TPSK SAFE AND CHAMBER INSTALLATION GUIDE

COMPANY: TOFCO CPP
ADDRESS: MEADOWFIELD INDUSTRIAL ESTATE
PONTELAND
NORTHUMBERLAND
NE20 9SD
TEL: 01661 860001
FAX: 01661 860002

CONTACT: ANDY SCOTT
MOBILE: 07764 787412

DISCLAIMER: This document DOES not attempt to address any potential risk that could occur during the installation of the TPSK SAFE, and should only be used as a reference source to assist in preparing and installing the complete TPSK SAFE unit.

ALL work carried out on the TPSK SAFE MUST be completed by a competent qualified Electrician.

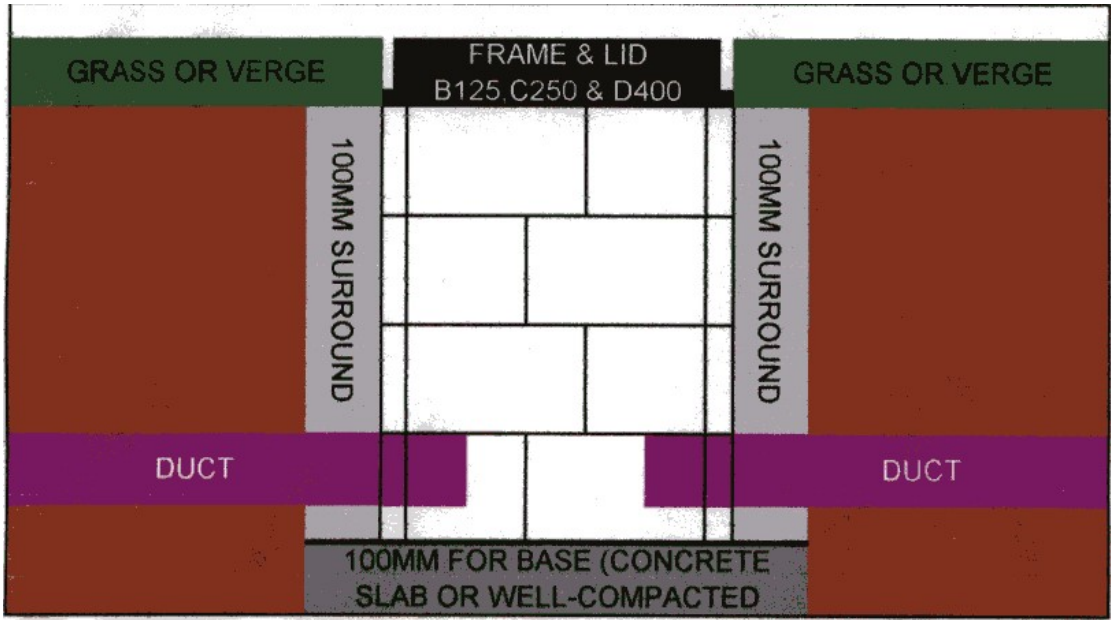
ALL electrical terminations must be checked before energizing the TPSK SAFE (all due care and attention is taken to secure electrical terminations in the factory, but may come loose in transportation to site).

Guide to installing the Chamber has been supplied by Manufacturer. This is only a guide and a site-specific installation guide MUST be sought from a qualified Civil Engineer. TOFCO accepts no responsibility for a failure of the unit due to improper instillation.

