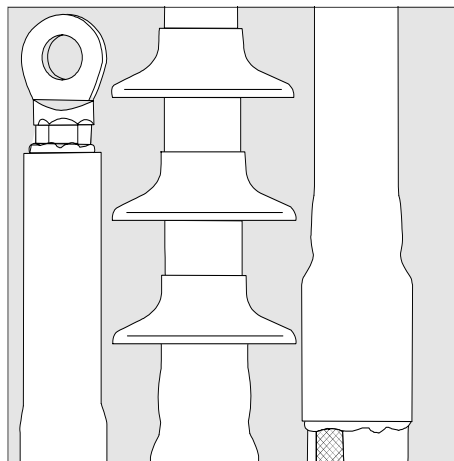


Energy Division

**Installation Instruction  
ESD-4870-AU-5/09****Terminations for  
1.5kV Single Core  
XLPE Insulated Cables  
with & without  
Insulation Screen and  
Composite Sheath****240mm<sup>2</sup>—400mm<sup>2</sup>**

ENDORSED BY	SIGNATURE	DATE
Wilfred Leung Principal Engineer—Mains RailCorp	<i>W. Leung</i>	22. 6. 2009

APPROVED BY	SIGNATURE	DATE
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APPROVED BY	SIGNATURE	DATE
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Check List Number: CL887-5/09

# EPKT-RCP01

Qty: 1

## Kit Contents

1	x	HVOT-62/21-450/U	Non Track Tubing HV Red 450 long
2	x	205W336-103/89	Skirt (Shed) - Red - Adhesive
2	x	S1085-3-400	Low Temp Sealant - Red - 400 long (50mm wide)
1	x	S1085-1-300	Low Temp Sealant - Red - 300 long (20mm wide)
1	x	S1189-1-150	Mastic 20 x 150mm Yellow
3	x	EPPA-004	Cleaning Tissue
1	x	ESD-4870-AU-5/09	Installation Instruction

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Date: 13/05/2009  
ESD-1573-AU  
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## **Before Starting**

Check to ensure that the kit you are going to use fits the cable.

Refer to the kit label and the title of the installation instruction.

Components or working steps may have been improved since you last installed this product.

Carefully read and follow the steps in the installation instruction.

## **General Instructions**

Use a propane (preferred) or butane gas torch.

Ensure the torch is always used in a well-ventilated environment.

Adjust the torch to obtain a soft blue flame with a yellow tip.

Pencil-like blue flames should be avoided.

Keep the torch aimed in the shrink direction to preheat the material.

Keep the flame moving continuously to avoid scorching the material.

Clean and degrease all parts that will come into contact with adhesive.

If a solvent is used follow the manufacturer's handling instructions.

Tubing should be cut smoothly with a sharp knife leaving no jagged edges.

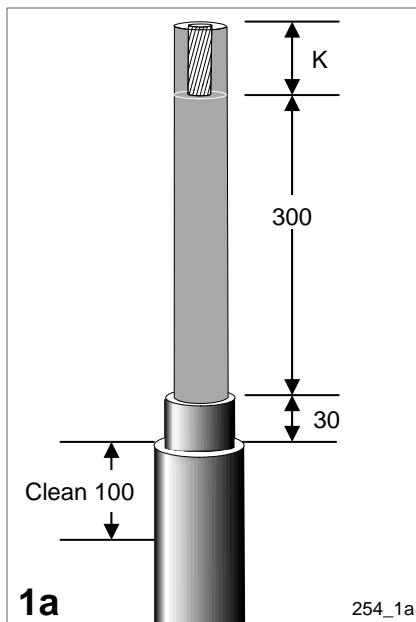
Start shrinking the tubing at the position recommended in the instruction.

Ensure that the tubing is shrunk smoothly all around before continuing along the cable.

Tubing should be smooth and wrinkle free with inner components clearly defined.

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Raychem, TE Logo und Tyco Electronics are trade marks.

## Cable Preparation

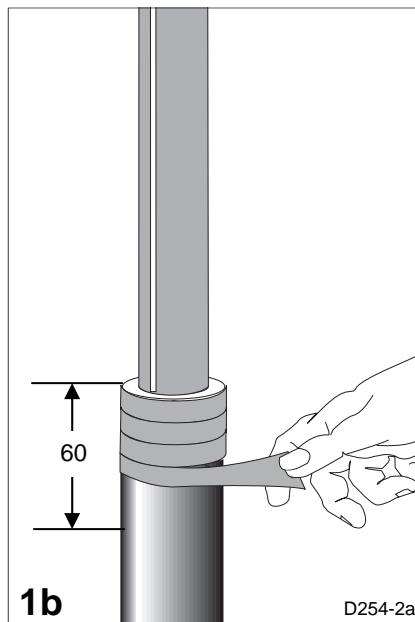
**Cables without Insulation Screen**

Cut the cable to the required length. Remove both the layers of the composite sheath for 300mm + K.

