Prysmian Group

INSTALLATION INSTRUCTION

32 INTERNAL SPLITTER NODE (32ISPN)

The 32ISPN is the last Splitter point before the customer.
The 32ISPN is wall mounted internally within a MDU location and provides the following functionality:

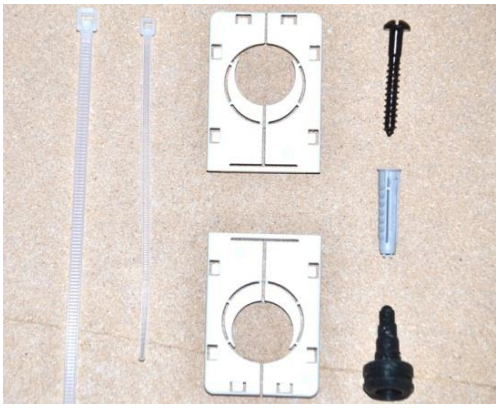
- A Tube Intercept joint for 4BFT and 7BFT
- A location point for a pre-installed 2 x 32-way Splitter Device
- A termination point for 4f Blown Fibre unit
- A splicing point between individual Splitter Output fibres and the 2 fibre Customer Premise Cable (only one fibre used)
- Loop through of riser cable

Installation guide Section Details		
Section 1 - Plan & Build	Attaching the 32ISPN to Wall	Supplied with the product and available on the Intranet
Section 2 - Plan & Build	Blown Fibre Tube Installation	
Section 3 - Plan & Build	Installation of Customer Premise Cable	
Section 4 – Plan & Build	Loop through of riser cable	Available on Intranet

Product Description

32ISPN Internal View	Port Layout
	 The top and bottom Port layout are identical and consist of: • 1 x BFT port • 36 x Customer Premise Cable ports

32ISPN Installation Kit



Installation Kit contents:

- 4 x black cross head screws
- 4 x wall plugs
- 2 x split BFT port closure inserts
- 36 x black rubber Customer Cable port grommets
- 36 x small cable ties
- 4 x large cable ties

Dimensions		
Height: 407mm	Width: 332mm	Depth: 120mm

SECTION 1 - Plan and Build
Attaching the 32ISPN to Wall

Additional Items Required	
	Item Code
None	

Additional Tools Required	
	Item Code
OTIAN Flush Cutter 1A	
Optical Fibre Stripper No 1A	

Cable Minimum Bend Radii	
Cable	**Minimum Bend Radii**
7BFT	185mm
Customer Premise Cable	TBA

⚠ **Appropriate Safety Procedures MUST always be followed**

SECTION 1 - Plan and Build
Attaching the 32ISPN to Wall

Step 1 – BFT Port Preparation

- Remove BFT port cut-out located on the top and bottom of closure using a suitable hacksaw.

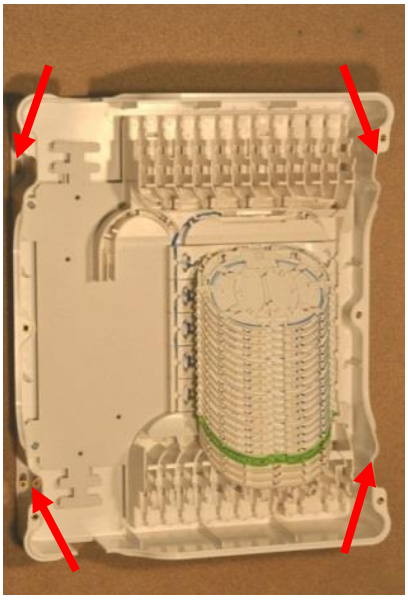
SECTION 1 - Plan and Build
Attaching the 32ISPN to Wall

Step 2 – BFT Port Preparation

- Remove all rough edges with a file.

