OAsys® INTERNAL PLANT
MDU FTTP BASEMENT SPLICING BOX (NON-SPLITTER)
Part Number: XCPSC03154, XCPSC01462 and XCPSC01463

Description	Tools & Additional Items Required

The MDU FTTP Basement Splicing Box is used in multi dwelling units (MDU's) to provide FTTP or Ethernet services to up to 30 end user units.

The box is designed to accept, and gas block a cable entering the MDU from the external network and distribute fibres to end user units via either MDU FTTP connectorized floor boxes or directly from EZ bend or Invisilight cable.

Fibres from the input cable are spliced to fibres in the MDU FTTP Connectorised floor boxes or EZ bend and Invisilight cables in the 4 element trays, each tray accepting up to 12 fibres.

The box has also been designed to transition from an external cable to an internal COF 201 or COF 950 cable for use where the external cable entry point is more than 2m from the distribution location.

Additional Items Required:	Prysmian Part No.
N/A	

Optional Items:	Prysmian Part No.
Security Screws	XAGSC00476

Tools:
HZ Closure Sealant 10B (BT Item Code 039962)
Compound (BT Item Code 072136)
Flush Cutting Tool 1A (BT Item Code 076080)   XPFSC00150
Pozidrive Screwdriver, Hammer, Cable Stripping tools, Fibre Stripping tools, drill, 6mm drill bit.

Component Parts (pictures not to scale)

**1 MDU Basement Box
Qty 1**

**2 Cable Gland Kit
Qty 1**

**3 Stepped Output Grommet
Qty 6**

**4 GRP Restraint w/ Grub Screw
Qty 1**

**5 Gas Blocking Port Kit
Qty 1**

Other

6.	Screw	Qty 4
7.	Cable Tie	Qty 7
8.	Screw	Qty 4
9.	Wall Plug	Qty 4

Additional Items – NOT INCLUDED

Kevlar Restraint Kit BT Item Code 075869


Page 1 of 38

CONTENTS

1. Preparation and Mounting
   - How to prepare Input port kits.
   - How to install the box to a wall.

2. Installation of COF600 Input Cable
   - How to install COF600 cable.
   - How to gas block input cable.
   - How to route COF600 input fibres.

3. Installation of ULW Input Cable
   - How to install ULW cable.
   - How to gas block input cable.
   - How to route input fibres.

4. Installation of Output Cable – EZ Bend
   - How to install small diameter output cable.
   - How to route output cable fibres.

5. Installation of Output Cable – Invisilight & Floor DP
   - How to install small diameter output cable.
   - How to route output cable fibres.

6. Installation of COF201 / COF950 Output Cable
   - How to install COF201 / COF950 output cable into large output port.
   - How to route COF201 / COF950 output cable fibres.

INSTALLATION INSTRUCTION

1.0 BOX PREPARTION AND MOUNTING

Step 1
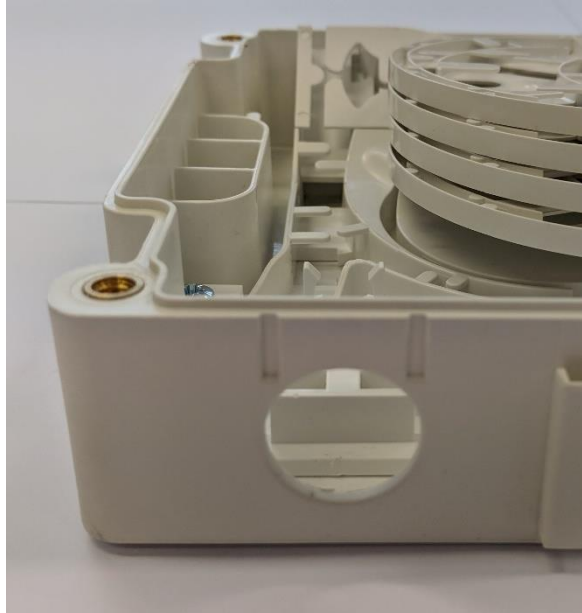
- Remove the cover from the Basement Box.

- Carefully knock out the cable entry port on the left-hand side of the base. Take care to support the base when doing this.

Step 2
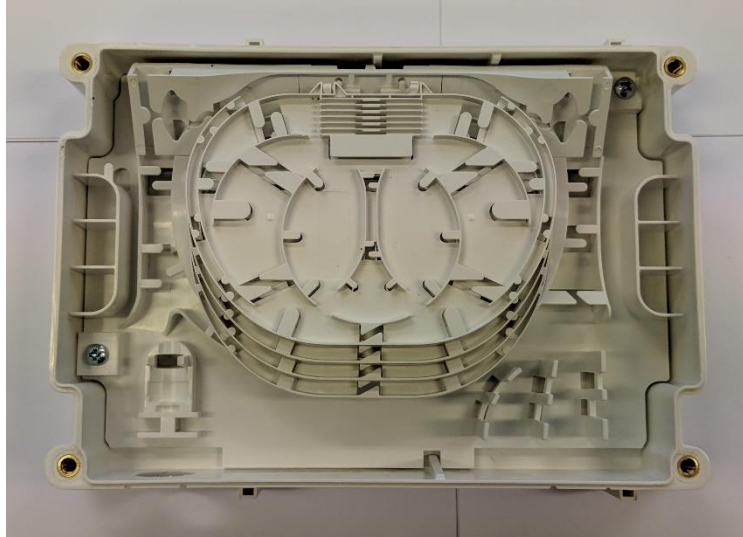
- Offer Base up to wall, level and mark 4 screw positions.

- Remove Base and drill marked positions using a 6mm drill bit.

- Insert wall plugs.

- Re-locate box to wall and screw into place with screws.