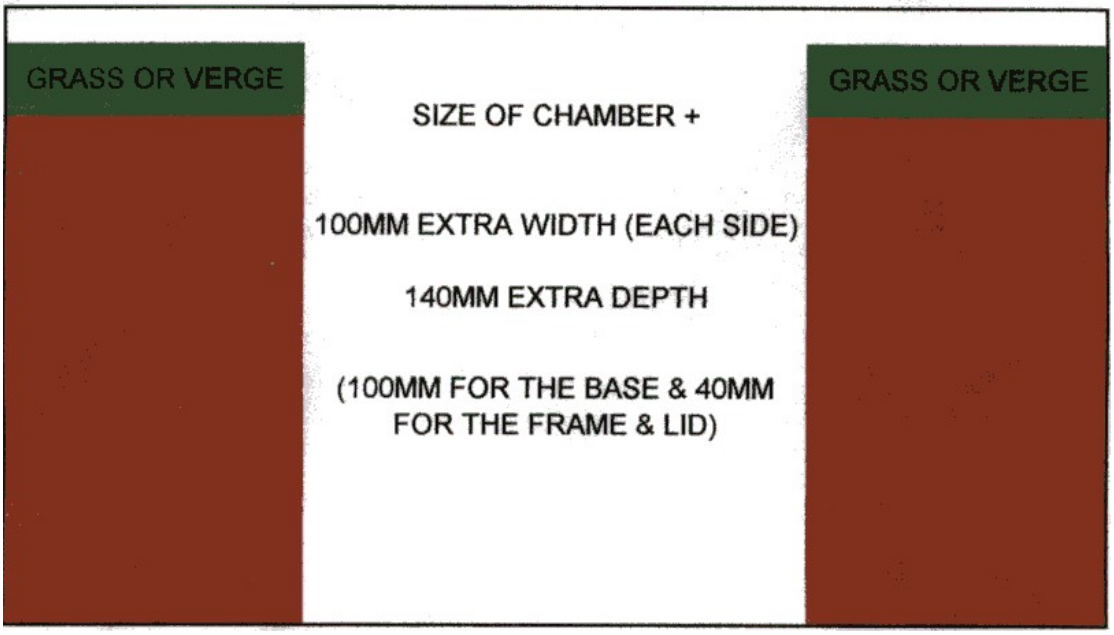
CONTENT:

GUIDE TO INSTALLATION OF CHAMBER:

NOTE – It is the contractors' responsibility to ensure that the chamber is installed in such a manner that tortional forces exerted on the cover and frame will NOT have an affect on the chamber in respect of any lateral movement.
If you are installing the chamber in an area where there is a risk of the chamber being trafficked, please consult with your Civil Engineers, as a concrete surround may be required.
If the chambers are positioned within 500mm of the kerb line then a C250 frame & cover may be required.
All chambers should include a soak away or drainage system.