SECTION 1 - Plan and Build
Attaching the 32ISPN to Wall

Step 3 – Closure Installation



- Position the closure so that the associated BFT can vertically enter and exit the closure.
- Support closure against wall, locate and mark the mounting points through the 4 fixing points shown above.
- Drill fixing holes using 4mm masonry drill.
- Insert wall plugs supplied.
- Fix to wall using cross head screws supplied.
- Ensure closure is level and tighten screws.

Note: To ensure safe working practices, consideration should be given to the positioning height of the closure.

SECTION 1 - Plan and Build
Attaching the 32ISPN to Wall

Step 4 – BFT Window Cut Preparation

- Position the BFT across the closure ensuring BFT sits vertically in the top and bottom port cut-outs.
- Measure 80mm from the inside edge of the top and bottom port cut-outs.
- Sheath mark the BFT at these points (the distance between these 2 marks will form the required window length).
- Remove the sheath using Cable Sheath Stripper No7 to expose the Blown Fibre tubes.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

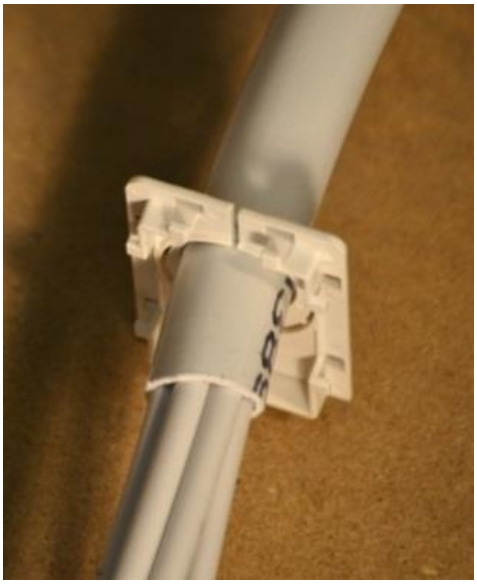
⚠ Appropriate Safety Procedures MUST always be followed

Step 1 – Port Closure Installation (Open)

- Ease the split Port Closure Inserts over both sheath butts formed by the Window cut.
- Ensure that the locating lugs on both inserts face into the closure.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

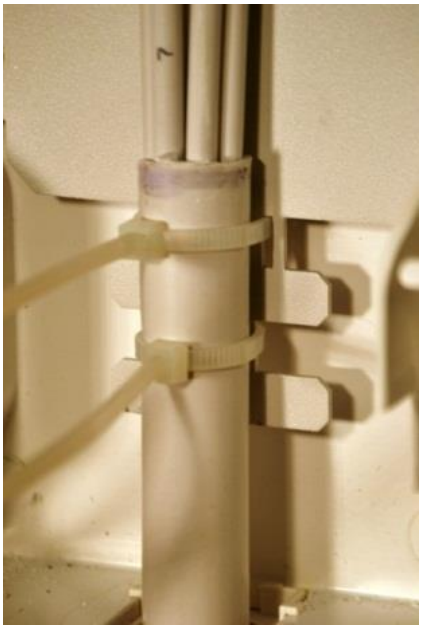
Step 2 – Port Closure Installation (Closed)



- Slide the closure inserts into place on the BFT sheath and close the inserts.
- Locate the inserts into the top and bottom port cut outs in the closure.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

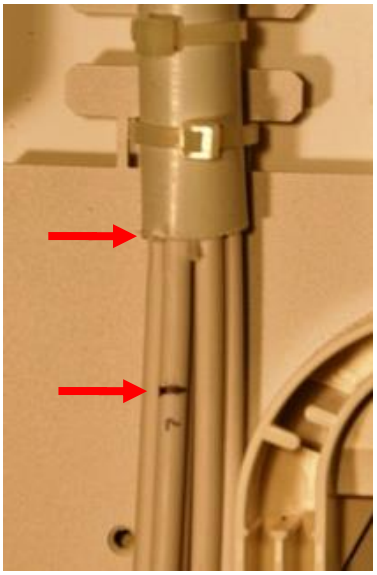
Step 3 – BFT Retention



- Retain to the retention lugs in the base of the closure using the large cable ties supplied.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

Step 4 – Blown Fibre Tube Preparation



- Identify allocated Blown Fibre Tube.
- Measure 25mm from BFT butt and mark tube.