Note – Use suitable alternative wall fixing plugs if necessary, to suit wall material or construction.

2.0 INSTALLATION OF COF600 INPUT CABLE

Step 1
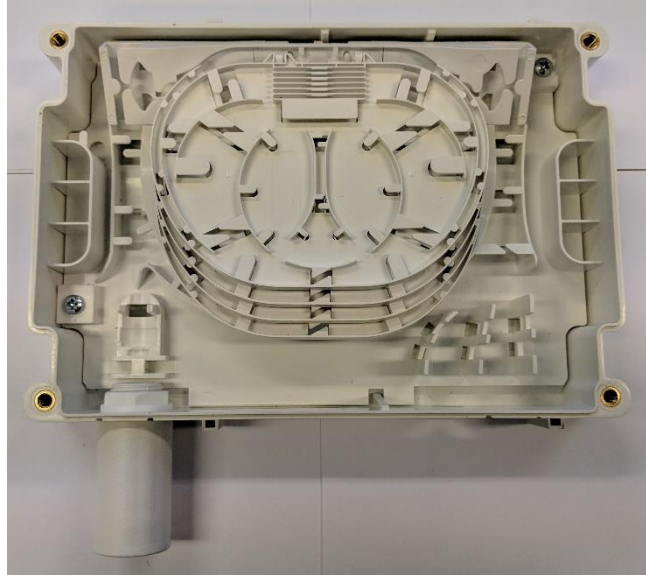
- Fit 'O' Seal over the thread of the gas blocking port gland.

- Insert the gas blocking gland through previously knocked out cable entry port so that 'O' Seal sits against outside face of Base.

- Fit Locknut and tighten against inside face of Base to secure.

2.0 INSTALLATION OF COF600 INPUT CABLE

Step 2
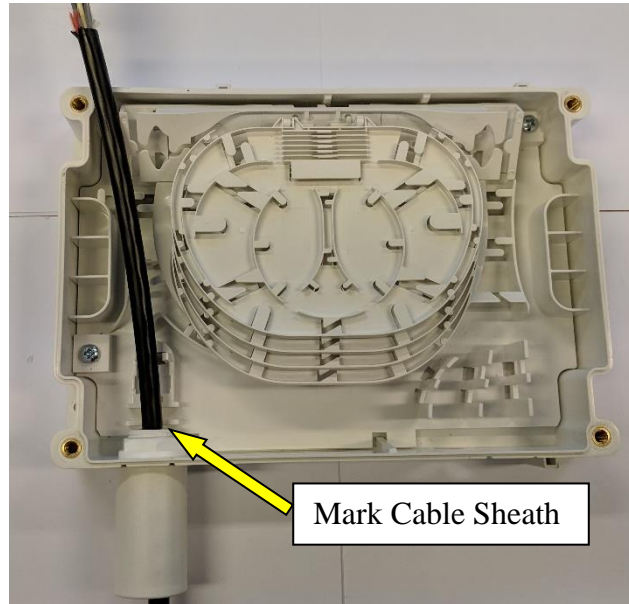
Mark Cable Sheath

- Install approximately 2m of cable into gas sealing port.

- Mark the cable sheath at a point level with the top of the gas sealing port.

- Follow the striping practices in EPT/COF/D953 to strip the cable sheath at a point 50mm below the mark made in the previous step.

- Cut all dummy fillers, water swellable tape, rip cords and aramid bindings level with the cable butt.

2.0 INSTALLATION OF COF600 INPUT CABLE

Step 3
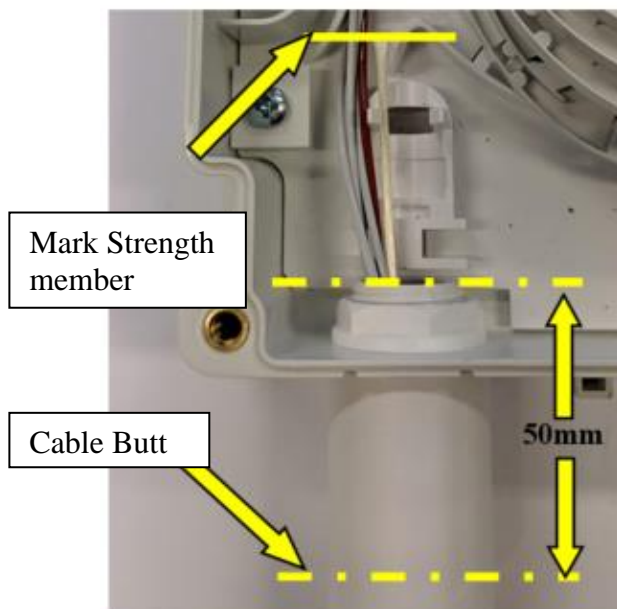
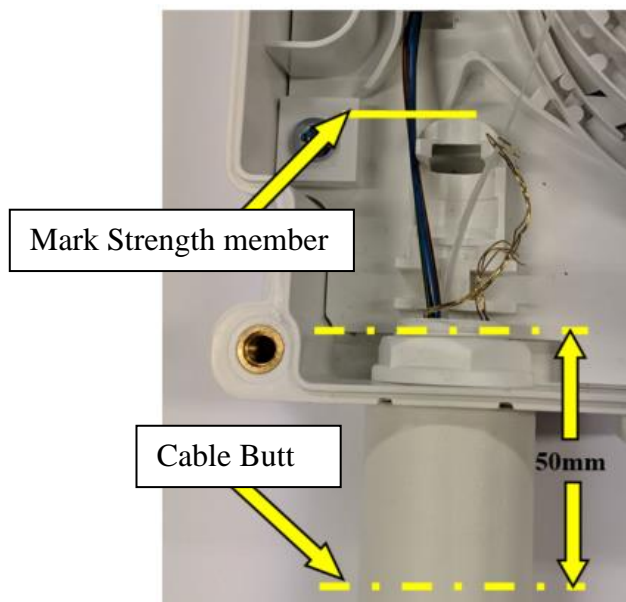

Mark Strength member

Cable Butt

50mm

- Align the cable so that the cable butt is positioned 50mm below the top of the gas seal port.

