

Installation Procedure For Aerial Cable CBT System

CIG0148

Product application

This instruction details the installation procedure for the Aerial Cable CBT System.



Port Number	Feeder Cable Fibre Colour	Port Number	Feeder Cable Fibre Colour
1	Blue	7	Brown
2	Orange	8	Violet
3	Green	9	Black
4	Red	10	White
5	Grey	11	Pink
6	Yellow	12	Turquoise

Precautions and Warnings

- ! This guide is only valid for products purchased from or approved by Prysmian Group.
- ! During this procedure all local Health & Safety statutory regulations must be adhered to.
- ! This installation should only be carried out by suitably trained competent persons.
- ! 6.0mm Cable Parameters
 - Minimum Bend Diameter (Static) – 120mm
 - Maximum Working Tension – 1000N
 - Typical Installation Tension – 150N

Cable Instruction Guide

Tools and materials

1. Pole/House Mounting Clamp PN: XTCSC00001	2. Helical Tension Clamp PN: XTCSC00002	3. Cable Cleat PN: XTCSC00009	4. Cable Pulley PN: XTCSC00027	5. Sub-duct PN: n/a
				
6. Steel Capping PN: XTCSC00020	7. Plastic Capping PN: XTCSC00019	8. Capping Adaptor PN: XTCSC00021	9. Cable Stocking PN: XTCSC00008	10. Cable Dispenser PN: XTCSC00025
				
11. 4/12f Drop Cable Sheath Stripper PN: XBFSC01760	12. Side Cutters PN: n/a	13. PVC Tape PN: n/a	14. CBT Connector Tool PN: XKTSC01437	
				

Cable Instruction Guide

Pole Mounted CBT Terminal Installation

Step 1



Determine the preferred position for the CBT Terminal.

Step 2



Remove the base from the Connector housing by gently deflecting the two clips away from the base.

Step 3



Attach the base to the pole using the steel banding provided. Alternatively, the base can be attached to the pole using wood screws.

Step 4



At the CBT Terminal fit the cable into a suitable cable dispenser.

Step 5




Remove and fleet sufficient cable from the drum to enable the cable to be installed into the u/g joint.

Step 6



Re-attach the connector housing to the base. The housing is designed for either top or bottom entry of the drop cables.

Step 7




Secure the feeder cable down the pole using pole cleats.

Step 8



Install the cable through the underground network to the joint position.

Step 9



Fit the capping adaptor to the base of the pole.

Step 10



Protect the cable going up the pole with the steel or plastic capping.

Underground Joint Chamber CBT Terminal Installation

Step 11


No Picture

The CBT can be installed within an underground chamber. It should be secured to either the chamber wall or onto a MOBRA.

Cable Instruction Guide


Pre-Connectorised Drop Cable Installation

Step 12




At the CBT Terminal fit the Drop Cable drum into a suitable cable dispenser.

Step 13




Attach the Mounting Clamp to the pole at the correct position.
Care should be taken to ensure that the cable does not infringe the minimum ground clearance requirements under worst case conditions.

Step 14




Attach a suitable pulley to the Mounting Clamp.

Step 15




Feed the pulling bond through the pulley at the cable dispenser pole.

Step 16



Attach the swivel to the cable using that cable stocking grip.

Step 17



Attach the Mounting Clamp to the house at the correct position.
Care should be taken to ensure that the cable does not infringe the minimum ground clearance requirements under worst case conditions.

Cable Instruction Guide

Step 18



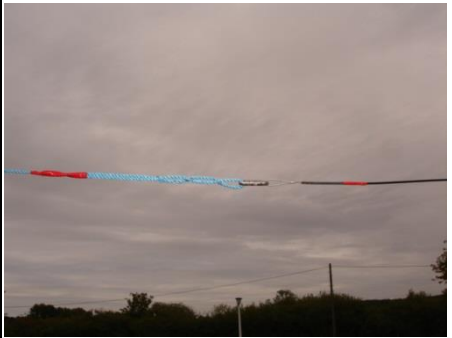
Attach a suitable pulley to the Mounting Clamp.

Step 19



Pass the pulling bond through the pulley at the remote pole/house.