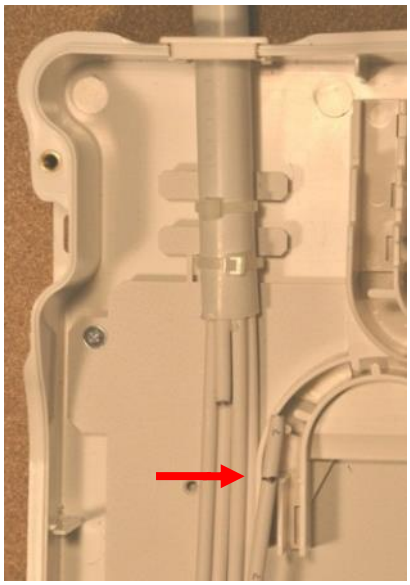
SECTION 2- Plan and Build
Blown Fibre Tube Installation

Step 5 – Blown Fibre Tube Preparation

- Cut BFT at the sheath mark.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

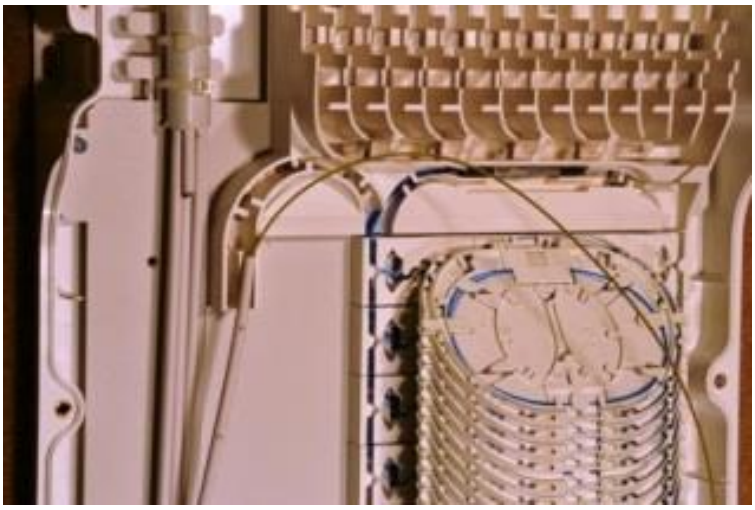
Step 6 – Blown Fibre Tube Preparation



- Align the cut BFT with the top of the tube retention slots.
- Mark the tube and reduce to length using BF Crimper/Cutter I/C.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

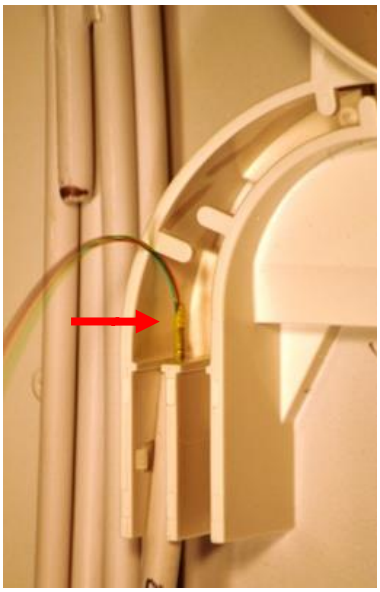
Step 7 – Blown Fibre Unit Installation



- Install 4 Fibre BFU into the nominated tube and allow an additional 2,5m of BFU for fibre management within the closure.