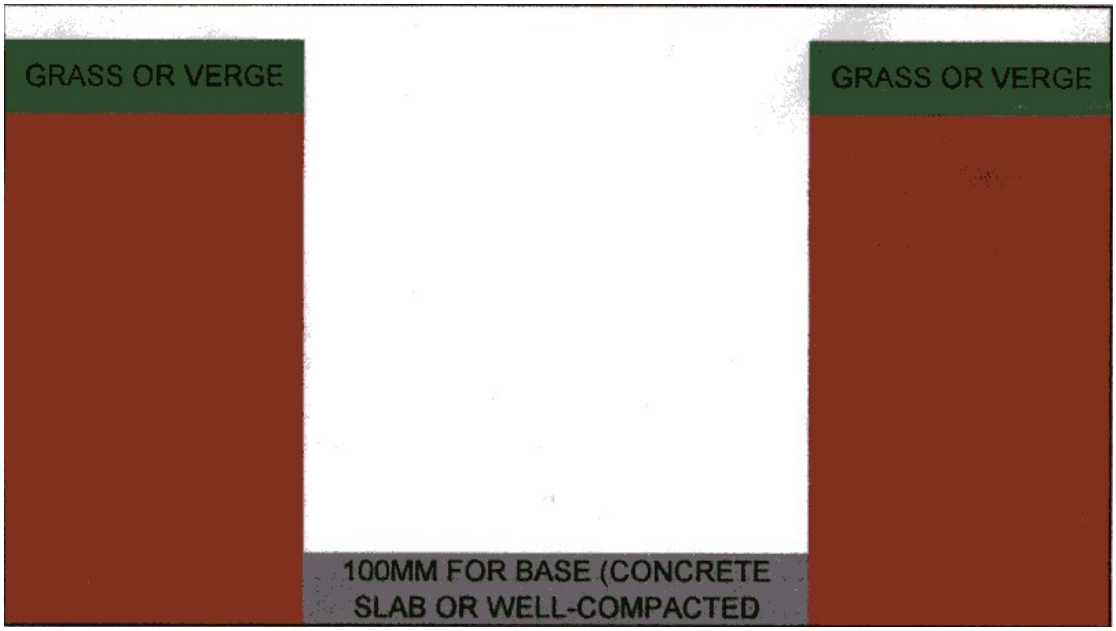


EXCAVATION –



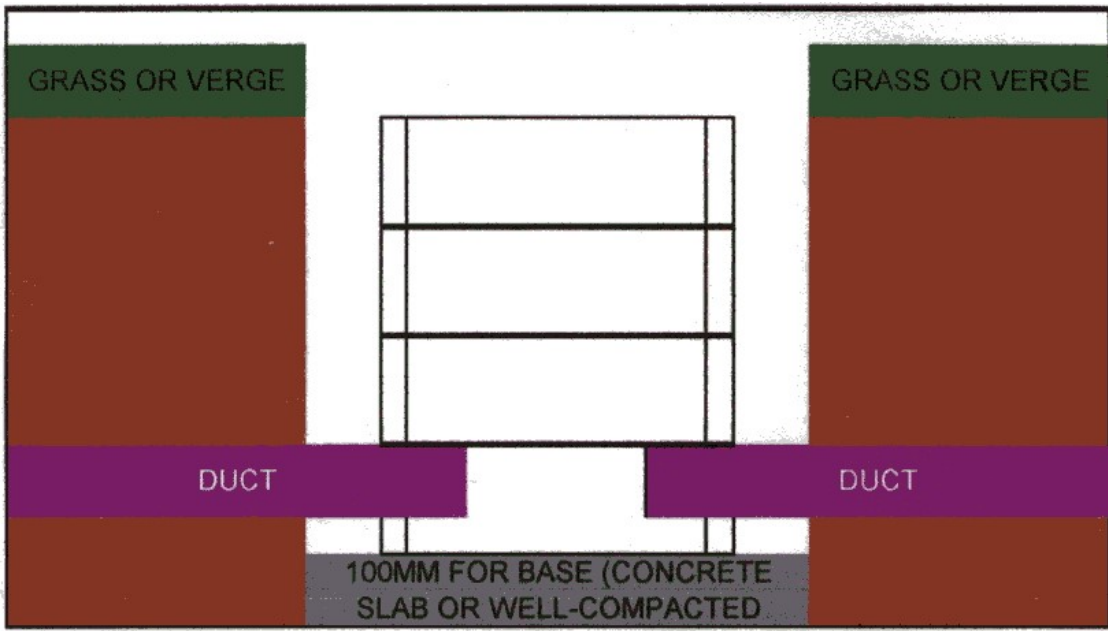
1. Excavate the hole to the size of the chamber – allowing an extra 140mm in depth and 100mm each side of the chamber (only if using C250 & B400 covers. If using B125 cover only 10mm is required around chamber for backfilling).

PREPARATION OF BASE SECTION-



1. Consult a Civil Engineer to ascertain what type of drainage or soak away is required (carry out the Civil Engineers instructions)
2. Flatten the ground to allow accurate depth measurement of base.
3. Install a minimum depth of 100mm of Lean mix concrete or a minimum 100mm depth of well compacted granular material