Step 20



Pull the pulling bond and cable across the span.

Care should be taken to ensure that there is no risk to third parties during this operation.

Step 21



Continue to pull the cable across the span until there is enough cable left on the drum to locate the pre-connectorised end into the CBT Terminal Block.

Step 22



Fit the helical tension clamp to the cable and mounting clamp at the cable dispenser pole.

Step 23



Pull the cable to the required tension and fit the helical tension clamp at the pole/house.

Step 24



At the building end fit the CBT External Customer Termination Box in a suitable position. This could be inside or outside the building.

Step 25



Determine the length of cable required to link the tension clamp to the CBT External Customer Termination Box. Mark the cable at this point and add an extra 3m.

Step 26



Cut the cable at this mark.

Cable Instruction Guide

Cable Stripping

Step 27



Open the cutter by pulling down on the black arm.

Step 28



Assemble the cutter around the cable at the mark made in step 24. The blades should be positioned over the groove and yellow line.

WARNING: Failure to maintain the 90° position relative to the cable wire strength members may result in permanent damage to the stripper tool.

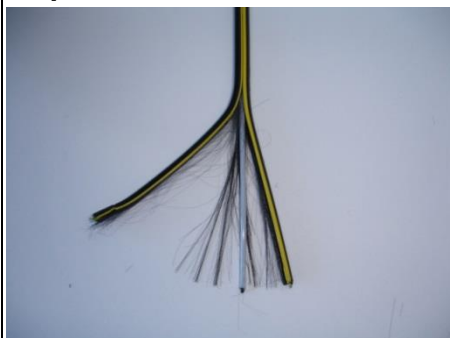
Step 29



Pull the cutter along the cable.

WARNING: Failure to maintain the 90° position relative to the cable wire strength members may result in permanent damage to the stripper tool.

Step 30



Separate the two halves of the Fibre Drop Cable sheath back to the mark made in step 25.

Step 31



Carefully cut the two halves of the cable sheath, non-mettalic yarns and the steel wire strength members.

Cable Instruction Guide

Identification Of Pre-Connectorised Assembly Type


Mk 1

Step 32



Slide the rubber boot away from the assembly.


Step 33



If there is a section of heatshrink tubing between the cable sheath butt and the clamp nut then this indicates a Mark 1 Pre-connectorised Assembly

Mk 2

Step 34



Slide the rubber boot away from the assembly.

Step 35



If the cable is installed within the clamp nut then this indicates a Mark 2 Pre-connectorised Assembly

Installation Of Mk 1 Pre-Connectorised Assembly

Step 36



Remove the remaining cable from the drum.

Step 37



Slide the rubber boot away from the assembly.

Step 38



Unscrew the pulling eye locking nut.

Step 39



Remove the clamp nut.

Step 40



Slide the shroud body back.

Step 41



Using the CBT Connector Tool remove the cap from the relevant port on the CBT. There is a number by the port for identification.

Step 42



Remove the adapter blanking plug.
Note: The colour may differ.

Step 43



The CBT Port Cap retaining straps and those on the Pulling Eye can be removed if required.

Step 44



Alternatively, they can be screwed together and kept with the CBT.

Cable Instruction Guide

Step 45



Remove the SC connector protective shroud.

Step 46



Clean the connector with a lint free cloth or other suitable wipe.

Step 47



Push SC connector into the adapter. Ensure locating the rib is facing upwards to line on top of the port.

Step 48



Line the rib on the shroud body to rib on the port and insert the shroud into the port.

Step 49



Using the CBT Connector Tool tighten the shroud nut fully.

Step 50



Tighten the clamp nut ensuring the seal is in the end of the shroud.

Step 51



Re-fit the rubber boot.

Installation Of Mk 2 Pre-Connectorised Assembly

Step 52



Remove the remaining cable from the drum.

Step 53



Slide the rubber boot away from the assembly

Step 54



Unscrew the pulling eye locking nut.

Step 55



Remove the pulling eye.

Step 56



Slightly release the shroud nut.

Step 57



Slide the shroud body back.

Do not pull against the connector.