SECTION 2- Plan and Build
Blown Fibre Tube Installation

Step 8 – Preparation of BFU



- Remove the protective sheath from the BFU to a point 25mm from BFT butt.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

⚠ Appropriate Safety Procedures MUST always be followed

Step 1 – Fibre Management

- Manage BFU around bend manager and route down the LEFT-HAND side of the tray assembly.
- Identify nominated working fibre and separate from remaining fibres in the BFU.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 2 – Fibre Retention at Rear

- Route the spare fibres on to the storage tray associated with the Splitter I/P splicing tray.
- Ensure fibres are correctly retained in the rear hinge area of the tray.

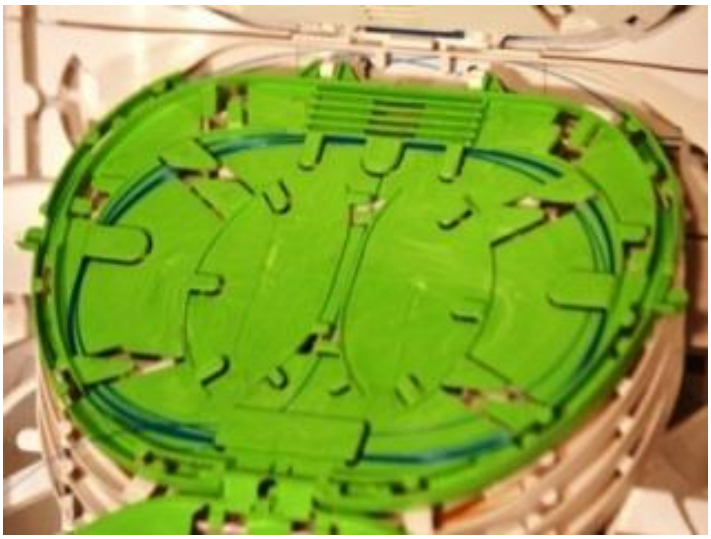
SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 3 – Fibre Routing (Stored Fibres)

- Manage the spare fibres into the central storage area via the outside fibre track.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 4 – Fibre Routing (Allocated Fibre)



Note: The Splitter device input fibres are pre-installed into the (green) device tray such that the nominated working fibre (blue) is in TR AY 1.

- Manage the fibre into the central storage area via the outside fibre track.
- Store fibre prior to Splicing to Splitter device fibre.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 5 – Customer Premise Cable Port Preparation

Note: The Customer Premise Cable ports consists of 3 rows of 12 ports and count from the back row LEFT TO RIGHT when viewed from the top.

- Knock out nominated port using suitable tool.

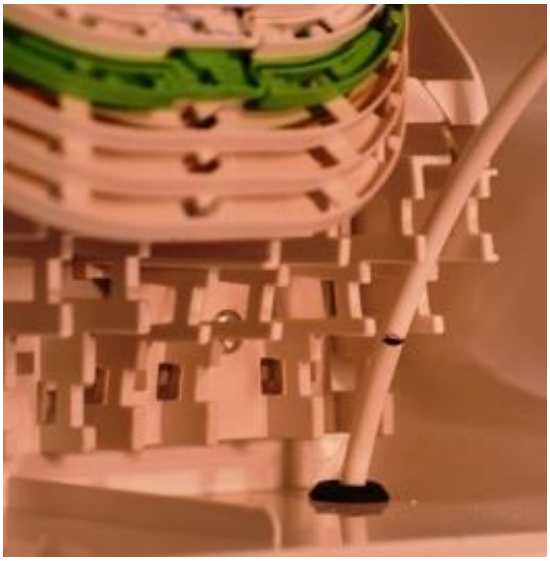
SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 6 – Customer Premise Cable Installation

- Cut the tapered rubber teat on the port grommet (provided in installation kit) to the second step.
- Feed 2m of Customer Premise Cable through the grommet, ensuring the rubber teat is located on the outside of the closure.
- Feed the Customer Premise Cable into the closure and seat the grommet into the open port.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 7 – Customer Premise Cable Preparation



Note: The individual location of the cable anchor point within the closure is dependent on which row of cable ports the Customer Premise Cable enters from i.e. ports in rear row = lower anchor points.

