

OAsys® INTERNAL PLANT

SRS3000 1U Splicing and Patching Shelf

General Note

1. This Installation Guide is written in general terms and as such the connectors and adaptors are for reference only.
2. The installation procedure described in this document is applicable for all fibre types.
3. The colour coding for this product is as follows:

Blue	-	Single mode PC
Green	-	Single Mode APC
Beige	-	Multi Mode PC

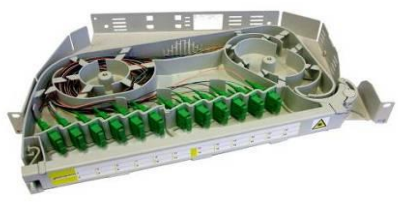


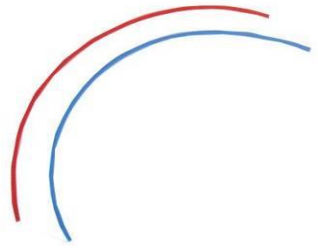



Tools & Additional Items Required

Additional Items Required:	Prysmian Part No.	BT Item Code
Slice protectors 5A	XPESC00053	076071

Fixings:	ETSI Mounting Bracket Kit – XKTSC00171
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Tools:	Pozi Drive Screwdrivers No.1, No.2 and No.3 Flush Cutting Tool 1A – BT Item Code 07680
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Component Parts (pictures not to scale)

<p>1 Splicing and patching Shelf Qty 1</p> 	<p>2 Top Cover Qty 1</p> 	<p>3 Patch cord Bend Manager Kit Qty 1</p> 														
<p>4 Bend Limiting Tube Qty 2</p> 	<p>5 Splice Protector Bays Qty 2</p> 	<p>6 Tube Install Tool Qty 1 (1U), 0 (2U & 3U)</p> 														
<p>7 Rapid Cable Anchor (ARS) Kit Qty 1</p> 	<p>Fastenings and Fixings</p> <table border="0"> <tr> <td>8 Screw M6 x 12mm Pozi Pan Hd.</td> <td style="text-align: right;">Qty 4</td> </tr> <tr> <td>9 M6 Cage Nuts</td> <td style="text-align: right;">Qty 4</td> </tr> <tr> <td>10 Heat Shrink Splice Protector Bays</td> <td style="text-align: right;">Qty 2</td> </tr> <tr> <td>11 Cable Ties 2.5 x 90</td> <td style="text-align: right;">Qty 5</td> </tr> <tr> <td>12 Cable Ties 3.5 x290</td> <td style="text-align: right;">Qty 2</td> </tr> <tr> <td>13 Screw M4 x 10mm Pozi Pan Hd.</td> <td style="text-align: right;">Qty 1</td> </tr> <tr> <td>14 Screw M4 x 6mm Pozi Pan Hd.</td> <td style="text-align: right;">Qty 1</td> </tr> </table>		8 Screw M6 x 12mm Pozi Pan Hd.	Qty 4	9 M6 Cage Nuts	Qty 4	10 Heat Shrink Splice Protector Bays	Qty 2	11 Cable Ties 2.5 x 90	Qty 5	12 Cable Ties 3.5 x290	Qty 2	13 Screw M4 x 10mm Pozi Pan Hd.	Qty 1	14 Screw M4 x 6mm Pozi Pan Hd.	Qty 1
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Cable Preparation and Shelf Installation