Step 58



Using the CBT Connector Tool remove the cap from the relevant port on the CBT. There is a number by the port for identification.

Step 59



Remove the adapter blanking plug.

Note: The colour may differ.

Step 60



The CBT Port Cap retaining straps and those on the Pulling Eye can be removed if required.

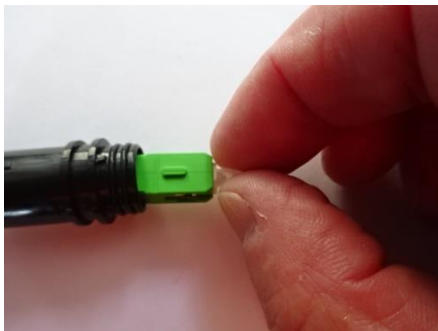
Cable Instruction Guide

Step 61



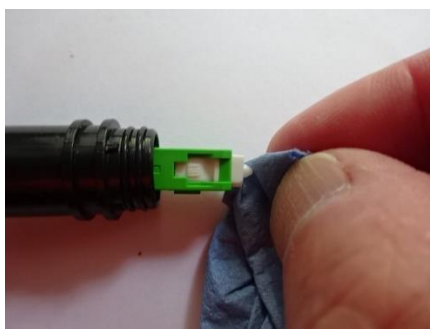
Alternatively, they can be screwed together and kept with the CBT.

Step 62



Remove the SC connector protective shroud.

Step 63



Clean the connector with a lint free cloth or other suitable wipe.

Step 64



Push SC connector into the adapter. Ensure locating the rib is facing upwards to line on top of the port.

Step 65



Line the rib on the shroud body to rib on the port and insert the shroud into the port.

Step 66



Using the CBT Connector Tool tighten the shroud nut fully.

Step 67



Tighten the clamp nut ensuring the seal is in the end of the shroud.

Step 68



Slide the rubber boot over the clamp nut.

Installation Of Pre-Connectorised Assembly Into An Underground CBT For installation distances up to 25m

Step 69



Remove the pulling eye and attach it to the pulling bond.

Step 70



Secure the end with pvc tape.

Step 71



Re-attach the pulling eye to the pre-connectorised assembly.

Step 72

No Picture

Carefully pull the assembly, by hand, through the underground network to the joint position

Step 73



Remove the pvc tape and follow Steps 37 – 51 or 53 – 68.

For installation distances over 25m

Step 74



Fit a helical tension clamp around the drop cable.
Note the position of the clamp relative to the connector.

Step 75



Attach the pulling bond to the tension clamp.

Step 76



Secure the end of the pulling bond with pvc tape

Cable Instruction Guide

Step 77



Secure the pre-connectorised assembly to the pulling bond and tension clamp with pvc tape.

Step 78

No Picture

The cable can now be carefully installed into the underground network

Step 79



Remove the pvc tape and tension clamp and follow Steps 37 – 51 or 53 – 68.

CBT External Customer Termination Box Installation

Step 80



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 81



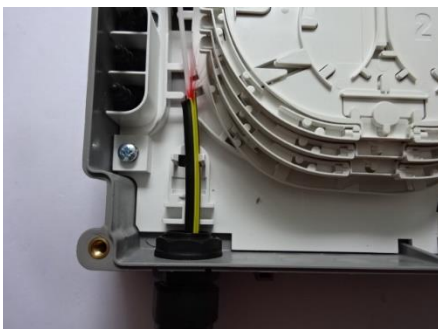
Fit 'O' Seal onto the cable gland and into annular recess in hexagonal face Push the cable gland into port so that the 'O' Seal sits against outside face of base. Fit Locknut and tighten against inside face of base to secure it.

Step 82



Remove the output cable knock out port.

Step 83



Insert the drop cable through gland and position approximately 65mm from the lowest face of the box.

Step 84



Apply a circumferential cut to the loose tube at the cable butt


Step 85



Apply a circumferential cut to the loose tube at 1m from the end of the tube.

