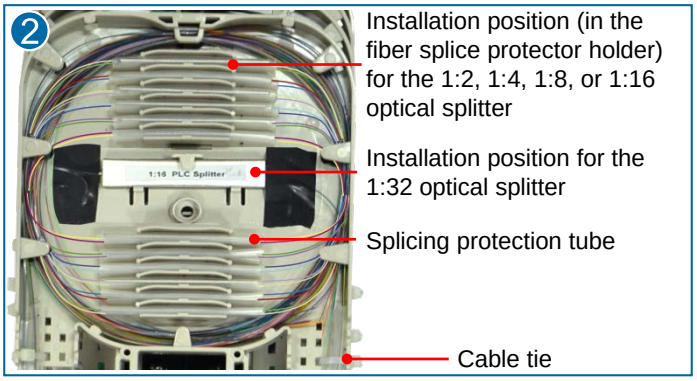
Place a splicing protection tube in each slot in a thin splicing tray, and place two splicing protection tubes in each slot in a thick splicing tray.







2. Coil the optical fibers.

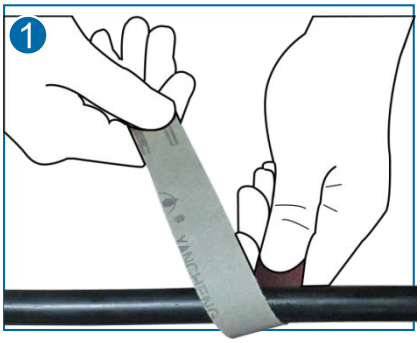


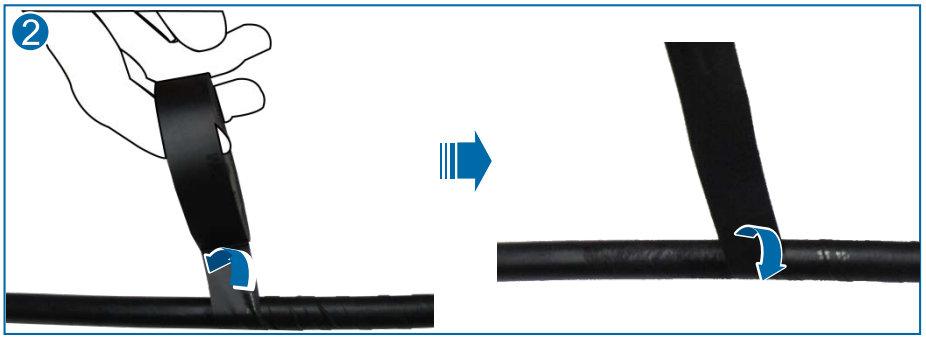
4 Sealing the Closure

a Preparing for Heat Shrink

1. Polish each cable aperture using a piece of sandpaper and clean the cable section outside the aperture to ensure heat shrink sealing quality.

2. Clear the leavings using insulation tape.

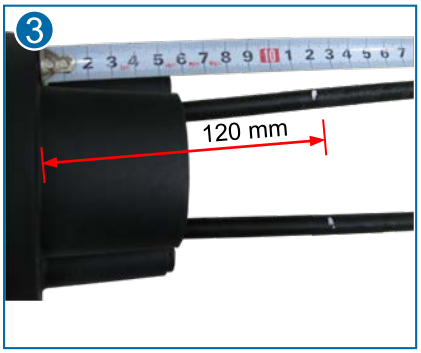




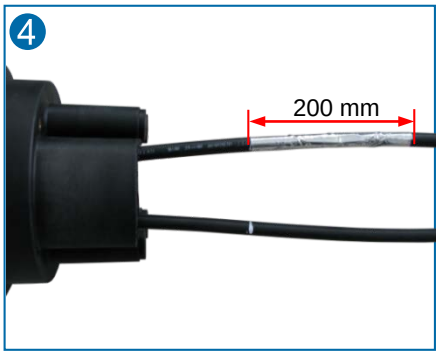
4 Sealing the Closure (Continued)

a Preparing for Heat Shrink

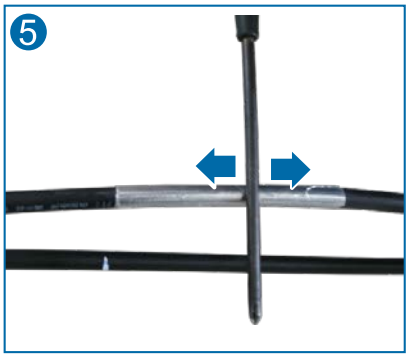
3 Mark the point 120 mm away from the endpoint of the cable aperture at the bottom of the closure.