- Mark and cut the strength member at a position just above the strength member restraint.

- Install the strength member into the restraint so it protrudes just above the top of the restraint and tighten the grub screw.   Make   sure the cable butt is positioned approximately 50mm below the top of the port.

- If necessary, the restraint can be unclipped to help with the strength member installation.

2.0 INSTALLATION OF COF600 INPUT CABLE

Step 4

Potting

- Seal the bottom of the port gland using Compound 16, item code 072136 (supplied with box).

- Fill the port gland to the top with Closure Sealant 10B, item code 039962.

NOTE: Ensure the cable butt is covered in sealant.

2.0 INSTALLATION OF COF600 INPUT CABLE

Step 5
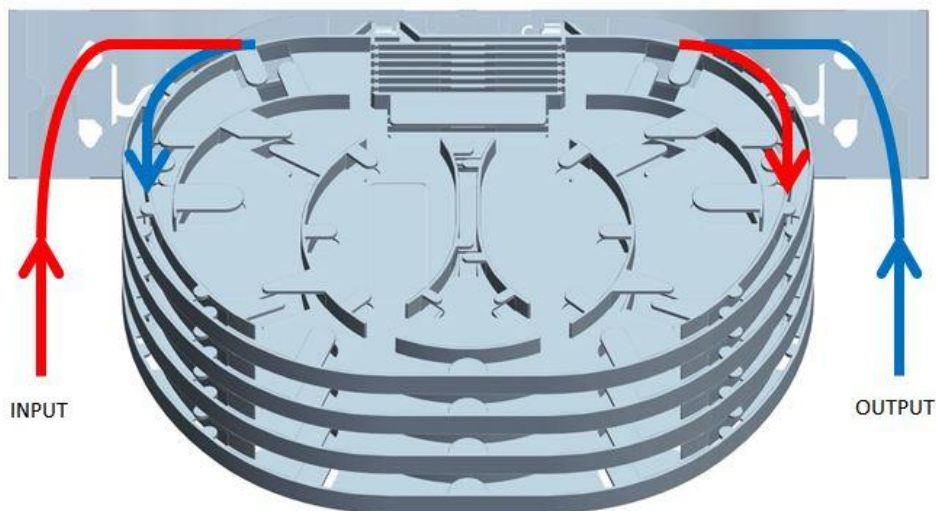
- Route fibres as shown.

- 12 fibres from element 1 to be routed to the bottom tray first (tray 1).

- 12 fibres from element 2 to be routed to the middle bottom tray next (tray 2).

- 12 fibres from element 3 to be routed to the middle top tray next (tray 3).

- 12 fibres from element 4 to be routed to the top tray last (tray 4).

Page 9 of 38

3.0 INSTALLATION OF ULW INPUT CABLE

Step 1
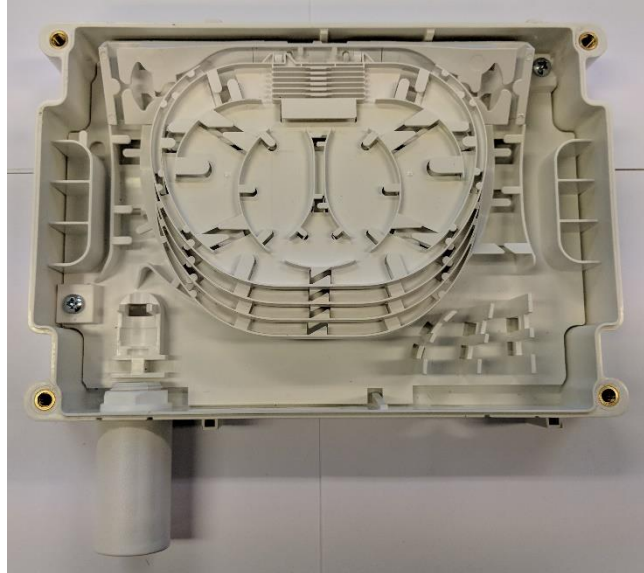
- Fit 'O' Seal over the thread of the gas blocking port gland.

- Insert the gas blocking gland through previously knocked out cable entry port so that 'O' Seal sits against outside face of Base.

- Fit Locknut and tighten against inside face of Base to secure.

3.0 INSTALLATION OF ULW INPUT CABLE

Step 2
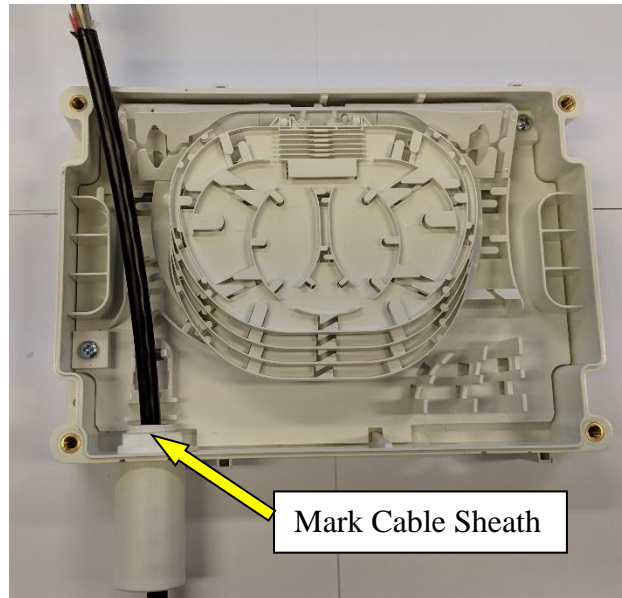
Mark Cable Sheath

- Install approximately 2m of cable into gas sealing port.