INSTALL CHAMBER AND DUCT –



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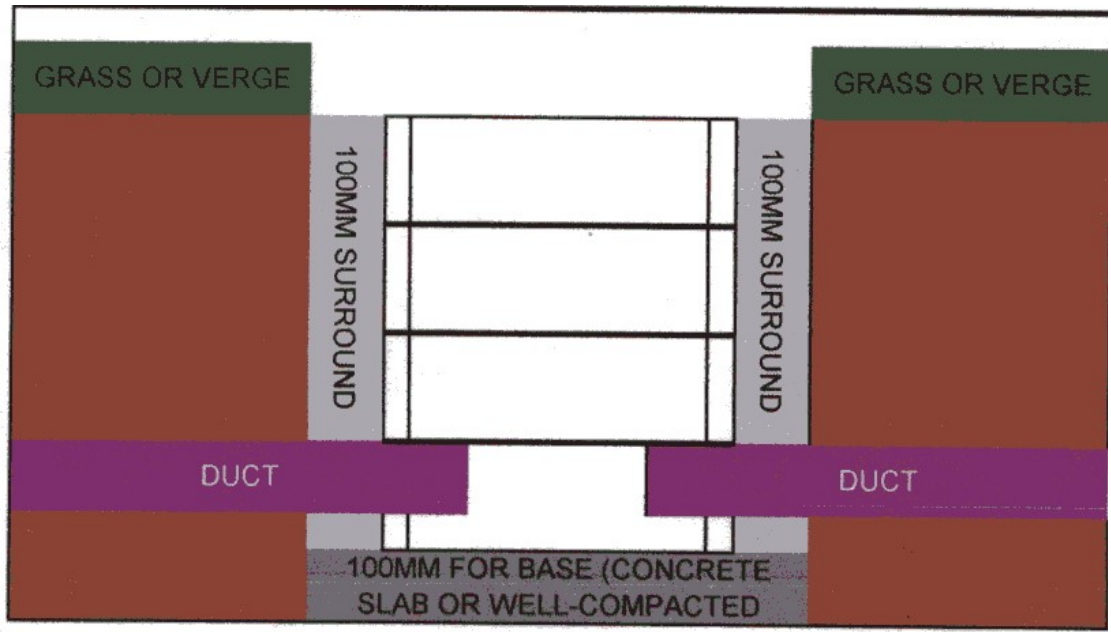
NOTE - The Manufacturer strongly recommend that the cover frame is in-situ when the installation of the chamber is taking place.

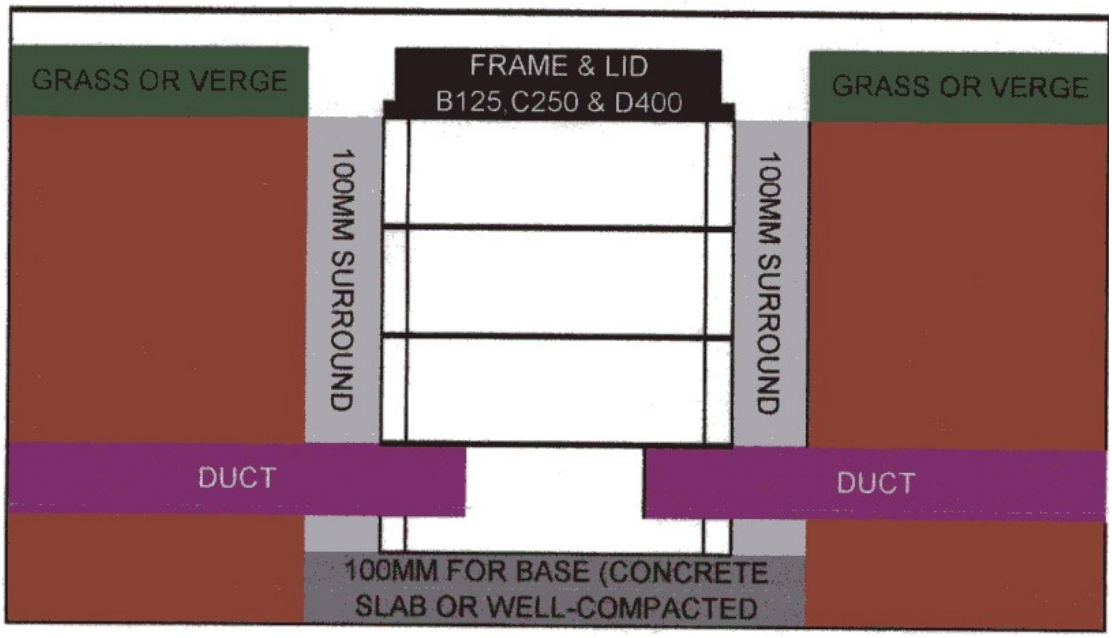
1. MAKE SURE the TPSK bracket is in place before installing the chamber.
2. Place the full chamber on top of the base. Allow 100mm space all round the chamber (10mm if using B125 cover).
3. Determine where the ducts will enter the chamber. Remove the duct ports as required and insert the ducts at least 40mm inside the chamber. REPLACE all duct ports, which are not being used.