4 Wrap the cable at the marked point one round using a piece of tinfoil paper that is 200 mm long.



5 Polish the tinfoil paper on the cable.



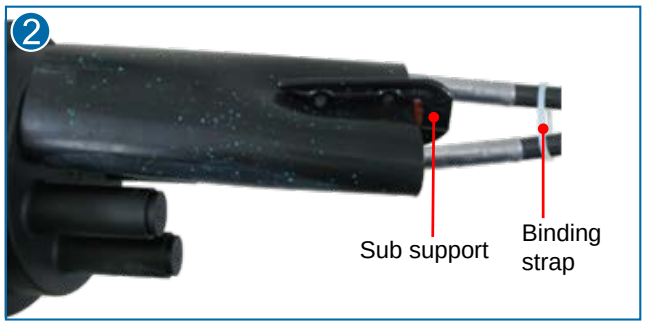
b Heat Shrinking Straight-through Cable Apertures

NOTE

1. During heat shrink, ensure that a heat gun with a nose longer than 10 cm must be taken.
2. Ensure that the heat shrink temperature is set to 400° C.
3. During heat shrink, heat the heat shrink tube evenly, preventing some parts of it from being burnt due to overheat.
4. During heat shrink, first fix the heat shrink tube to the closure. After 30-minute cooling, perform heat shrink for the optical cable.
5. During heat shrink, exert appropriate pressure on the heat shrink tube and ensure that the moving-upward distance of the heat shrink tube is within 1 cm.
6. During heat shrink, ensure that the temperature indicating paint on the tube surface turns from green to black. In addition, ensure that the tube appearance is smooth.
7. After heat shrink, the hotmelt is visible on the bottom of the heat shrink tube.
8. Do not move the closure or cable during 20 minutes.

1 Remove the insulation tape from the cable aperture.

2 Install a heat shrink tubing and sub support in the straight-through aperture, and secure the straight-through cable using a binding strap.



3 Heat shrink the bottom end of the heat shrink tubing for about 60 mm.

4 Heat shrink other parts after the bottom end is cooled.

4 Sealing the Closure (Continued)

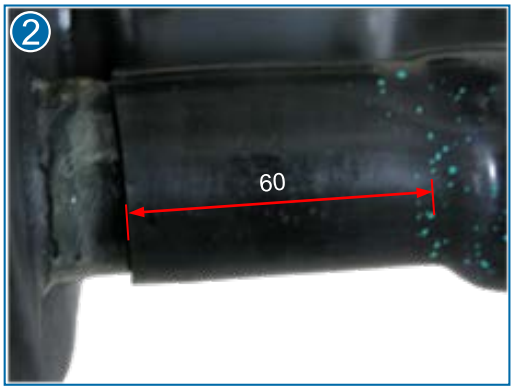
C Heat Shrinking Common Cable Apertures

1. Remove the insulation tape from the cable aperture, and install a heat shrink tubing at the common cable aperture.

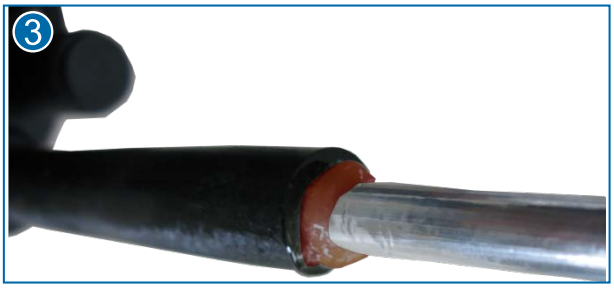
NOTE

Ensure that the heat shrink is even.

2. Heat shrink the bottom end of the heat shrink tubing for about 60 mm.



3. Heat shrink other parts after the bottom end is cooled.



5 Check After the Installation

No.	Description
1	Each screw is tightened.
2	Optical cables and fibers are secured.
3	The gasket on the shell is flat (press down the gasket if it bulges) and the closure is properly sealed.
4	The bending radius of optical fibers meets the requirement. Adjust the optical fiber coiling if necessary.

