OAsys® Equipment meets BT OTIAN® Equipment Specifications

Prysmian
Group

INSTALLATION INSTRUCTION

OAsys® EXTERNAL PLANT
Multi Tube Customer Lead-In Unit
Part Number: XBFSC00151

Description

- The OAsys Multi Tube Customer Lead In Unit enables external cable to be passed through the building fabric from an outside wall.
- The Customer Lead In comprises of two separate units mounted either side of the wall. The units are connected by a length of conduit.
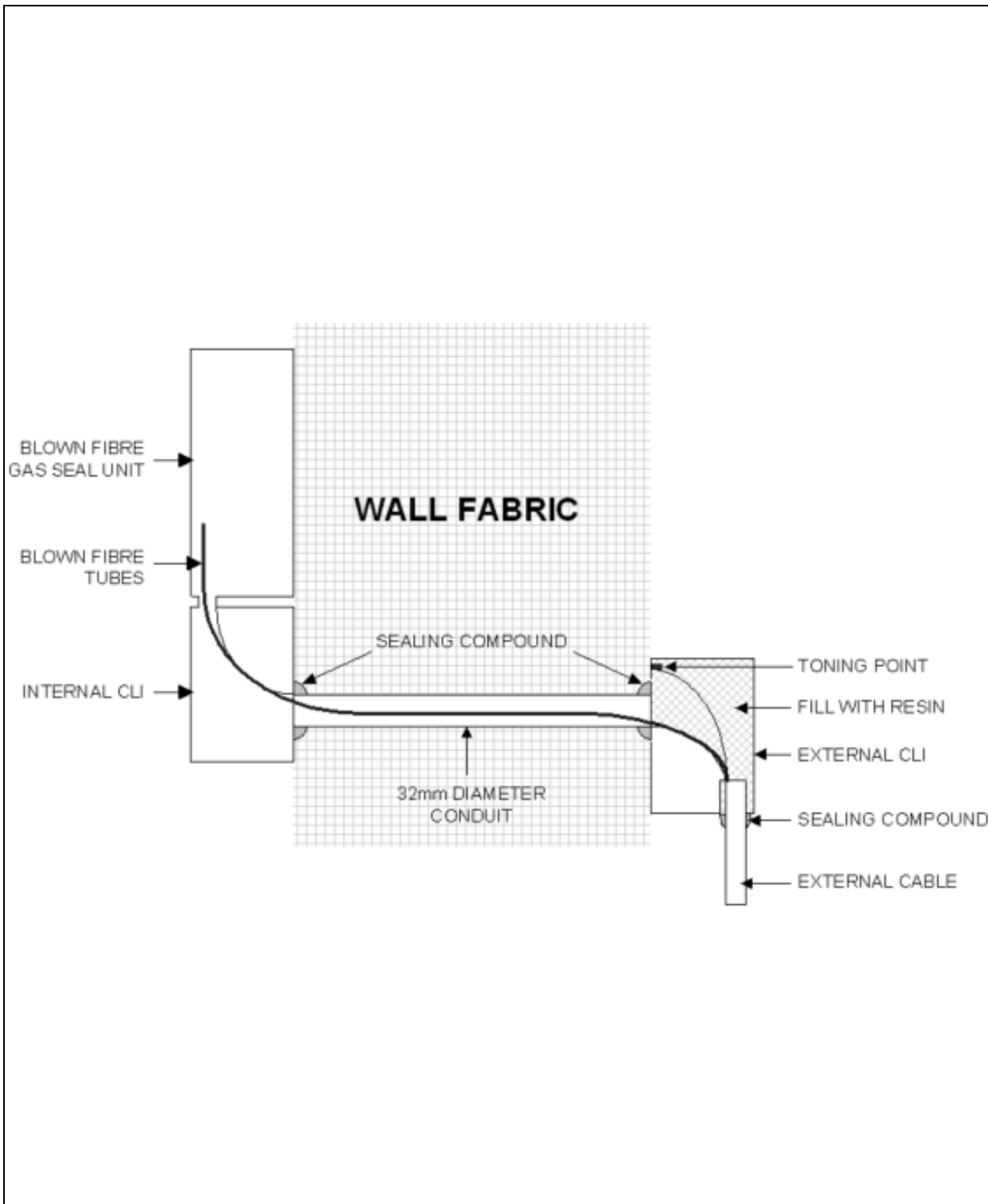- This product can be used with Sirocco® Blown Fibre tubing or conventional optical cable.