BACKFILL -



1. If using the B125 cover, backfill the chamber with self compacting gravel (pea)
2. C250 & D400 covers require 100mm of Lean mix concrete or stone (consult Civil Engineer). Compacted too the level of the chamber.

FRAME & LID-



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1. Fill void to the height of the chamber and concrete the frame in at the appropriate height/angle allowing rainwater to drain away efficiently (if required, consult a Civil Engineer for instructions on how to achieve the best result).
2. Once complete, place the lid onto the frame and reinstate the ground around the chamber.

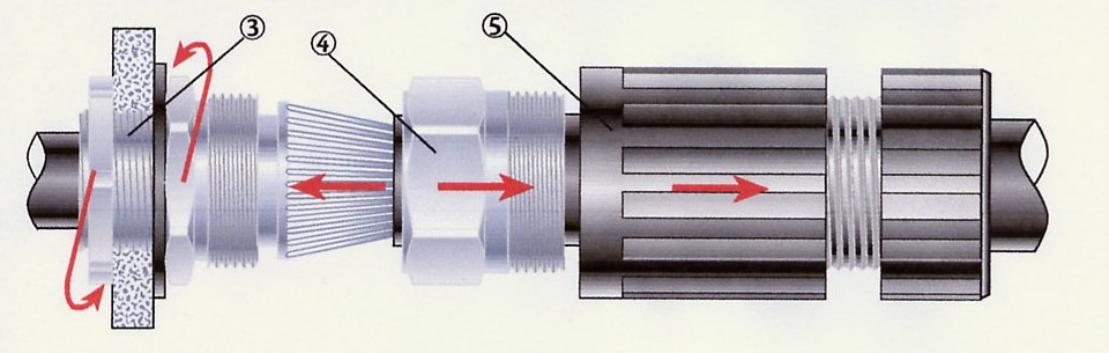
NOTE – It is the contractors' responsibility to ensure that the chamber is installed in such a manner that tortional forces exerted on the cover and frame will NOT have an affect on the chamber in respect of any lateral movement.
If you are installing the chamber in an area where there is a risk of the chamber being trafficked, please consult with your Civil Engineers, as a concrete surround may be required.
If the chambers are positioned within 500mm of the kerb line then a C250 frame & cover may be required.
All chambers should include a soak away or drainage system.

GUIDE TO INSTALLING TPSK UNIT UP TO 16mm² SWA:

- Place the complete TPSK unit into the chamber attaching the unit to the bracket with the use of the locating pin.
- Remove the lid with a screw driver, ensure that the IP67 gasket within the lid is not placed face down onto the ground as this will contaminate the IP67 box seal.
- ENSURE the 32amp isolator is in the OFF position.
- Locate the supply cable termination blocks and remove covers. Loosen the terminals.
- Prepare the incoming supply cable and gland off the incoming supply cable into the C2K glands (AS PER INSTRUCTIONS BELOW)

It is not necessary to dismantle the cable gland COMPLETELY.

1. Make sure lock nut is tightened onto the enclosure 3. Strip outer sheath and pass corrosion guard 5 and gland outer nut 4 over cable. Pass cable end through inner and spread out armour wire.