- Mark the cable sheath at a point level with the top of the gas sealing port.

- Follow the striping practices in EPT/COF/D931 to strip the cable sheath at a point 50mm below the mark made in the previous step.

- Cut all dummy fillers, water swellable tape, rip cords and aramid bindings level with the cable butt.

3.0 INSTALLATION OF ULW INPUT CABLE

Step 3

Mark Strength member

Cable Butt

50mm

- Align the cable so that the cable butt is positioned 50mm below the top of the gas seal port.

- Mark and cut the strength member at a position just above the strength member restraint.

- Install the strength member into the restraint so it protrudes just above the top of the restraint and tighten the grub screw. Make sure the cable butt is positioned approximately 50mm below the top of the port.

- If necessary, the restraint can be unclipped to help with the strength member installation.

3.0 INSTALLATION OF ULW INPUT CABLE

Step 4
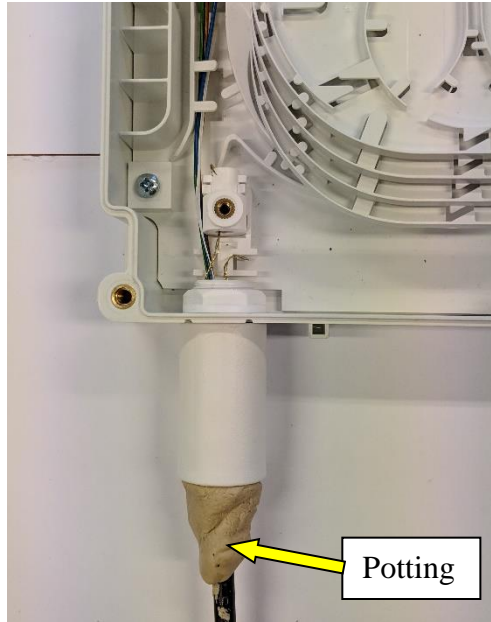
Potting

- Seal the bottom of the port gland using Compound 16, item code 072136 (supplied with box).

- Fill the port gland to the top with Closure Sealant 10B, item code 039962.

NOTE: Ensure the cable butt is covered in sealant.

3.0 INSTALLATION OF ULW INPUT CABLE

Step 5
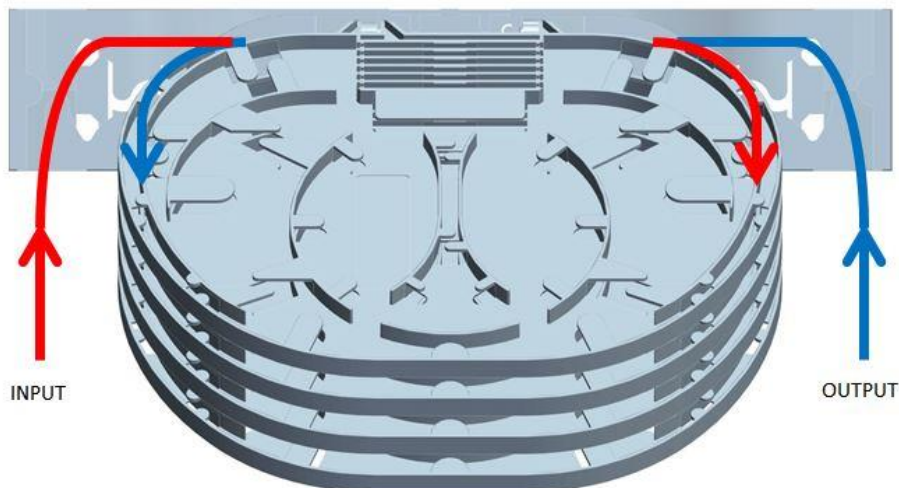
- Route fibres as shown.

- 12 fibres from element 1 to be routed to the bottom tray first (tray 1).

- 12 fibres from element 2 to be routed to the middle bottom tray next (tray 2).

- 12 fibres from element 3 to be routed to the middle top tray next (tray 3).

- 12 fibres from element 4 to be routed to the top tray last (tray 4).

Page 14 of 38

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 1

- The basement box is now ready to accept the installation and fibre routing of the output cables. The 10 small ports will each accept the cable from an MDU FTTP connectorized floor box or 4.8mm EZ bend cable and 2mm Invisilight cable.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 2
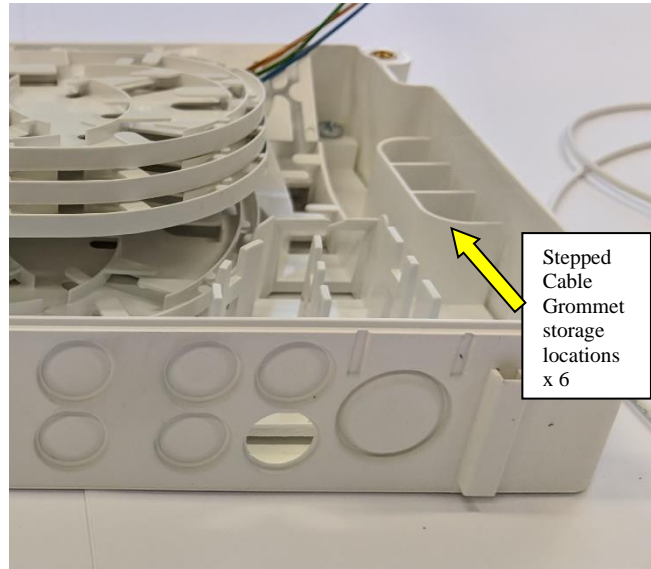
Stepped Cable Grommet storage locations x 6

- Carefully knockout the first Output Fibre Gland Port.