Step 1

PREPARATION STEP



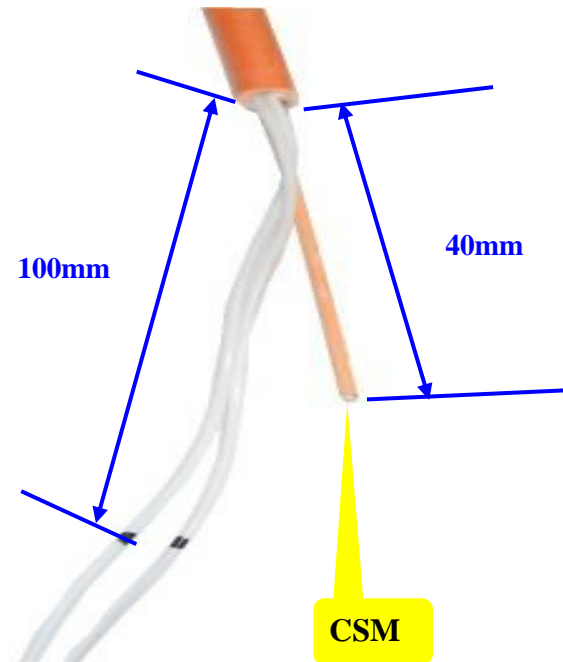
Clean before you connect.

It is important that all fibre connectors and adapters are cleaned prior to mating using approved local practice. Failure to clean may result in either poor signal performance and/or permanent damage to the connector end faces.

- Prior to installation ensure that there is a minimum of 3m of cable spare for installation, termination and storage purposes.
- Make a Butt Mark 2m from end of cable.
- Remove the outer sheath back to the Butt mark and remove all tapes and bindings.
- Remove all unwanted cable elements.

Cable Preparation and Shelf Installation

Step 2



- Cut the Central Strength Member (CSM) to a length of 40mm from the cable butt.
- Make a mark on the exposed cable elements 100mm from the cable butt.
- Remove the protective tube/sheath from the elements back to this mark to expose the fibres.

Cable Preparation and Shelf Installation

Step 3



- Ensure that the CSM is in the centre boss of the ARS (7) and the cable butt is approximately in line with the end of the cable support cradle of the ARS.
- Fit the M4 x 10mm screw (13) to secure the CSM.

Cable Preparation and Shelf Installation

Step 4

Ensure that the cable ties are secured with the large end in this position.

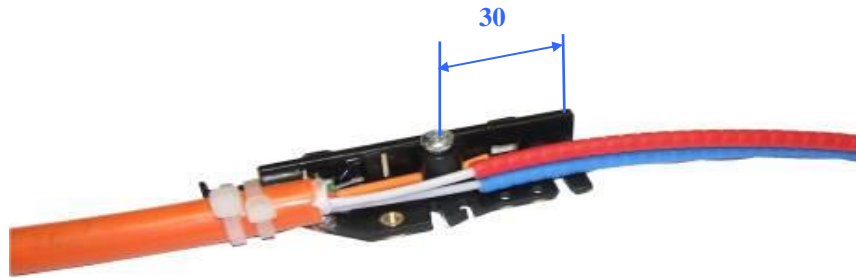


- Secure the cable butt to the ARS using 2, 3.5 x 295mm cable ties (12).
- Remove excess cable tie length with a Flush Cutting Tool 1A.

NOTE: The cable ties must be installed with the large end of the cable tie in the position as illustrated above.

Cable Preparation and Shelf Installation

Step 5



- Thread the fibres from cable element No.1 into the BLUE Bend Limiting Tube (4).
- Thread the fibres from cable element No.2 into the RED Bend Limiting Tube (4).
- The end of each tube should be approximately 30mm from the end of the ARS body.

