

# Open Awards Qualification Unit



This unit forms part of a regulated qualification.

## 1 Unit Details

Unit Title:	Distribution Side Copper Cable Jointing
Unit Reference Number:	T/618/8299
Level:	2
Credit Value:	5
Minimum GLH:	30

## 2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the terminology used in telephone networks	1.1 Identify the benefits and drawbacks of using copper telephone cables
	1.2 Identify the types of signal used in telephone networks
	1.3 Describe how attenuation affects the signal on copper cable pairs
	1.4 Identify the main components of external telephone cabling networks
	1.5 List the functions of cabinets in external line plant networks
2. Understand the different types of telephone cables	2.1 List common characteristics of external copper telephone cables
	2.2 List common applications of copper cables
	2.3 Identify common copper cable types
	2.4 State the colour code of local distribution layer type cables

3. Be able to terminate external telephone cables	3.1 State current methods used to terminate copper telephone cables
	3.2 Terminate external grade multi-pair telephone cables in cabinets and boxes
4. Be able to prepare copper cables for jointing	4.1 Prepare: <ul style="list-style-type: none"> <li>Armoured cable for termination and jointing</li> <li>Un-armoured cable for termination and jointing</li> </ul>
	4.2 Safely remove the sheath from a cable using the correct stripping tools
5. Be able to joint external 'D' Side cables	5.1 Identify situations when cable joints may be required
	5.2 Identify methods of jointing cables
	5.3 Join two multi-pair copper cables using current jointing methods
6. Be able to close and seal a 'D' Side cable joint	6.1 List at least two common characteristics of joint enclosures
	6.2 Identify current methods used to seal joint enclosures
	6.3 Close and seal cable joints with: <ul style="list-style-type: none"> <li>Mechanical closures</li> <li>Heat shrink closure sleeves</li> </ul> Cap-ended closures
	6.4 Re-enter and re-seal previously closed joints
7. Be able to safely handle external cable	7.1 List safety precautions to be carried out before installing cables through ducts and cable pits
	7.2 Handle external cable on a cable drum in line with relevant safety legislation and guidance
	7.3 Identify equipment used to protect and install cables in pits and ducts
	7.4 Name the correct methods for sealing cable in ducts and building entries
	7.5 Seal ducts with recognised industry methods
8. Know how to identify cable routes	8.1 Identify cable routes using charts and diagrams
	8.2 Route jumper wires through DPs and cabinets following wiring schedules
	8.3 Use a multi-meter appropriately to: <ul style="list-style-type: none"> <li>Identify cable pairs</li> <li>Test cables pairs</li> </ul>

### **Required Equipment List**

In order to deliver this unit, centre will need the following equipment:

Copper cabling samples

Copper cables in a range of sizes

Cable hand tools

Range of joint types (crimp and IDC)

Cabinets and/or mounted back-plates

Jointing jigs – one between two trainees

Range of distribution boxes

There should be sufficient components (consumable cables, joints and accessories) to allow every trainee to attempt several joints.