- Cut the Stepped Cable Grommet at the correct mark (matching the cable diameter) using a Flush Cutting tool 1A as shown above.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

| Step 3 | |

- Remove cable outer sheath to expose approximately 1.5m of fibre. Insert the cable through the Cable Grommet and into box.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 4
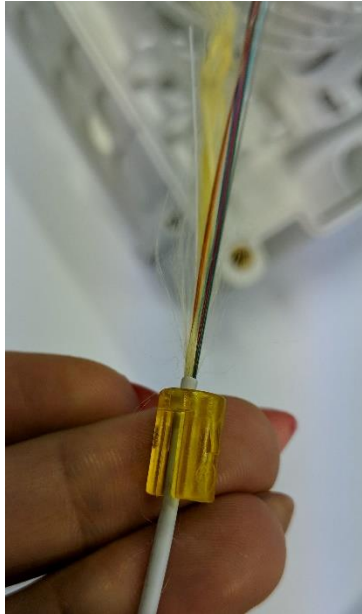
- Slide over the cable inner body and hold in position at cable butt.

Note: refer to IP008 Restraint Kit 2A installation guide for detailed instructions.
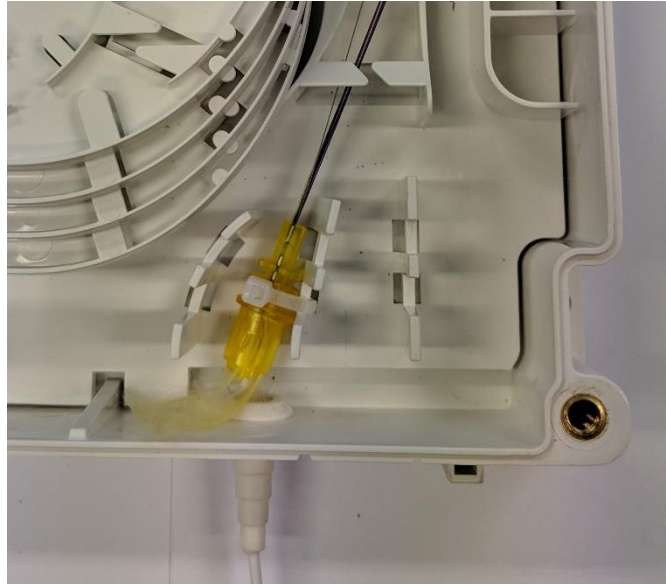
4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 5
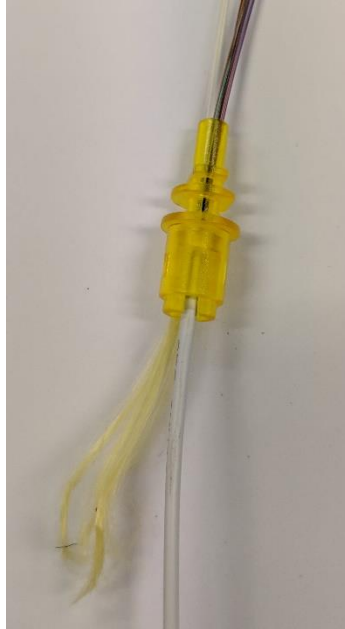
- Splay aramid evenly over the inner body and slide over outer body and click into position.

Note: refer to IP008 Restraint Kit 2A installation guide for detailed instructions.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 6

- Pull back cable into position.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 7

- Push and secure the grommet to the box. Position the cable butt as shown.

- Line up the Kevlar Restraint cable tie groove with insert cable tie position.

- Secure cable with Cable Tie hand tight only in position shown.
  Cut off Cable Tie tail using Flush Cutting Tool 1A.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 8
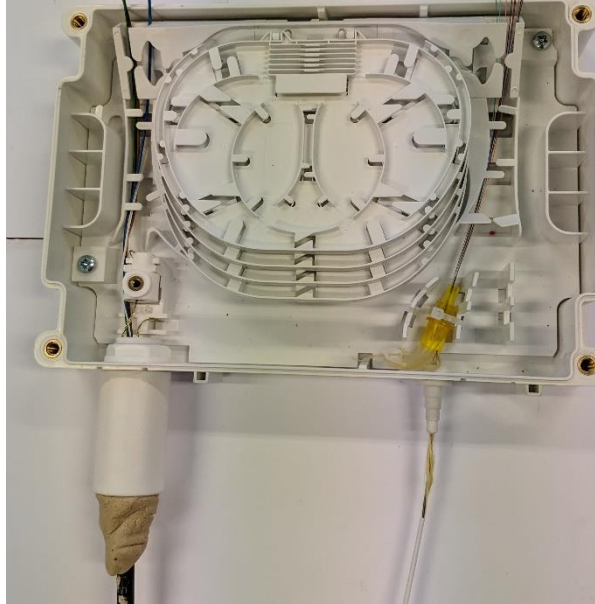
- Route the fibres to the designated splicing tray and splice to the input fibre using standard BT practices.

- Store any unused fibres in the centre of the splice tray.

- Repeat the process for remaining output cables.

4.0 INSTALLATION OF OUTPUT CABLE – EZ BEND

Step 9	

- Fit cover and tighten the 4 retaining screws.

Please Note – Replace the screws supplied with security screws as required.

5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 1

- The basement box is now ready to accept the installation and fibre routing of the output cables. The 10 small ports will each accept the cable from an MDU FTTP connectorized floor box or 4.8mm EZ bend cable and 2mm Invisilight cable.