K = depth of connector barrel hole + 5mm.

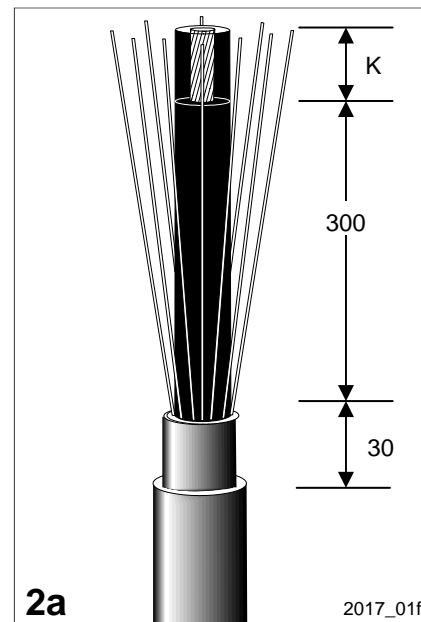
Then remove the composite sheath outer layer for 30mm.

Clean the outer layer of composite sheath for 100mm using the cleaning tissue in the kit.



Wrap one layer of long (50mm wide) sealant tape (red) with slight tension starting at the end of the inner sheath downwards for 60mm.

**Go to Step 3**

**Cables with Insulation Screen**

Cut the cable to the required length. Remove both the layers of the composite sheath for 300mm + K.

K = depth of connector barrel hole + 5mm.

Then remove the composite sheath outer layer for 30mm.

Clean the outer layer of composite sheath for 100mm using the cleaning tissue in the kit.

Wrap one layer of long (50mm wide) sealant tape (red) with slight tension starting at the end of the inner sheath downwards for 60mm. Bend the shielding wires back onto the oversheath. Avoid crossing the individual wires. Fix the wires with a wire binder 60mm from the end of the oversheath. Gather the shielding wires together to form an earth lead.

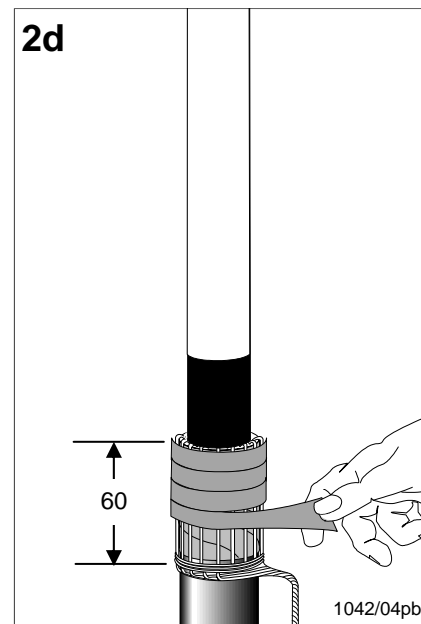
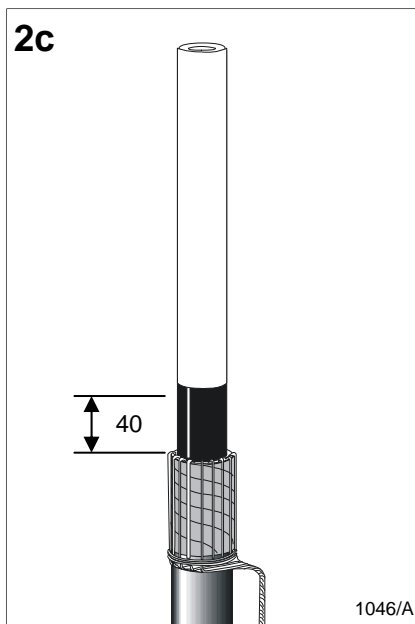
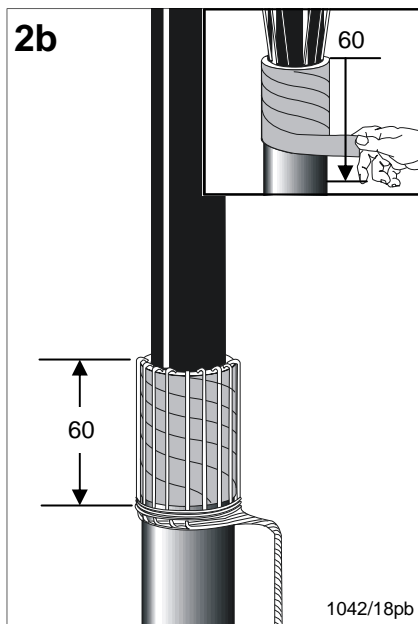
Thoroughly remove the core screen to within 40mm of the inner sheath cutback.