Cable Preparation and Shelf Installation

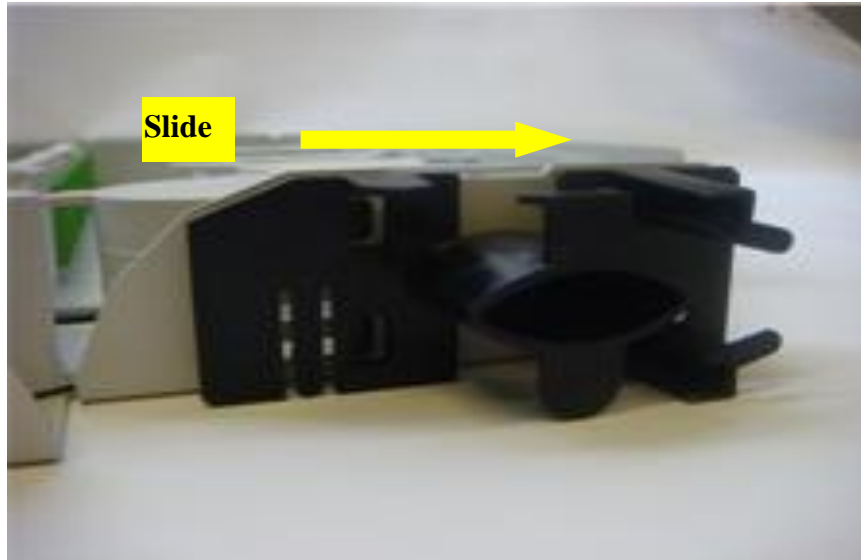
Step 6



- Thread two, 2.5mm x 90mm cable ties (11) through the 4 holes in the body of the ARS and secure the BLUE and RED tubes to the ARS body.

Cable Preparation and Shelf Installation

Step 7



- Fit the Patch Cord Bend Manager (3) to the Right-Hand Side of the SRS3000 Shelf.
- Fix the Bend Manager in position by sliding it until the tab is engaged and the bend manager is locked.

Cable Preparation and Shelf Installation

Step 8



- Select the rack mounting position for the shelf and fit 4 Cage nuts (9) into the rack uprights.
- If the Shelf is to be used in an ETSI front mounted rack, fit ETSI conversion brackets (not supplied), order part number XKTSC00171.

Cable Preparation and Shelf Installation

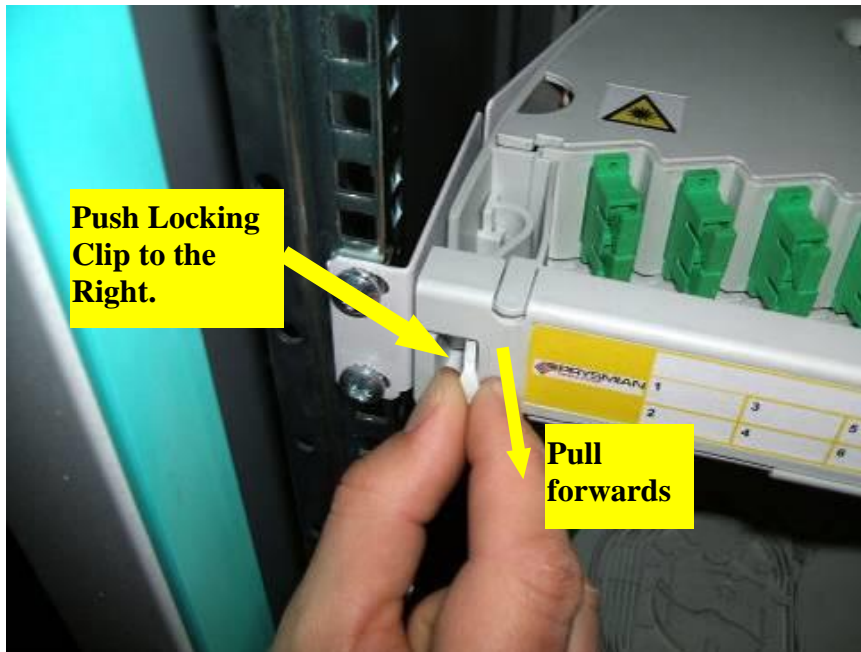
Step 9



- Using four, M6 x 12mm screws (8) fit shelf in position.

Cable Preparation and Shelf Installation

Step 10



- To unlock the splice and patch module, hold the locking clip and push to the Right. Hold the locking clip and pull forward, the module will swing out.