Tools & Additional Items Required

Additional Items Required:	Prysmian Part No.
None	

Optional Items:	Prysmian Part No.
Sealing Resin	XKTSC00084
Blown Fibre Gas Seal Unit	XBFSC00150
40mm Conduit x 0.5M	XCPSC00671
Tools:	Pozidrive Screwdriver
	Drill Bit 45mm
	Flush Cutters

Component Parts (pictures not to scale)

1 Internal CLI Base Qty 1	**2 Internal CLI Cover** Qty 1	**3 External CLI Base** Qty 1
4 External CLI Cover Qty 1	**5 40mm Conduit x 0.5M** *(Optional)* Qty 1	**6 Compound 16** Qty 1
7 Foam Strip Qty 1	**8 Tube Collets 1-24** Qty 1	**9 Element Collets 1-12** Qty 1
10 Moisture Barrier Connector Qty 1	**11 Fixing Screws & Wall Plugs** Qty 4	**12 Toning Screw & Nuts** Qty 1 & 2

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WALL FABRIC

BLOWN FIBRE GAS SEAL UNIT

BLOWN FIBRE TUBES

INTERNAL CLI

SEALING COMPOUND

32mm DIAMETER CONDUIT

TONING POINT

FILL WITH RESIN

EXTERNAL CLI

SEALING COMPOUND

EXTERNAL CABLE

INSTALLATION INSTRUCTION

Mounting the Customer Lead in Units

Step 1

- Identify a suitable mounting position for the external CLI (dark grey) **(3)** and drill a pilot hole completely through the wall using the template on page 5.

- Mark and drill the fixing holes for the unit and insert wall plugs.

Step 2

- Enlarge the pilot hole to 45mm, but do not drill completely through the wall from the outside.

- Complete the enlargement of the pilot hole from the inside of the building.

Step 3

- Measure the thickness of the wall and cut a length of conduit **(5)** to wall thickness minus 20mm.

- Working at the outside wall, apply a small fillet of sealing compound **(6)** around the inside and outside of the rear port of the external CLI. Insert the length of conduit into the port of the CLI.

Mounting the Customer Lead in Units

Step 4

- Seal around the conduit and the two fixing screws using another small fillet of sealing compound **(6)**.

- Ensure that the cable tie is inserted into the CLI before fixing to the wall to ease installation later. Do not assemble the cable tie at this stage. The cable tie is provided to assist in the installation of large cables, such as 19 and 24 tubes. It is not required for 4, 7 and 12 tube cables.

- Slide the 32mm conduit through the wall and fix the base of the CLI to the wall using fixing screws **(11)** provided.

Ensure the cable tie is inserted
before fixing to the wall if
installing a 19 or 24 tube cable

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Step 5

- Working at the inside of the building, apply a small fillet of sealing compound **(6)** around the inside and outside of the rear port of the internal CLI. Push the base firmly home and secure it to the wall ensuring that the conduit is fully located.

Step 6

Mark cable butt level with butt position of CLI
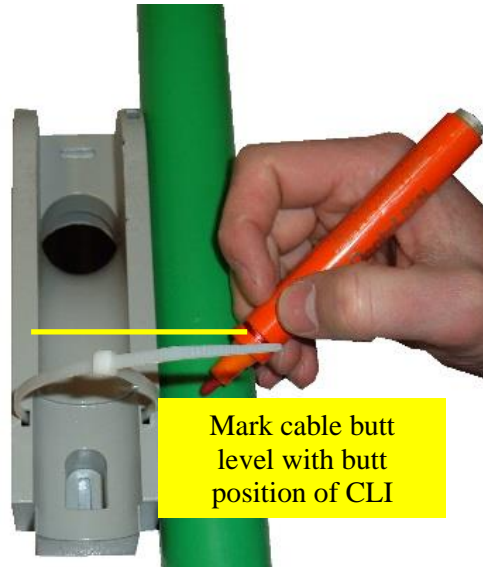
- Working at the outside wall, position the cable alongside the CLI base and apply a butt reference mark to the sheath level with the cable butt stop position as shown, ensuring a 3-metre overhang for the jointing allowance.

- Strip the cable back to the butt mark to expose the tubes (or elements).