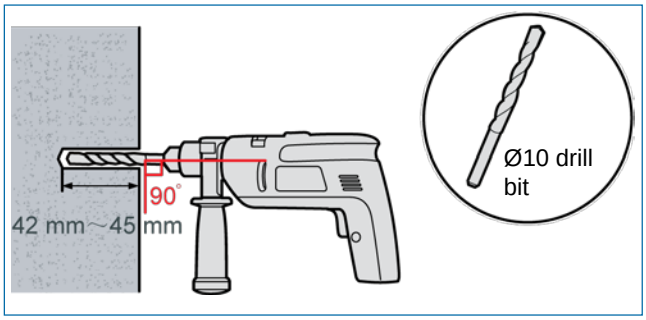
6 Sealing the Dome-style Closure

1. a) Install the closure cap. b) Install the staple bolt on the shell and seal the closure.

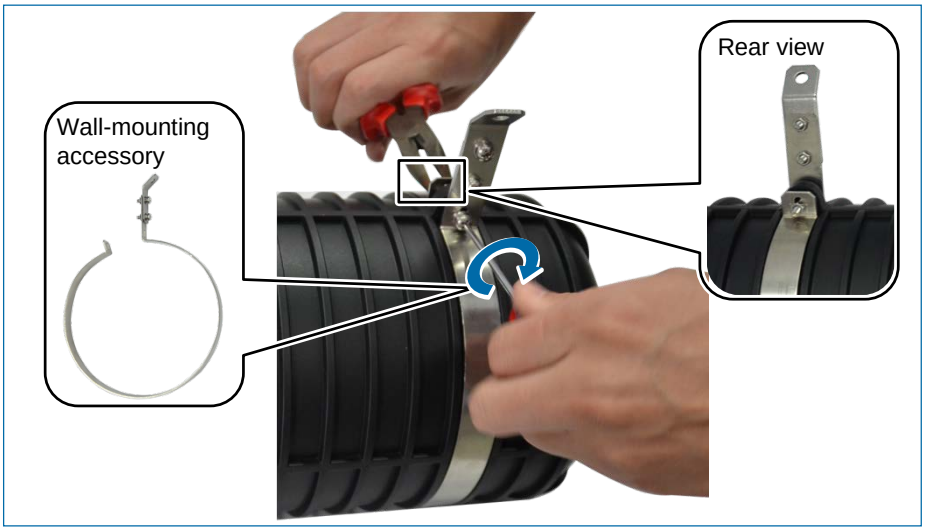
7 Installing Closure Accessories

a Installing Wall-mounting Accessories

1. Install expansion screws on the wall.



2. Install a wall-mounting accessory using a 45 mm M4 screw on the closure and tighten the screws.

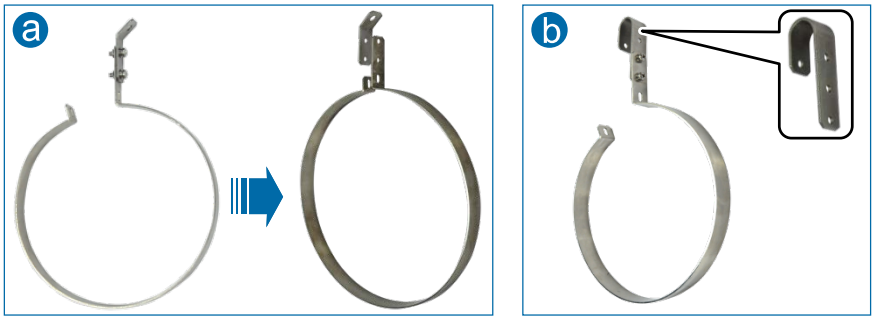


3. Attach the wall-mounting accessories to expansion screws on the wall and secure the closure to the wall.

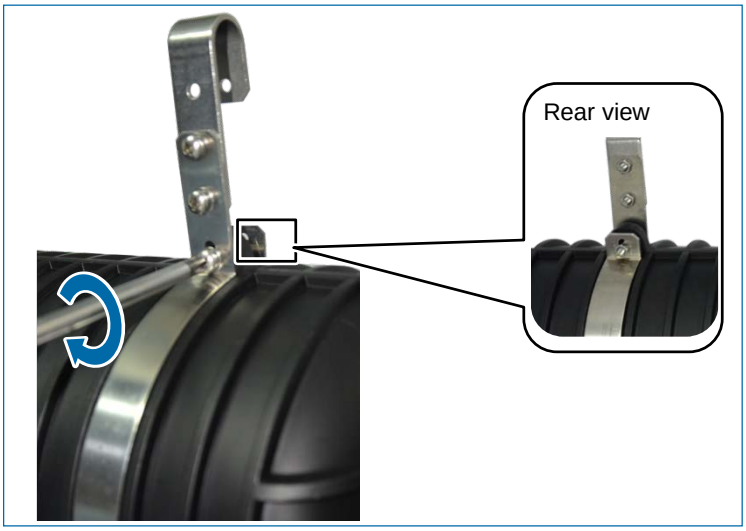
7 Installing Closure Accessories (Continued)

b Installing Aerial Accessories

1. a) Remove the wall-mounting accessory. b) Install an aerial accessory.