- Sheath mark in line with the top of the appropriate anchor point.

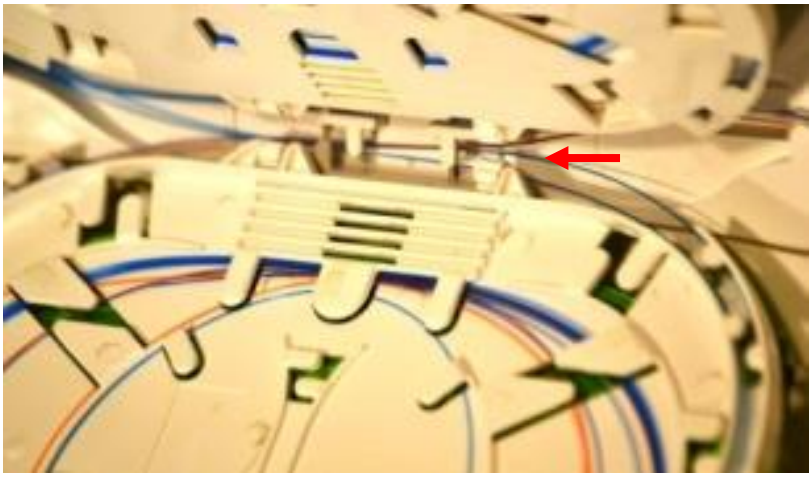
SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 8 – Customer Premise Cable Anchorages

- Remove cable sheath back to the sheath mark, using the appropriate tools.
- Remove the protective sheath from the 2-fibre unit using Strippers Optical 1A.
- Cut back the Aramid Yarn to the sheath butt.
- Fix the cable sheath to the appropriate anchor point using the small cable ties provided.
- Hand tension and remove over length using OTIAN Flush Cutting tool, 1A.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 9 – Fibre Routing (Address Point Tray 1 Deployment)



- Route the fibres up the RIGHT-HAND side of the Tray Assembly on to the appropriate Address Point Tray.
- Route fibres on to the tray; ensure the fibres are correctly retained in the rear hinge area.
- Open splicing tray to expose fibre storage area for Address Point Tray 1.
- Manage the fibres via the cut-out in the outside track into the central storage area.
- Store fibre for splicing.

Note: Only fibre 1 is spliced through. Fibre 2 remains in storage within the storage area of the nominated Address Point Tray.

SECTION 3 - Plan and Build
Installation of Customer Premise Cable

Step 10 – Fibre Routing Address Point Tray 2

- Route the fibres up the RIGHT-HAND side of the Tray Assembly on to the appropriate Address Point Tray.
- Route fibres on to the tray; ensure the fibres are correctly retained in the rear hinge area.
- Feed fibre around outside track and through the tunnel at (top) tray 2 hinging point.
- Manage fibres across tray hinge areas into outer storage area.
- Store fibre for splicing.

SECTION 4 – Installation and Loop through of Riser Cable

Additional Items Required	
Loop Kit for MDU FDP	

Additional Tools Required	
Junior Hacksaw with 3 Blades	
Optical Fibre Stripper No 1A	

Cable Minimum Bend Radii	
Cable	**Minimum Bend Radii**
12f to 72f	200mm
96f to 144f	350mm

SECTION 4 – Installation and Loop through of Riser Cable

Step 1 – Fibre Guide Preparation

- The fibre guide supplied with the MDU internal splitter node incorporates breakaway grooves. This enables the left-hand side of the guide to be snapped off enabling installation of loop kit.

SECTION 4 – Installation and Loop through of Riser Cable

Step 2 – Fibre Guide Preparation

- Flex the left portion of the fibre guide back and forth until it snaps away.
- Remove burrs and excess plastic from the remaining guide using a file or emery cloth.