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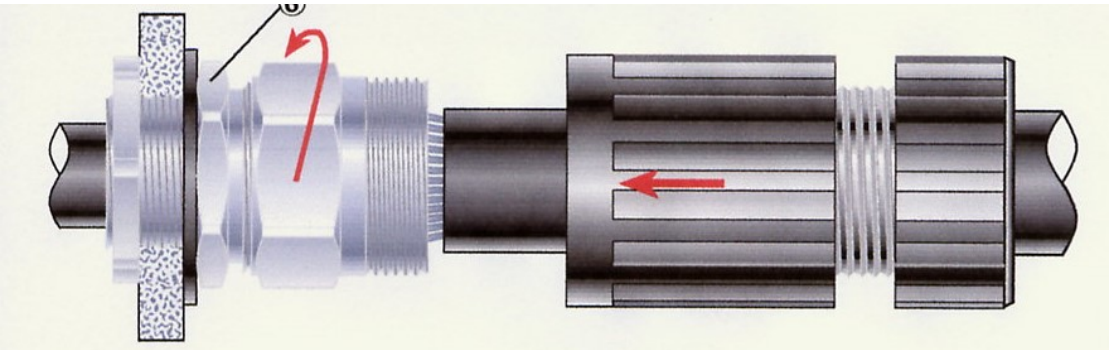
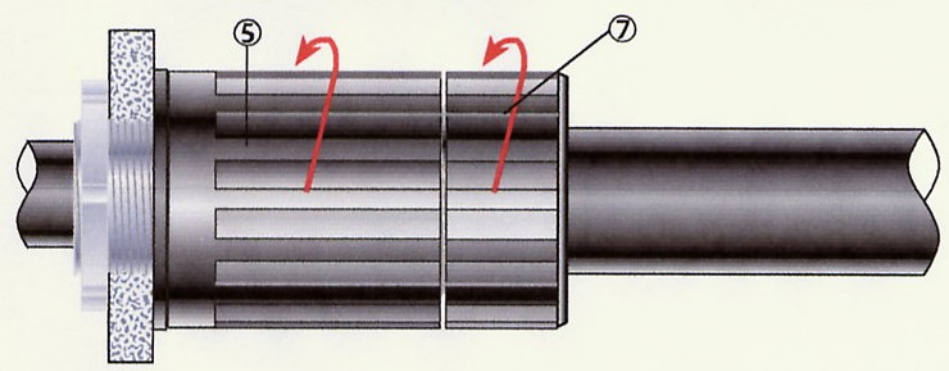
2. Screw outer nut 4 onto inner 6 and tighten**.**



3. Pass corrosion guard body 5 and outer nut 7 over assembled gland, screw on and hand-tighten to produce the required dust and waterproof seal IP68.



- Connect the supply cable to the supply cable termination blocks.
- Place covers back onto the termination blocks.
- CHECK ALL ELECTRICAL TERMINALS TO MAKE SURE NONE HAVE WORKED LOOSE DURING TRANSIT

GUIDE TO INSTALLING TPSK UNIT 25mm² & 35mm² SWA:

- Place the complete TPSK unit into the chamber attaching the unit to the bracket with the use of the locating pin.
- Remove the lid with a screw driver, ensure that the IP67 gasket within the lid is not placed face down onto the ground as this will contaminate the IP67 box seal.
- ENSURE the 32amp isolator is in the OFF position.
- Locate the supply cable termination blocks and remove covers. Loosen the terminals.
- Prepare the incoming supply cable and gland off the incoming supply cable into the C2K glands (AS PER INSTRUCTIONS BELOW)

It is not necessary to dismantle the cable gland COMPLETELY.

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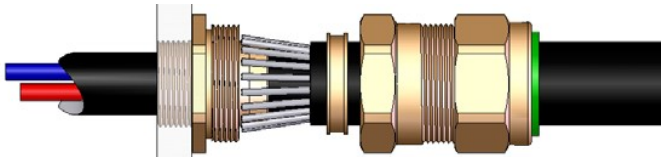
1. If required fit shroud over the cable outer sheath. Prepare the cable by removing the cable outer sheath and the armour to suit the geometry of the equipment. Remove a further 18mm (maximum) of outer sheath to expose the armour. If applicable, remove any tapes or wrappings to expose the cable inner sheath. Separate the cable gland entry component from sub-assembly B. Ensuring that the outer seal is relaxed; pass sub-assembly "B" over the cable outer sheath and armour followed by the "Anyway" clamping ring (R).