2. Install a aerial accessory using a 45 mm M4 screw on the closure and tighten the screws.

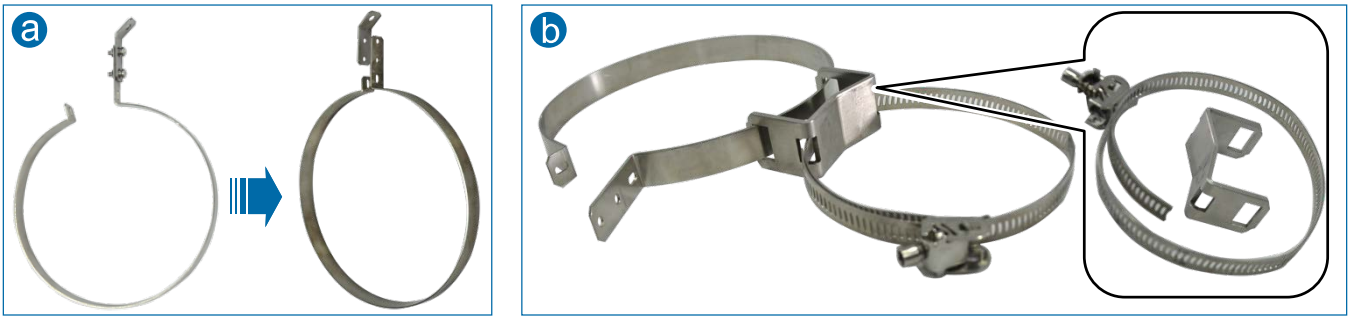


3. Install the aerial accessory on the steel wire and secure the closure.

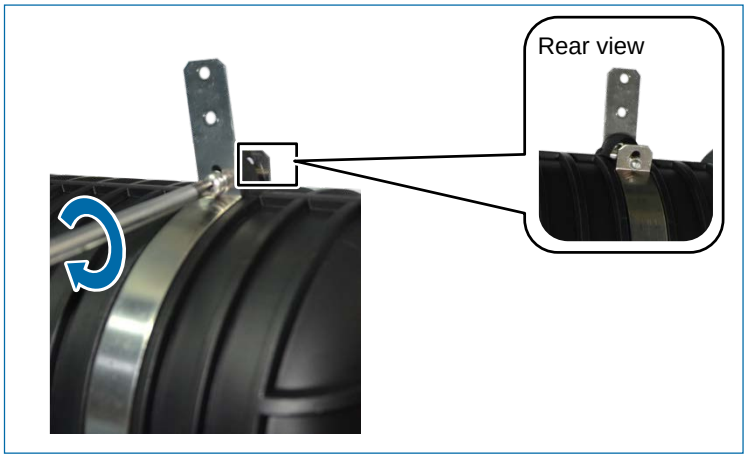
7 Installing Closure Accessories (Continued)

c Installing Pole-mounting Accessories

1. a) Remove the wall-mounting accessory. b) Install a pole-mounting accessory.



2. Install a pole-mounting accessory using a 45 mm M4 screw on the closure and tighten the screws.



3. Install the pole-mounting accessory on the pole and secure the closure.

Huawei Technologies Co., Ltd
Administration Building, Huawei Technologies Co., Ltd., Bantian,
Longgang District, Shenzhen, P. R. China
Postal code: 518129
www.huawei.com