Step 7

Wrap Foam Tape around butt as per list below

- Wrap foam tape **(7)** around the cable sheath at the cable butt. This is important if resin filling the CLI's to gas block, as it will prevent the resin from running out of the bottom of the CLI. The following amount must be used: -

- 4 tube cable = 5 turns.
- 7 tube cable = 4 turns
- 12 tube cable = 3 turns
- 19 tube cable = 2 turns
- 24 tube cable = 1 turn

Step 8

Slide collets up approximately 50mm from end

Attach toning wire if required
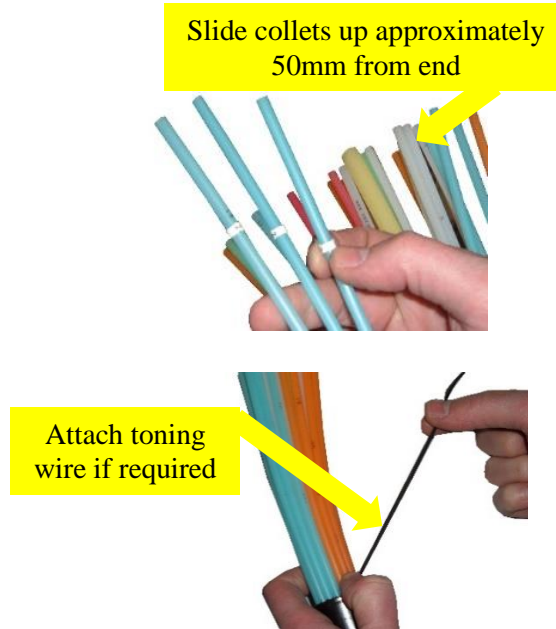
- Apply identification collets **(8 or 9)** to the tubes or elements. Slide the collets up so they rest approximately 50mm from the end. Secure into place using PVC tape if necessary. For conventional cable, cut the strength member approx 40mm from the butt.

- Rivet a toning connector **(10)** to the cable moisture barrier if required.

Step 9

Secure using cable tie. Ensure cable tie block rests against wall of CLI
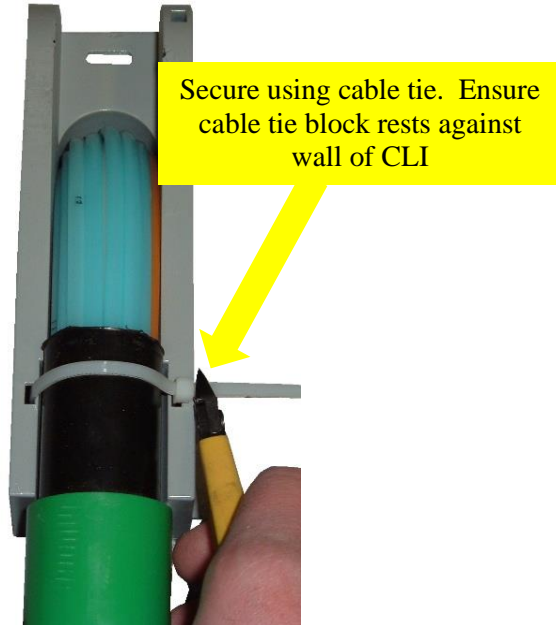
- Feed the Blown Fibre tubes or elements through the conduit and check that the cable butt position is correctly located against its stop. Take up any slack and ensure the tubes follow the cable bend manager. Clip the cable to the wall using approved cable clips.

- Secure the cable into place using the cable tie inserted earlier. Pull the cable tie tight and ensure that the block ends up against the left- or right-hand wall of the unit. Cut the cable tie excess off using flush cutters.

Step 10

Knock screw through
blind hole for toning

Secure toning
wire using nuts
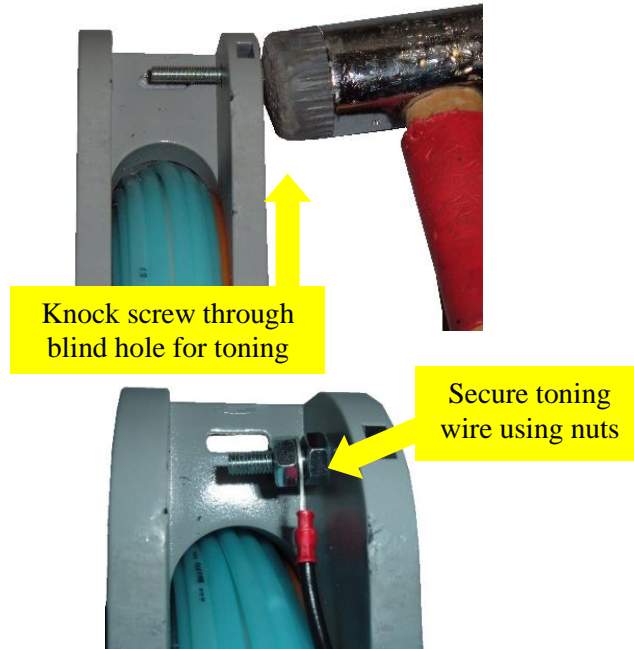
If toning is required: -

- Take the toning screw and nuts **(12)** and insert the screw into the blind hole at the top right-hand side of the CLI. Tap the screw through the wall of the unit using a hammer.
- Secure the screw into place using one of the nuts.
- Position the eye of the toning connector over the screw and secure into place using the second nut.