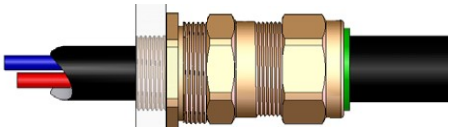
Note: On maximum size cables the clamping ring may only pass over the armour.

2. Secure the entry component into the equipment as indicated.

3. Locate the reversible armour cone (C) into the recess of the entry component, ensuring correct orientation as indicated above. Pass cable through the entry component evenly spacing the armour around the cone.



4. Whilst continuing to push the cable forward to maintain the armour in contact with the cone tighten the body of sub-assembly B onto entry component (as illustrated below).



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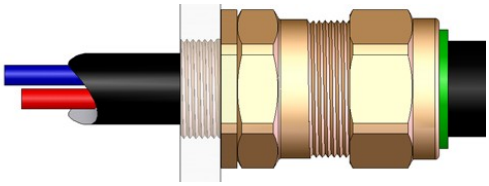
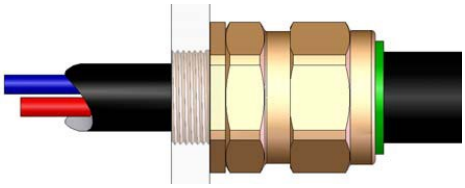
5. Ensure the two components make "metal to metal" contact.



6. Tighten the outer seal nut until either:
i) The outer seal nut makes metal to metal contact with the gland body, or
ii) The outer seal nut has clearly engaged the cable and cannot be further tightened without the use of excessive force by the installer. This completes the procedure for direct entry installation. Please see overleaf for remote installation



- Connect the supply cable to the supply cable termination blocks.
- Place covers back onto the termination blocks.
- CHECK ALL ELECTRICAL TERMINALS TO MAKE SURE NONE HAVE WORKED LOOSE DURING TRANSIT.

GUIDE TO INSTALLING THE TPSK SNATCH PLUG-

- Affix the TOFCO double pole switch disconnector fuse unit, or cut-out fuse unit, securely to the backboard in the lighting column using the stainless steel woodscrews provided. The male portion of the break-away snatch plug

connector is fixed to the fuse unit through a nylon stuffing gland and tightened into live and neutral terminals screws and/or clamping device.

- Fit the cable cleat, provided, around the "free" cable and secure to the column backboard with the stainless steel woodscrews provided. This should be affixed within a maximum distance of 250mm from the TOFCO cut-out unit.
- Thread the female section of the snatch plug cable assembly from the termination enclosure, located in the ground chamber pit, through the ducting and the cable slot in the column/signpost and offer up to the free hanging male section.
- Remove the safety end cap from the female socket and "snap fit" this to the male plug at ground level.
- Secure the male plug cable to the backboard at a distance not exeeding100mm from the female socket, using the stainless steel wood screw provided.
- The snatch plug is now secured in position and the male cable end will be at ground level.
- Take up the slack in the cable on the female side of the socket within the draw pit chamber and secure this, under tension, to the steel eye bolt affixed to the wall of the chamber, and secure in loops with a cable tie.

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- Approximately one metre of surplus coiled cable will be affixed to the side of the chamber. This is necessary for the periodic inspection and testing requirements of the plug, and to allow the plug to be raised above "ground level" to the top position of the column door to facilitate inspection.

- The drawstring provided with the cable cleat and cable lug – should now be affixed at two points, firstly, around the bottom of the female cable, below the socket now connected under tension to the male plug assembly, and securely fixed to the wooden backboard with the stainless steel woodscrews provided. Secondly, the cable lug with drawstring should now be attached to the main earth bonding point in the column/signpost.

The system is now ready to be energized. Once the power is on, switch the 32amp isolator in the TPSK to the on position. Place the lid back on the TPSK and tighten the screws making sure there is nothing obstructing the seal between the body and lid of the TPSK unit.

For further technical assistance, please call our office on 01661 860001.