Cable Preparation and Shelf Installation

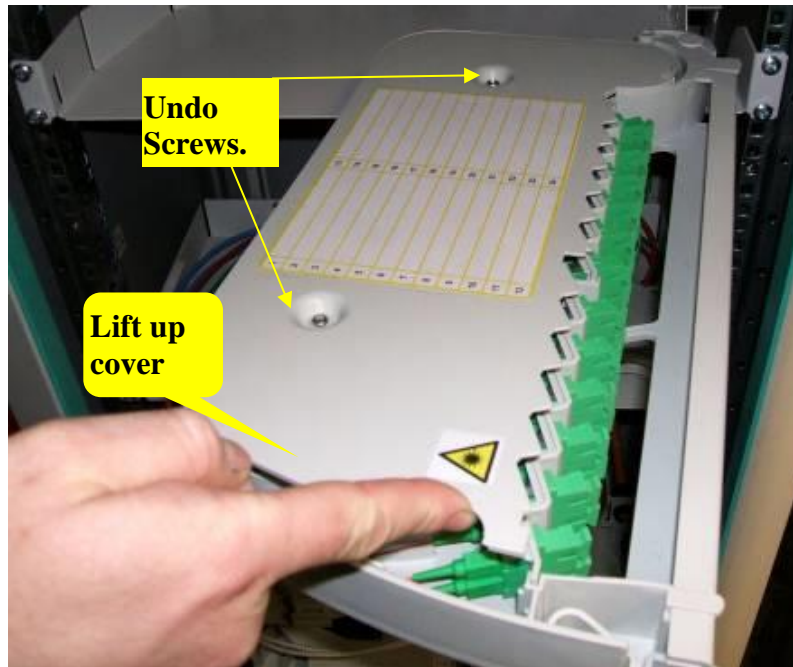
Step 11



- Swing out the Splice and patch Module to fully open.

Cable Preparation and Shelf Installation

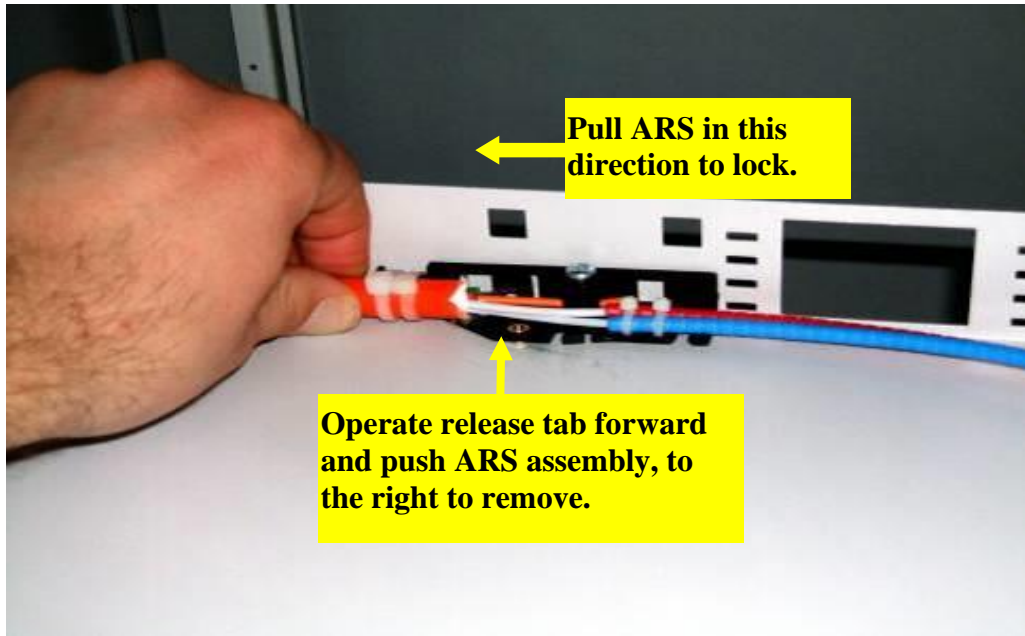
Step 12



- Undo the two M4 screws located in the top of the cover.
- Place finger, in the semi-circular cut out in the cover and lift out.