5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 2
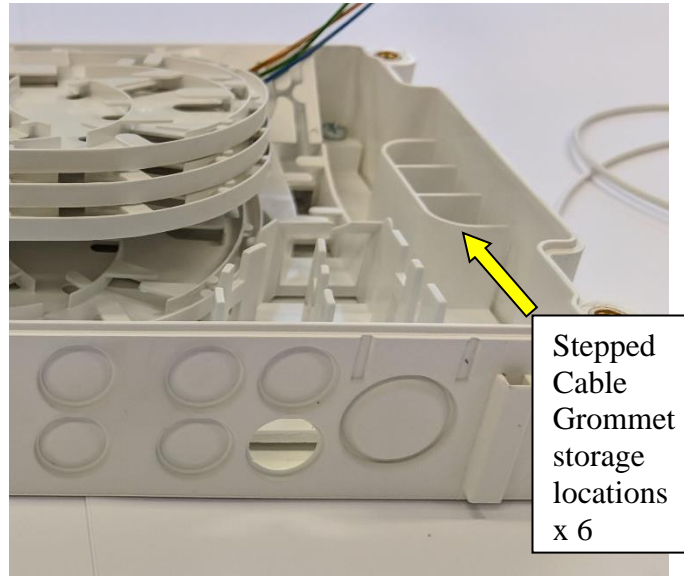
Stepped Cable Grommet storage locations x 6

- Carefully knockout the first Output Fibre Gland Port.

- Cut the Stepped Cable Grommet at the correct mark (matching the cable diameter) using a Flush Cutting tool 1A as shown above.

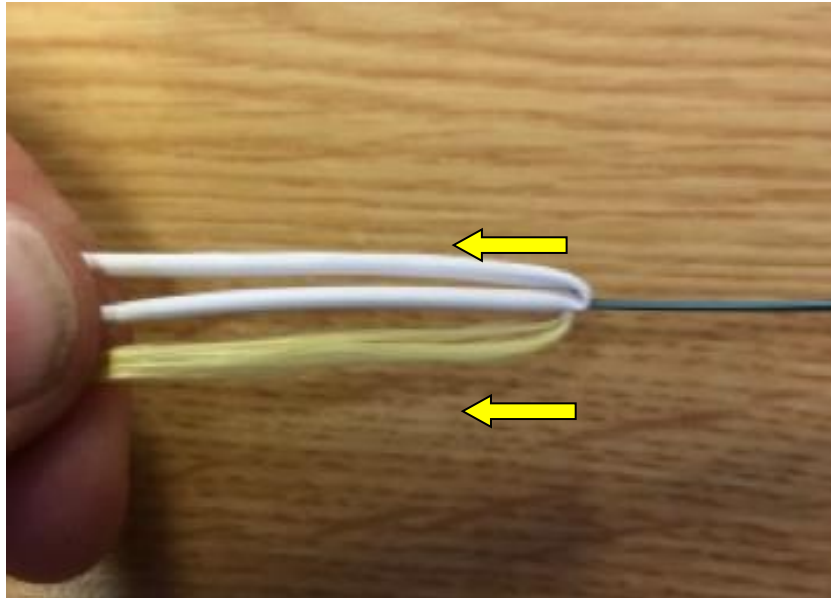**5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP**

Step 3	

- Remove cable outer sheath to expose approximately 1.5m of fibre. Insert the cable through the Cable Grommet and into box.

5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP
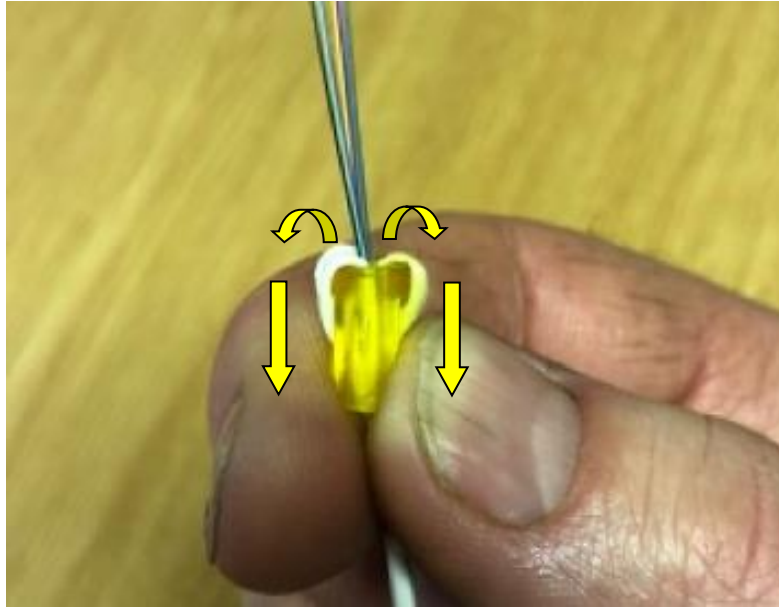
Step 4	

- Carefully fold back the sheath and separate the aramid strands as shown leaving at least 100mm.

Note: refer to IP008 Restraint Kit 2A installation guide for detailed instructions.

