openreach

ISIS Practice
For Openreach People

EPT/OHP/B041

Issue 2, 03-Oct-2019
Use until 03-Oct-2021

Published by Chief Engineers Unit

Privacy- None

Overhead Fed Squid

Installation method for hollow poles

About this document ...

Author

The author of this document may be contacted at:

Martin Nottage
Working at Height & PPE Professional
(BOI)
Post Point G32, PolarisPolaris House
Adastral Park
Martlesham Heath
Ipswich
SUFFLK
IP5 3RE

Telephone: +441473642254
Fax:
Email: martin.nottage@openreach.co.uk

Content approval

This is the Issue 2 of this document.
The information contained in this document was approved on 03-Oct-2019 by Glen Barford, Overhead Network Policy and Standards Specialist

Version History

Version No.	Date	Author	Comments
Issue 2	03-Oct-2019	Martin Nottage	Author/Approver update no content change
Issue 1	24-Oct-2018	ISIS co-ordinator Openreach Network Engineer's Office	Initial issue

Table of Content

1 *Introduction*

This document details the working practice for installing an Overhead fed squid into a Hollow Pole.

This procedure is intended for use only by those who are already trained / competent in the working practices for the erection of Copper Dropwire. Where this is not the case, full formal training will be required.

2 *Working practice*

Broadly speaking, the Cable uses Dropwire installation practices. However, unlike Dropwire, two people are required for its installation, particularly over Carriageways, where a revised method is to be used.

The revised method uses much of the same equipment and techniques deployed when erecting normal Dropwire over carriageway.

Note: However, as the SST Reel is too large to fit the Dispenser 2B, that cannot be used to provide back tension and instead, tension is provided manually by a 2nd person, with the Cable reel mounted on a Dispenser A Frame Universal (see pic below).

The Dispenser is available via i-buy from Comtec.

Fig 1 – Dispenser A Frame

During the pulling operation, the role of the 2nd person at the feed end, is totally dedicated to maintaining the back tension, necessary to keep the sash line / cable safely aloft over the carriageway

Caution: The person at the feed end is only released from this dedicated task when the line has either been temporarily secured or terminated at that position.

Effective Visual / Audio contact is required between Point A and Point B. Where this is not possible, two way radios may offer an alternative.

Where communication between Point A and Point B is not possible, this method should not be used. In such cases, BAU practices used for other Wires & cables (i.e. Temp road closure) would be required.

NB: Managers should ensure that their people have been supplied and are fuly conversant with this installation process before undertaking the task.

Follow EPT/OHPB039 sect. 3.1 and 3.2 when pulling SST overhead & across a carriageway.

3 *Method - single span*

1. Rig pole with sash line as per instructions in EPT/OHP/B011 Erection & retension of dropwire

2. Connect sash line to the squids SST cable by bending SST cable back on it's self to form a loop and tape using PVC tape 25mm. Tie sash line to loop using a bowline knot, wrap PVC tape on loose ends to avoid snagging.

Fig2

A-Frame needs to be sited next to the hollow pole. A second engineer will be required to control the drum to ensure the cable maintains the tension

3. Fit come along to pole belt attached below hollow pole door opening and position come along body so that it will hold the SST cable when erected into position.

Fig3

4. 1st engineer runs sash line to serving pole and runs through pulley No6 and down to ground level. It is essential that the pulley no.6 is located at the pulling end to maintain tension on the erected SST cable in conjunction with the engineer at the hollow pole end or the come along.

5. Pull sash line and SST untill squid is almost in correct position.

Caution: 2nd engineer must continually control the squid drum as SST cable is payed out.

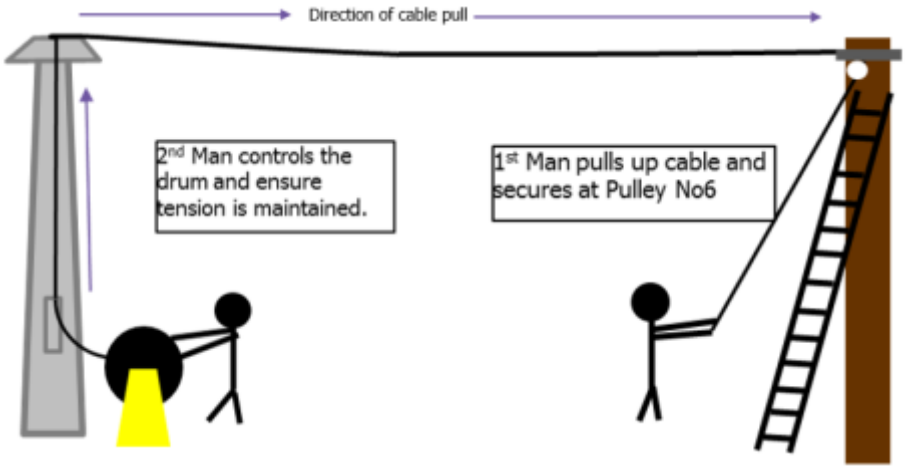

Fig4

6. Due to its flat profile, this cable requires twists to be inserted into each Span during installation

Insert a minimum of 1 twist per 10 metres – Preferably 10 twists per span. As this cable is very light, the twists can be inserted by hand, by simply rotating the Cable using both hands.

Caution: Inserting twists is very important. Failure to do so will result in the cable galloping in windy conditions and becoming damaged!