Cable Preparation and Shelf Installation

Step 13

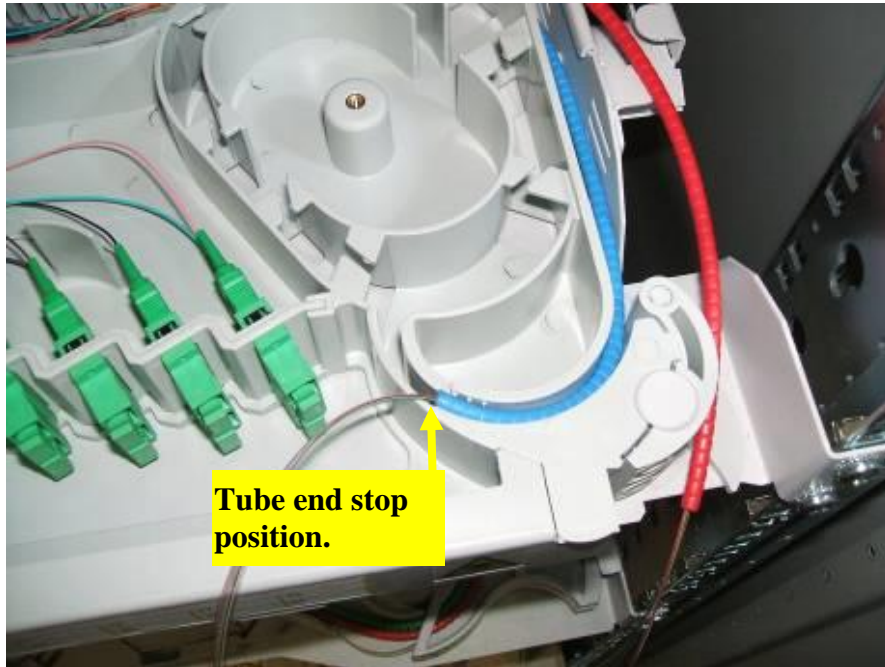


- Feed spare cable into rack.
- Locate the two angled legs on the back of the ARS into the lower pair of square locating holes.
- Pull the ARS and Cable assembly to the left and the ARS will now lock into position.

NOTE: If the ARS needs to be removed, then place a flat bladed screwdriver behind the release tab and push the ARS assembly to the right.

Cable Preparation and Shelf Installation

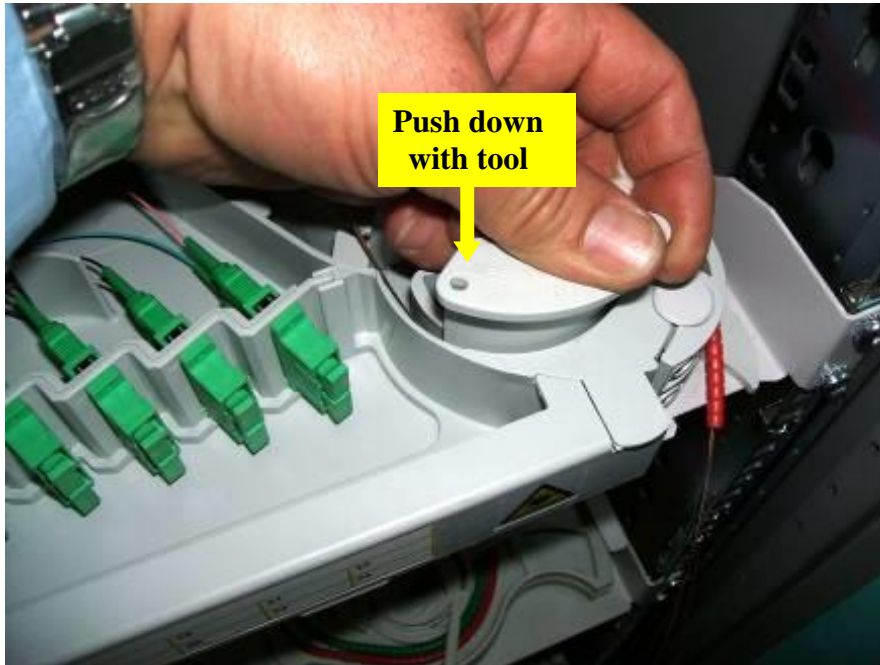
Step 14



- Fully open the module.
- Select the Blue Tube and route around back of module and into the tube location area.
- Locate the end of the tube at the tube stop position and push the tube downwards so that the groves in the tube align with the splines on the module.