SECTION 4 – Installation and Loop through of Riser Cable

Step 3 – Port Preparation

- Saw along moulded guides of the cable ports located at the top and bottom of the splitter DP.

SECTION 4 – Installation and Loop through of Riser Cable

Step 4 – Port reparation

- Snap-off remaining material to form a cable access slot.

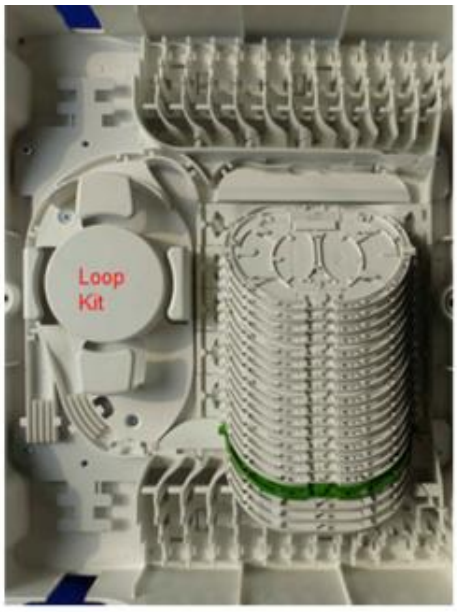
SECTION 4 – Installation and Loop through of Riser Cable

Step 5 – Marking Cable Butts

- Place the input side of the cable into the bottom port slot and mark the sheath just above the cable retention bracket.

SECTION 4 – Installation and Loop through of Riser Cable

Step 6 – Install Loop Kit



- Install the Loop Kit item code 063238 using the two mounting screws provided.

SECTION 4 – Installation and Loop through of Riser Cable

Step 7 – Marking Cable Butts

- Place a second mark 180cm from the previous towards the output side of the cable.

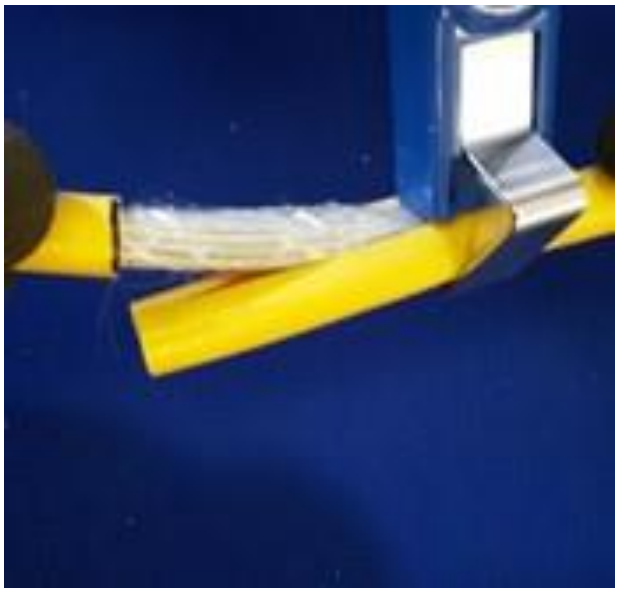
SECTION 4 – Installation and Loop through of Riser Cable

Step 8 – Strip Sheath

- Circumferentially cut the sheathing at the two marks using a stripper cable sheath 7 item code 126853.

SECTION 4 – Installation and Loop through of Riser Cable

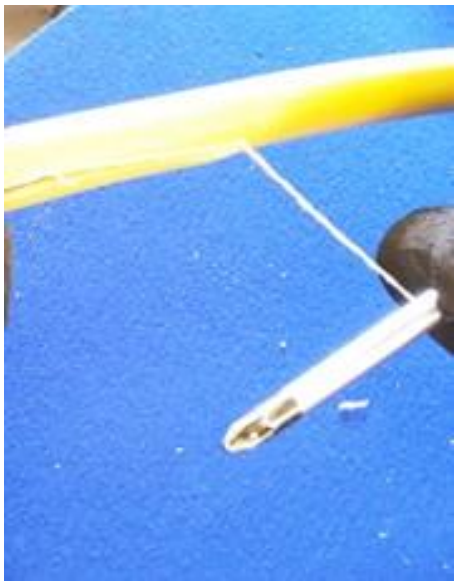
Step 9 – Strip Sheath



- At one of the circumferential cuts use the stripper cable sheath 7 to make a longitudinal cut of sufficient length to access a rip cord.