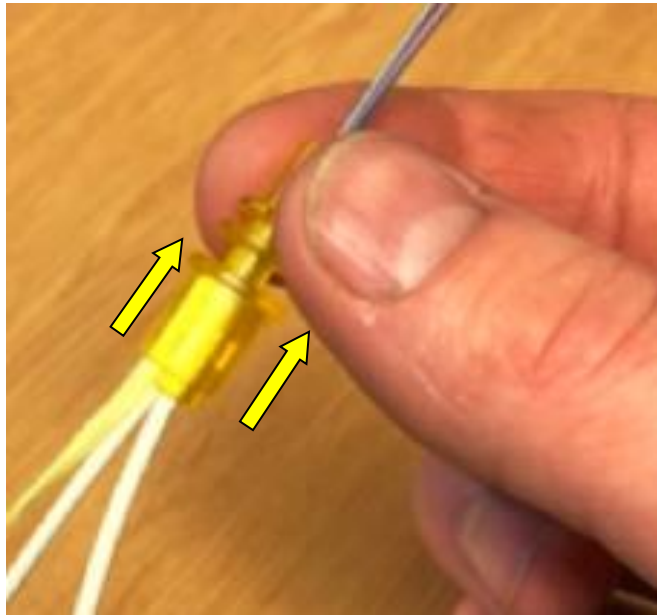## 5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 5

- Thread the internal part of the Kevlar Restraint over the stripped fibres, aramid, and stripped sheath.

- Carefully fold back the aramid and stripped sheath and line up the cable butt in line with the top of the Kevlar Restraint.

## 5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 6

- Slide the external part of the Kevlar Restraint over the fibres.

- Ensure the sheath and aramid strands are spread and pass either side of the locking tab.

- Visually check the Kevlar Restraint clips are securely engaged.

- Trim the sheath and aramid strands in line with the bottom of the Kevlar Restraint.

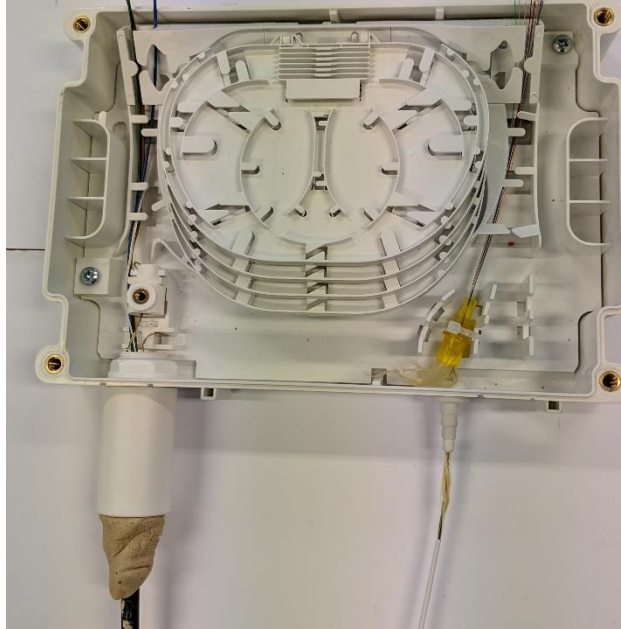## 5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 7
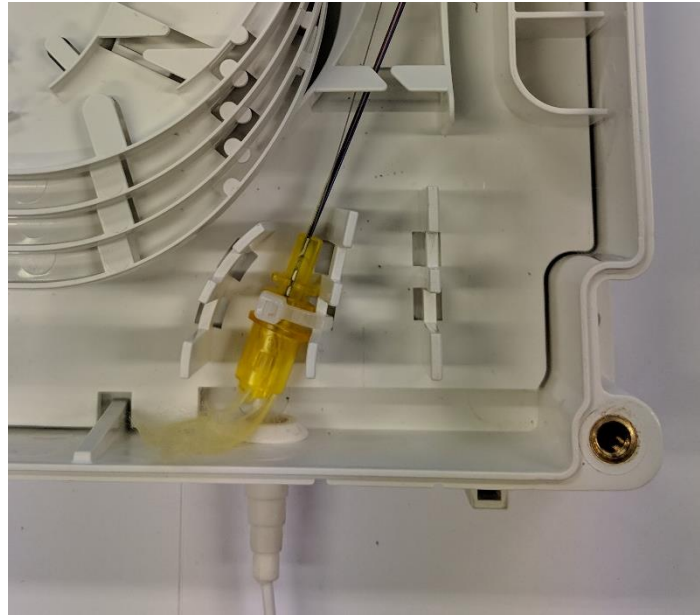
- Pull back cable into position.

- Push and secure the grommet to the box. Position the cable butt as shown.

- Line up the Kevlar Restraint cable tie groove with insert cable tie position.

- Secure cable with Cable Tie hand tight only in position shown.
  Cut off Cable Tie tail using Flush Cutting Tool 1A.

5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 8

- Route the fibres to the designated splicing tray and splice to the input fibre using standard BT practices.

- Store any unused fibres in the centre of the splice tray.

- Repeat the process for remaining output cables.

5.0 INSTALLATION OF OUTPUT CABLE – INVISILIGHT & FLOOR DP

Step 9

- Fit cover and tighten the 4 retaining screws.

Please Note – Replace the screws supplied with security screws as required.

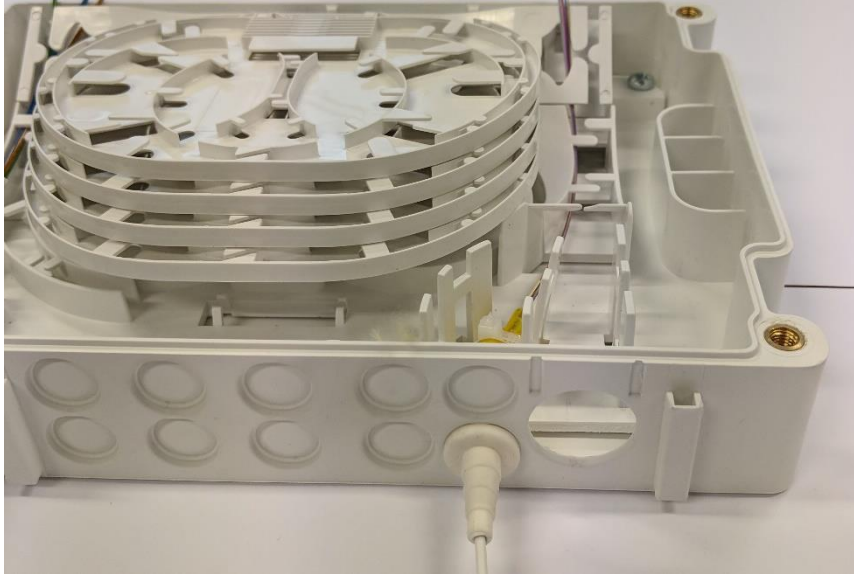## 6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE

Step 1

- The basement box is now ready to accept the installation and fibre routing of the output cables using the large knock out position. The 1 large port will accept the CPF201 cable.

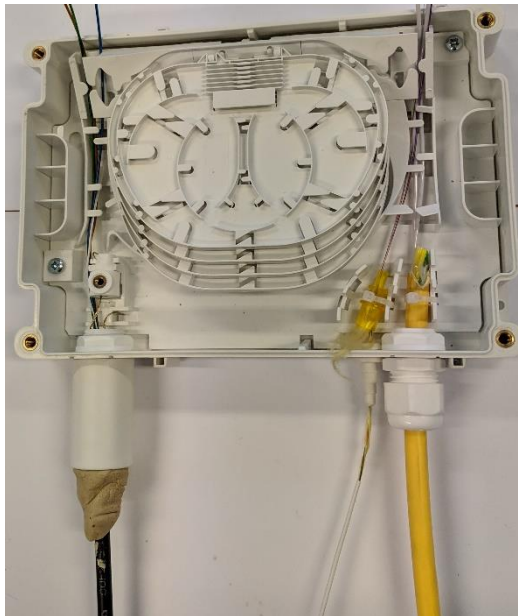**6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE**

Step 2	

- Carefully knockout the large Output Fibre Gland Port on the right side as shown.

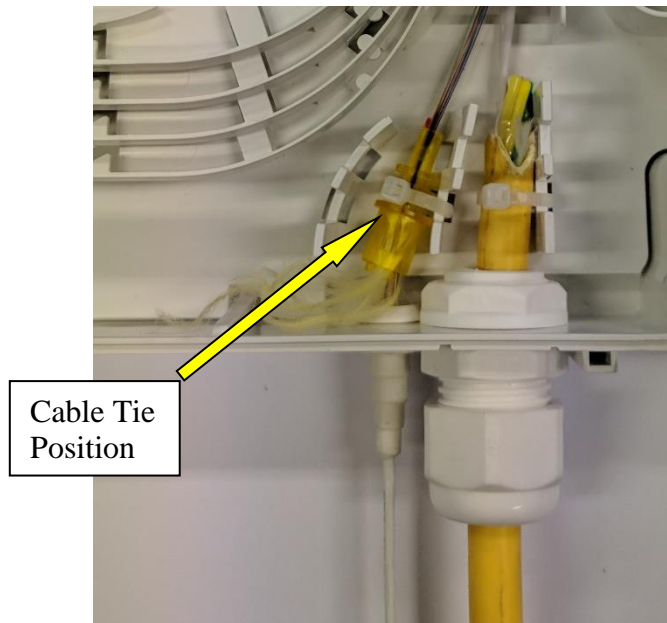## 6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE

Step 3

- Fit 'O' Seal over Cable Gland and into annular recess in hexagonal face.

- Push Cable Gland through previously knocked out cable entry port so that 'O' Seal sits against outside face of Base.

- Fit Locknut and tighten against inside face of Base to secure.

- Remove cable outer sheath to expose approximately 1.5m of fibre. Insert the cable through the Cable Grommet and into box.

Page 35 of 38

6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE
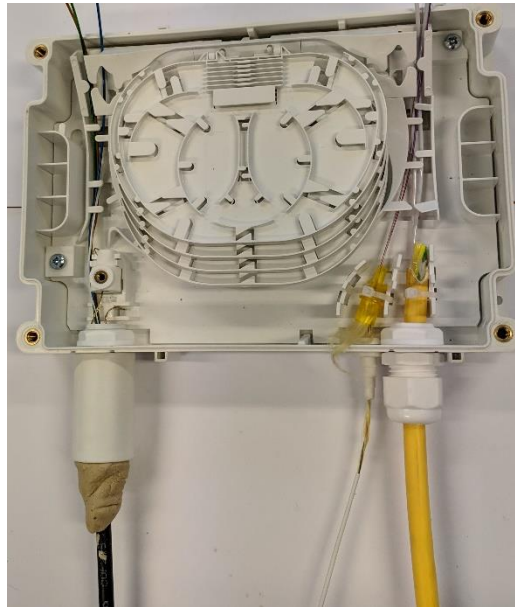
Step 4

Cable Tie Position

- Secure cable with Cable Tie hand tight only in position shown.
  Cut off Cable Tie tail using Flush Cutting Tool 1A.

6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE

Step 5	

- Route the fibres to the designated splicing tray and splice to the input fibre using standard BT practices.

- Store any unused fibres in the centre of the splice tray.

- Repeat the process for remaining output cables.

6.0 INSTALLATION OF COF201 / COF950 OUTPUT CABLE

Step 6

- Fit cover and tighten the 4 retaining screws.

Please Note – Replace the screws supplied with security screws as required.

PRYSMIAN HELPLINE: + 44 (0) 7816191633
connectivity.helpline@prysmian.com

IP491   Issue Number: 04   Date: 11th November 2024