The surface of the insulation should be free from all traces of conductive material.

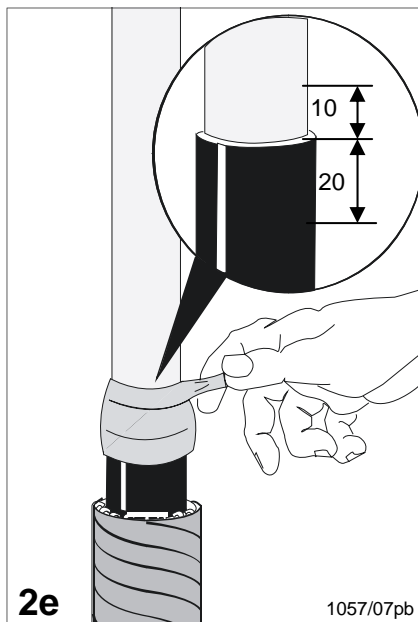
Smooth out any irregularities.

**Note:** Do not nick the insulation.

Wrap one layer of long (50mm wide) sealant tape (red) with slight tension starting at the top of the screen wires downwards for 60mm.

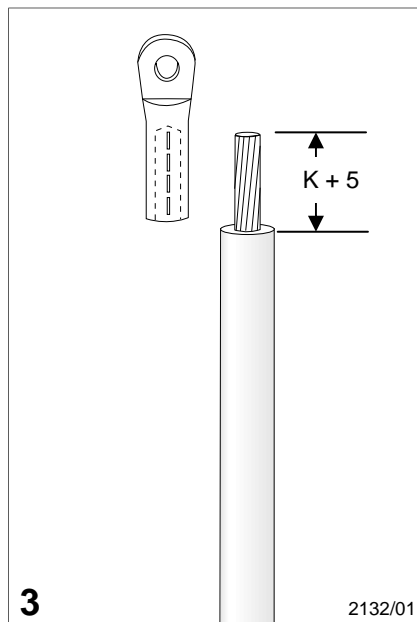


## Completion of Termination



Remove the release paper and wrap the void filling strip (yellow) around the end of the core screen.

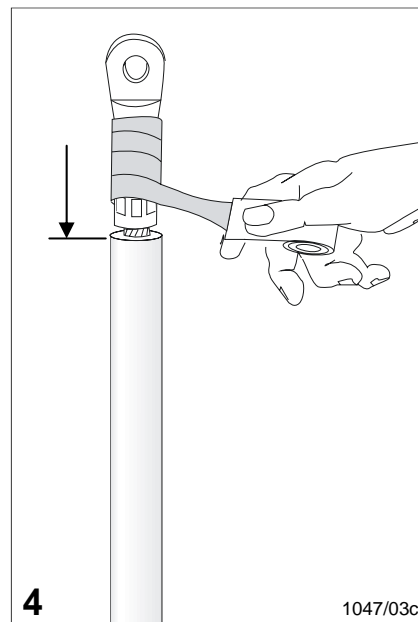
Cover 20mm of the core screen and continue onto the insulation for 10mm. Stretch the strip to half of its original width to achieve a fine, thin edge onto the insulation.



Cut back the insulation according to dimension **K = depth of cable lug barrel hole + 5mm.**

Install the cable lug.

Clean and degrease the core insulation and the lug using the cleaning tissue supplied in the kit.



Wrap the short (20mm wide) red sealant tape around the barrel of the cable lug. Stretch the tape to half of its width and apply with half overlap. Use the remaining sealant (red) to fill in the space between the core insulation and the cable lug to leave a smooth transition.

Slide the tubing (red) over the core, level with the wire binder.

Shrink down the tubing starting at the oversheath end working towards the cable lug.

Cut the tubing back onto the cable lug barrel if necessary. Postheat the palm of the cable lug until a bead of mastic is seen around the top of the tubing.

Indoor termination completed.

Allow the termination to cool before applying any mechanical strain.

**Outdoor Terminations**

Shrink the skirts into place at the positions shown in the drawing.