Cable Preparation and Shelf Installation

Step 15



- Use the tube insertion tube (6) to push the tube into position. The tube will stop when the base of the module is reached.

Cable Preparation and Shelf Installation

Step 16



- Route the 12, fibres from the BLUE Tube in direction of Arrow.

NOTE: An arrow indicating **DIRECTION - FIBRE IN** is embossed into the module base at this point.

- Store the fibres from the BLUE tube in the Right-hand fibre storage area.

NOTE: The fibres from the BLUE tube are from Cable element No.1 and represent Fibre Numbers 1 to 12.

Cable Preparation and Shelf Installation

Step 17

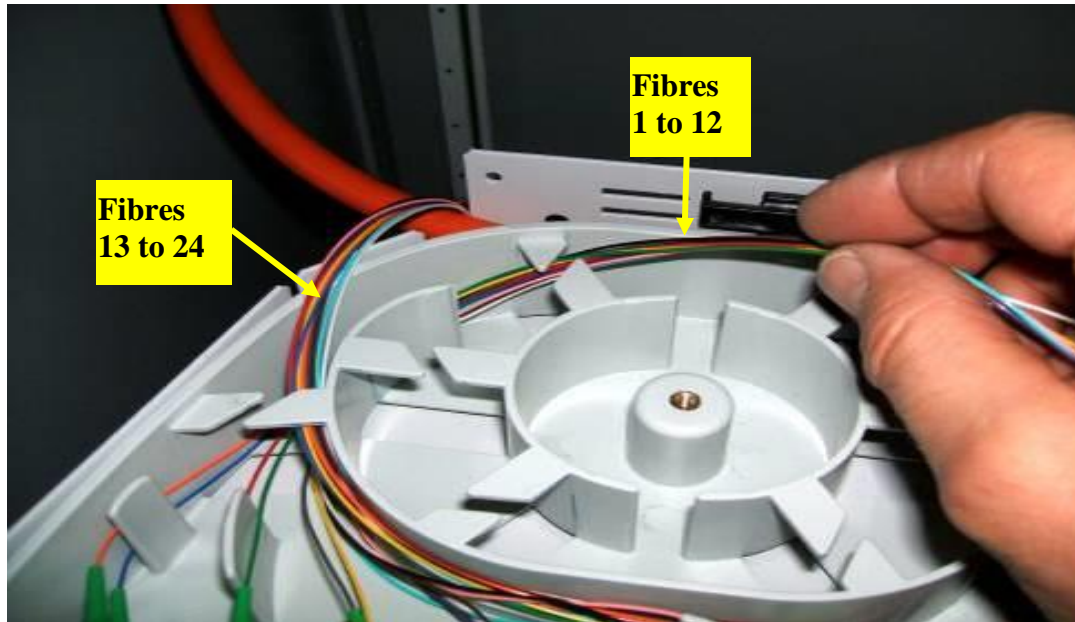


- Repeat Steps 14 to 16 for the RED Tube.
- Store fibres as indicated in Step 16.

NOTE: The fibres from the RED tube are from Cable element No.2 and represent Fibre Numbers 13 to 24.

Splicing

Step 18



- Remove Pigtails from Left Hand Storage Area.
- Segregate the Pigtails into 2 groups of 12, Fibres 1 to 12 and Fibres 13 to 24.

NOTE: Each Group of 12 Pigtails is identified with a label, 1-12 and 13-24.

Splicing

Step 19



- Insert one of the Splice Protector bays (5) and click into place.