7. 1st engineer ensures SST cable is locked in pulley No6 jamming cleats.

8. 2nd engineer fits come along to SST, removes squid frome cable drum & attaches wedge clamp just above squid body.

Wedge clamp installation procedure can be found in sect 5 in this document.

Fig5

9. 2nd engineer releases SST cable from come along, 1st engineer slowly pulls SST cable as 2nd engineer feeds clamp into position on the pole ring. Using links cabling or pole top link component to attach the wedge clamp bail wire onto the clamp ring.

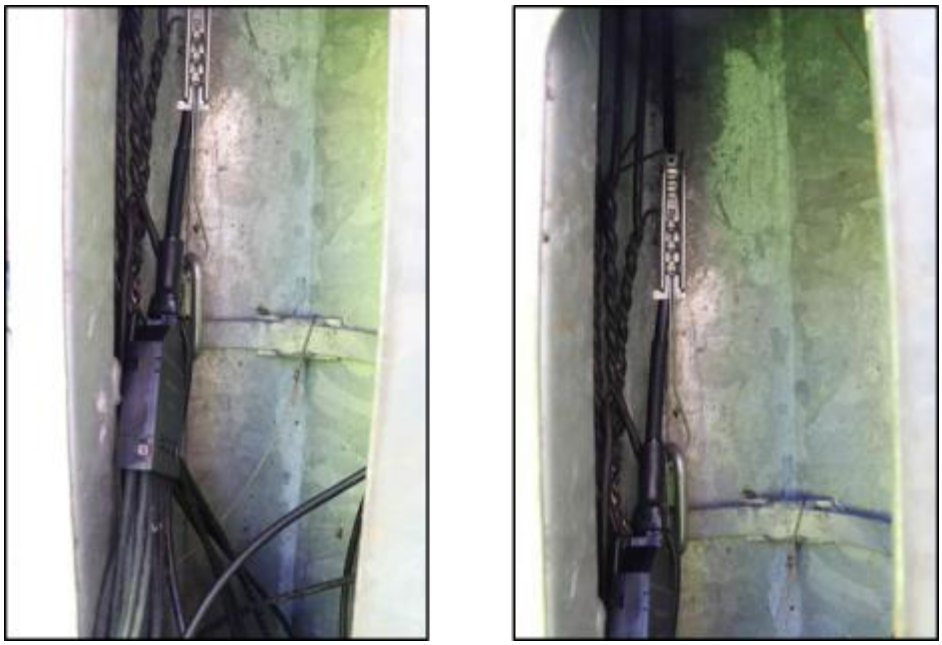

Fig6

10. 1st engineer pulls up slack and fits wedge clamp on feed pole.

4 *Method - multispan*

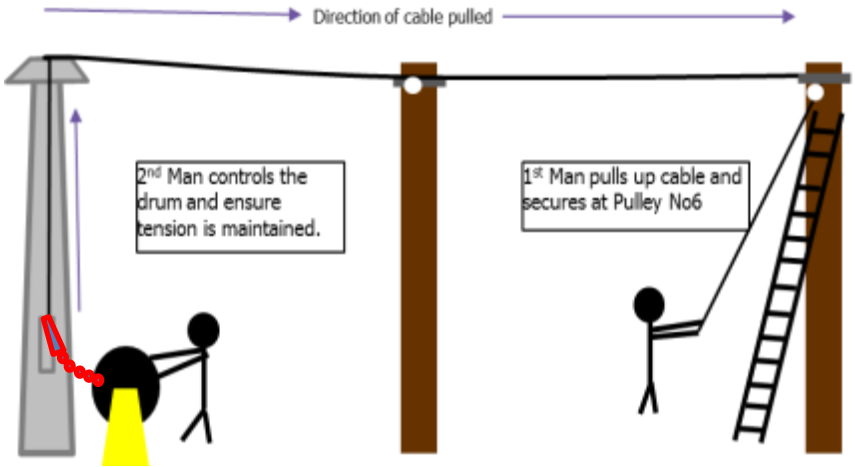

Fig7

Installation for multispan fed squid should follow the single span method as detailed in sec 3 with the addition of pulley No4 at intermediate poles.

Once SST is aloft and wedge clamp installed at hollow pole, pull up slack and fit wedge clamps on intermediate poles working back to feed pole.

Due to its flat profile, this cable requires twists to be inserted into each Span during installation. Ensure twists are added at each span as the SST cable is terminated along the route.

Insert a minimum of 1 twist per 10 metres – Preferably 10 twists per span. As this cable is very light, the twists can be inserted by hand, by simply rotating the Cable using both hands.

Caution: Inserting twists is very important. Failure to do so will result in the cable galloping in windy conditions and becoming damaged!

5 *References*

SST clamp installation

Further detail can be found in EPT/OHP/B039

5.1 Cable Suspension Clamps

Stores item “Corning SST Cable Clamp (x25) – Item Code 095296 should be used to attach the cable to Poles. Note this item comes in a pack of 25.

The SST Clamp has a closed Eye, so also requires a Link to form attachment between the Clamp and the Pole Ring.

Initially, this will be done using a Link Cabling 1 (Item Code 126421).

However that item will soon be replaced by a new item – SST Pole Top Link (I/C 095928). Pictures of all three items are shown below.

Fig8

SST cable clamp (x25) - item code 095296

Fig9

Link cabling 1 - item code 126421

Fig10

SST pole top link - item code 095928

END OF DOCUMENT