Cable Installation

Step 11

Hook Slots over protrusions

Attach cover. Press sides over clips until clicks shut
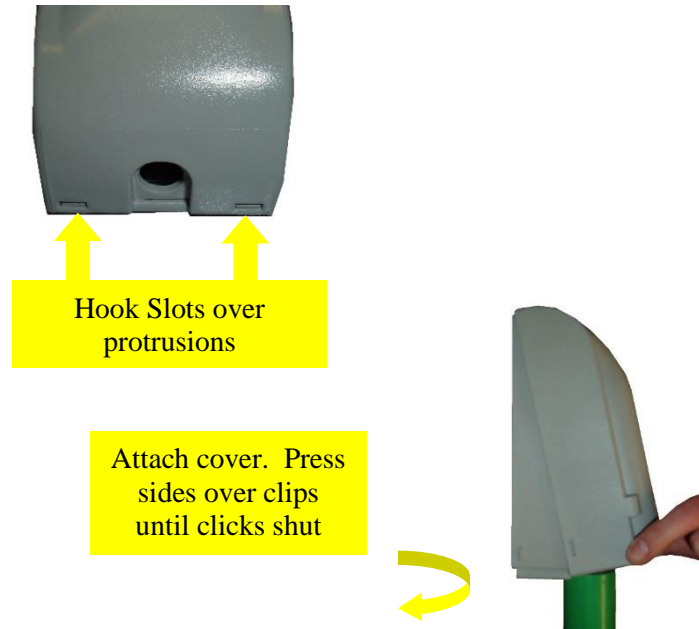
- Apply small fillets of sealing compound **(6)** into the holes for the cable tie. Apply further fillets into the holes for the screws to prevent resin from leaking out.

- Fit the CLI lid **(4)** by locating the two holes in the top over the protrusions in the base. Rotate inwards and press at the bottom until the fixing clips locate. Squeeze the side of the unit near the clips to ensure they are fully in place. A click should be heard.

Step 12

Fill the CLI with resin

- Remove the rubber bung from the top of the CLI.

- Using the resin (XKTSC00084) and a sealant gun, fill the CLI approximately three quarters of the way up with resin. Look through the hole at the top until the resin can be seen approximately level with the conduit.

Step 13

Re-insert the bung

- Re-insert the rubber bung into the top of the CLI and allow 5 minutes for the resin to cure.

Step 14

The Gas Seal Unit mates with the CLI

- Working at the inside of the building, position a Blown Fibre Gas Seal Unit immediately above the Internal CLI so that the funnel in the base of the Gas Seal Unit mates with the port of the Internal CLI.

Note: For conventional cables or Blown Fibre cables with more than 12 tubes, the Blown Fibre Gas Seal Unit cannot be used. Go to step 18.

Step 15

- Mark and drill fixing holes for the Blown Fibre Gas Seal Unit, insert wall plugs but do not fit to the wall at this stage.

Step 16

Feed the tubes into the BFGSU
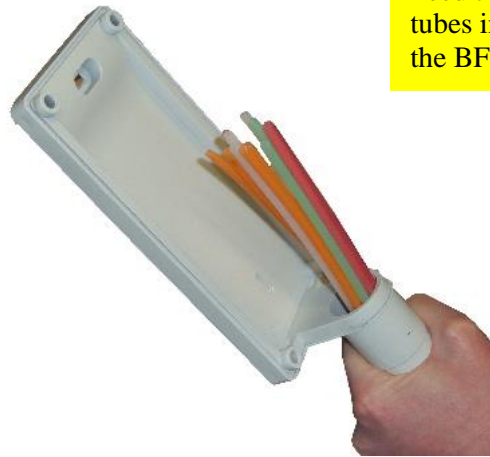
- Pass the Blown Fibre Tubes from the Internal CLI through the funnel of the Blown Fibre Gas Seal Unit.

Step 17

Secure BFGSU
to Wall

- Position the Blown Fibre Gas Seal Unit and fix it to the wall.

- Fix the lid of the Internal CLI **(2)** and follow the instructions of the Blown Fibre Gas Seal Unit.

Step 18

- For conventional cables, or Blown Fibre cables with more than 12 Tubes, secure a length of suitable cable trunking to the wall immediately above the CLI. Run the trunking to the designated distribution point.

Step 19

- Pass the cable elements from the internal CLI, through the trunking to the distribution point. Replace the lid of the internal CLI **(2)** and refer to the distribution point instructions.

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INSTALLATION INSTRUCTION

Fixing Template

Drill 6.5mm

Drill pilot hole through wall then enlarge from either side to 45mm

Drill 6.5mm

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