Splicing

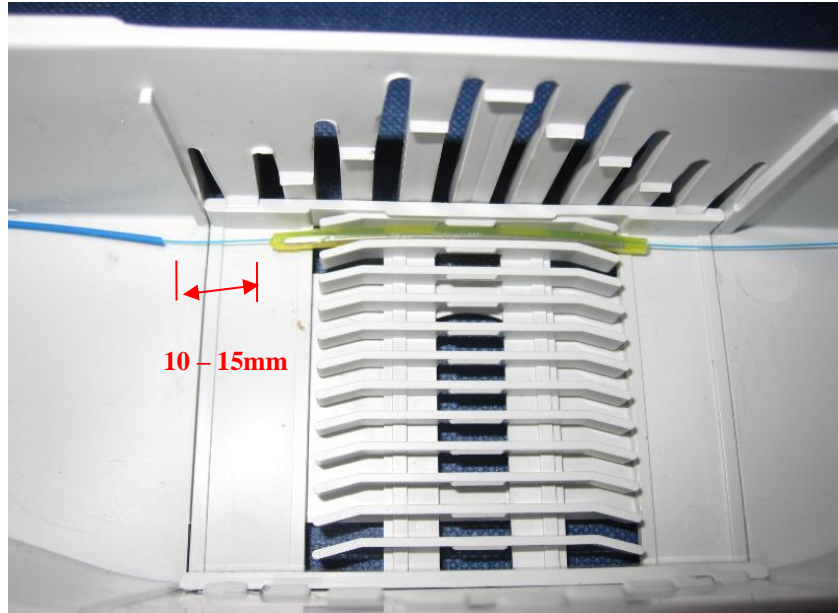
Step 20



- Select the 12 Primary Coated Fibres from the BLUE tube (Fibres 1 to 12).

Splicing

Step 21

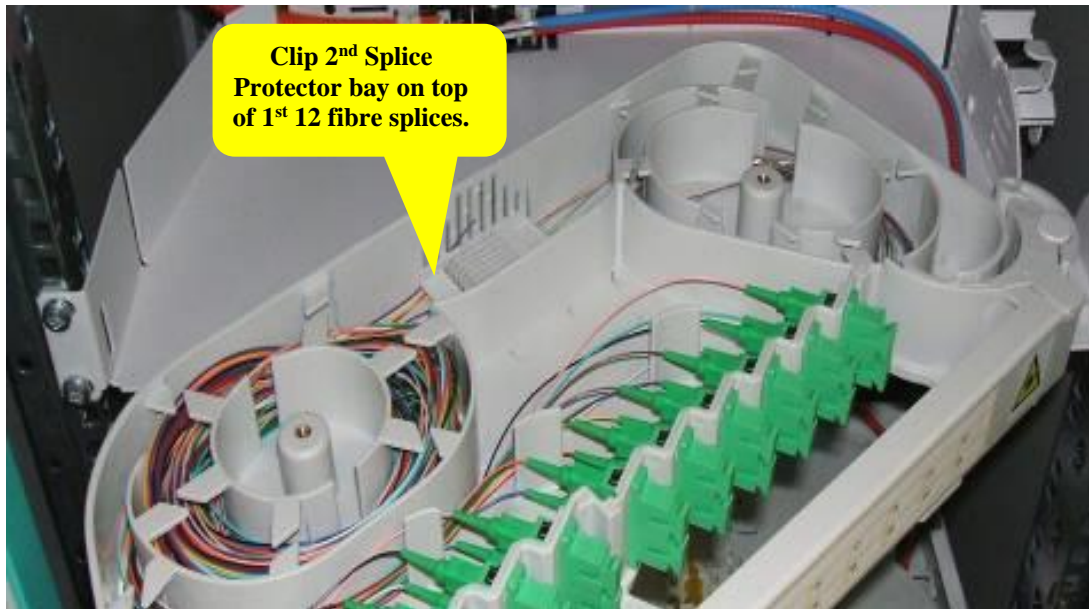


- Starting with Fibre No. 1 (BLUE), splice the Blue Pigtail to the Blue Primary Input Fibre and store the splice protector in the Splice Protector Bay (5).
- Repeat for fibres 2 through to 12 and store each spliced fibre in sequence in the splice protector bay.