SECTION 4 – Installation and Loop through of Riser Cable

Step 10 – Strip Sheath



- Wrap the rip cord around a screwdriver and slit the sheath between the circumferential cuts. Remove element bindings and wrapping.

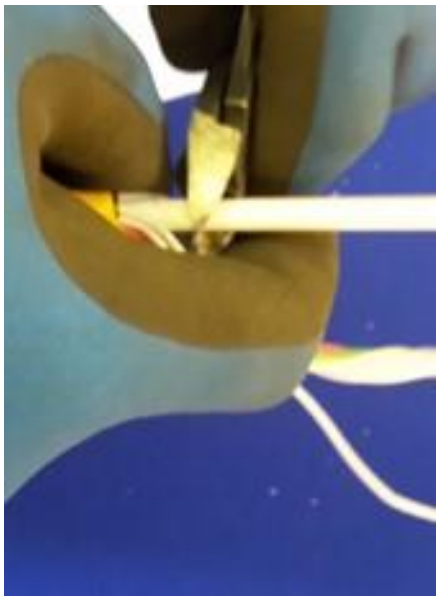
SECTION 4 – Installation and Loop through of Riser Cable

Step 11 – Cut Fibre Element

- Identify the element containing the fibres to be spliced and cut it close to the output side sheath butt.

SECTION 4 – Installation and Loop through of Riser Cable

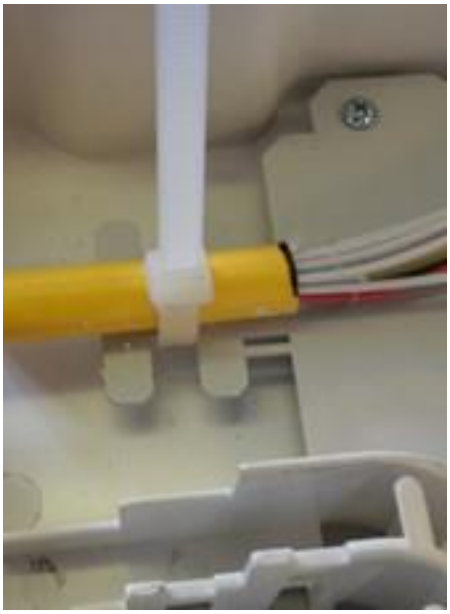
Step 12 – Cut Strength Member



- Cut the strength member close to both sheath butts and remove. Also remove any dummy fillers and rip cords.

SECTION 4 – Installation and Loop through of Riser Cable

Step 13 – Installing cable



- Refer to section 2 for fitting the split port inserts. Retain cable at both input and output ends with straps cable fixings.

SECTION 4 – Installation and Loop through of Riser Cable

Step 14 – Loop storage

- Loop the elements containing fibres that are continuing to the next floor level into the loop storage area.

SECTION 4 – Installation and Loop through of Riser Cable

Step 15 – Preparing Fibre Element

- Route the element containing the fibres to be spliced into the element guides. Mark the element at a position between the retaining tabs aligned with the centre of the loop storage manager.

SECTION 4 – Installation and Loop through of Riser Cable

Step 16 – Access & Route Fibres

- Using a stripper Fibre 1A circumferentially cut the element at the mark and remove to expose fibres. Removal of the element is made easier when carried out in shorter sections.
- Follow the guidance detailed in section 3 for routing, storing, and splicing of fibres.

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