Cable Instruction Guide

Step 86



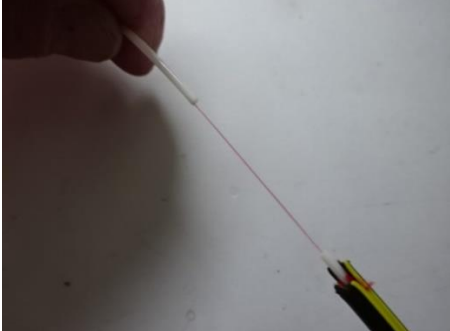
Carefully remove the tube.

Step 87



Clean the optical fibre.

Step 88




Remove the final section of the loose tube.

Step 89




Clean the optical fibre.

Step 90




Pass the optical fibre through the 6mm - 3mm connector.

Step 91




Fit the connector to Drop Cable.

Step 92



Insert optical fibre through the locking tube.
Please Note: The locking tube is pre-cut to the correct length

Step 93



Fit the tube to the reducing connector.

Step 94



Locate the completed tube assembly into position and clip the connector into place.

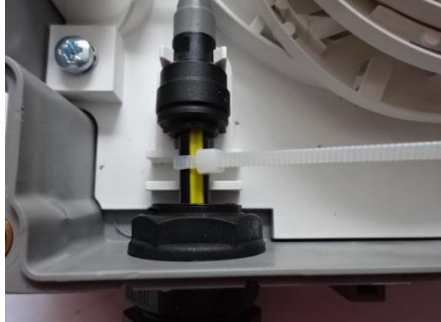
Cable Instruction Guide

Step 95



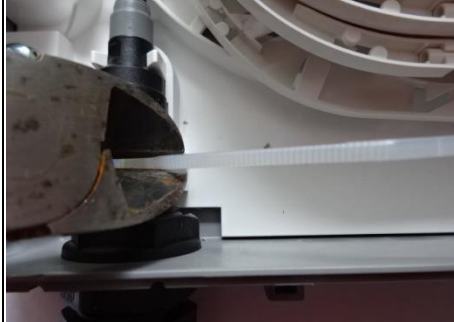
Tighten gland sealing nut.

Step 96



Secure the cable with cable tie in position shown.

Step 97



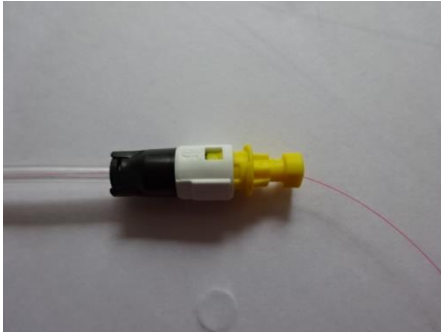
Trim the excess from the cable tie.

Step 98



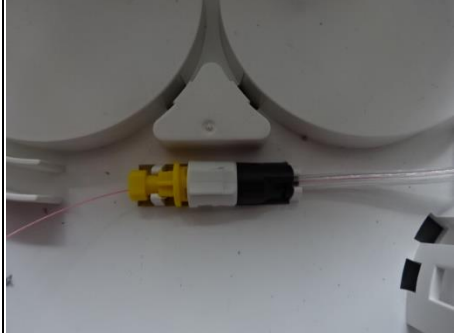
Pass the optical fibre through the connector

Step 99



Attach the connector onto the locking tube.

Step 100



Fit the connector into the locking clips.

Step 101



Wrap the locking tube around the mandrels.

Step 102



If the wrapping is done correctly there will be no excess tube.

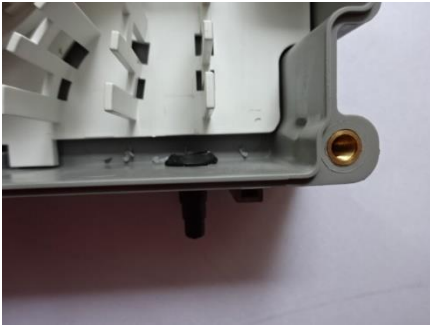
Step 103



Trim the output gland to the size for the outlet cable

Cable Instruction Guide

Step 104



Fit the output gland into the enclosure.

Step 105



The output cable can be fed through the gland and the optical fibre spliced onto the drop cable fibre.

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