NOTE: Ensure that enough 900µm buffering is removed from the Pigtail fibre to allow a gap of 10 to 15mm from the buffering to the splice protector. This will allow the splice protector to shrink down onto 250µm fibre only, as illustrated in the photograph above.

Splicing

Step 22



- Store the first 12 in the pigtail storage area and the first group of Primary coated fibres in the input fibre storage area.
- Clip the second Splice Protector Bay (5) on top of the first set of spliced fibres.
- Repeat Steps 20 to 21 for the 12 Fibres from the RED Tube and the remaining 12 Pigtail Fibres (Fibres 13 to 24).

Splicing

Step 23



- Replace the protective cover over the splicing area.
- Swing Module back into the closed position.

Note. When closing the module lift slightly before pushing back into place.

Installing Patch Cords

Step 24



**Push Tab Up
to release**



**Push Tab Up
to release**

- Push both left hand and right-hand release Tabs up to un-latch the front cover.

Installing Patch Cords

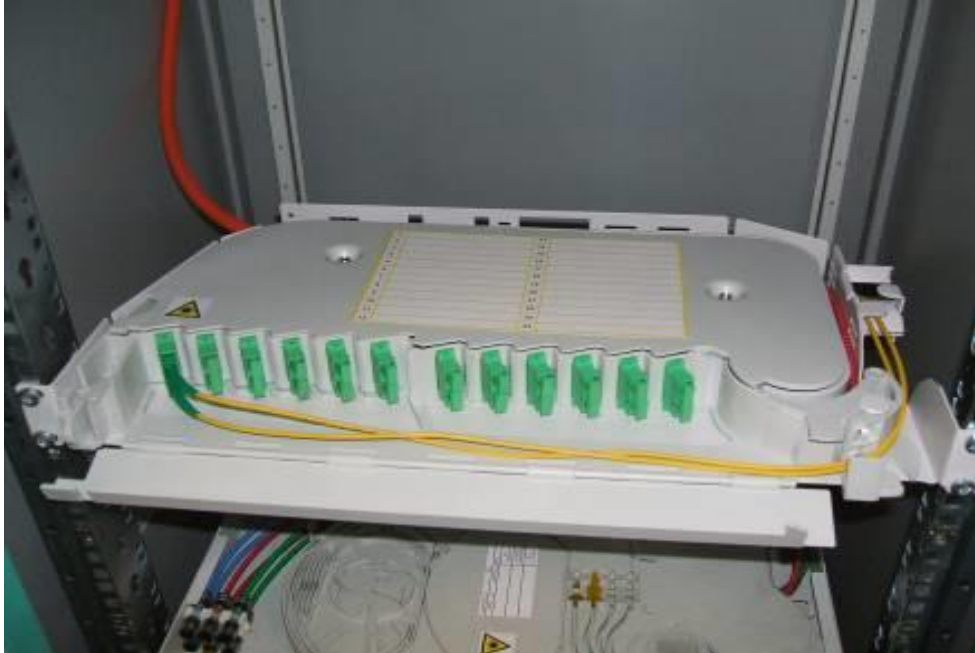
Step 25



- Rotate the Front cover down to expose the Patch Cord adapters.

Installing Patch Cords

Step 26



⚠ Clean all connectors before making any connections.

- Plug Patch Cord Connectors into the adapters in the desired sequence.
- Route the Patch cords along the front of the module and around the bend manager hinge.
- Route pigtails through the side bend manager, either up or down, as illustrated in Step 27.

Installing Patch Cords

Step 27



- Route fibres over the side bend manager as illustrated above.
- Follow the RED arrows if Patch cords are routed downwards.
- Follow the BLUE arrows if Patch cords are routed upwards.

Installing Patch Cords

Step 28



- On completion of Patch Cord Installation, close the flip down front cover and ensure that the cover is retained by the two locking tabs.
- Fill in the Front and Top Cover labels with details of routings and circuits as necessary.