

Electricity Specification ES400TC1

Issue 3 November 2022

**Tapes and associated Consumables used
for cable jointing and other tasks**



Amendment Summary

ISSUE NO. DATE	DESCRIPTION
Issue 1 October 2021	<p>New document created by the merging of relevant parts of the following specifications which are now archived;</p> <p>ES400A1: Abrasive papers and cloths ES400T1: Coated Textile or Fibre Glass tape ES400T3: Tape Cotton Plain ES400T5: PVC Tapes for Electrical Purposes ES400T6: Anti-corrosion products ES400W1: Aluminium & Copper Binding Wires</p> <p>Prepared by: Philip Howell Approved by: Policy Approval Panel and signed on its behalf by Steve Cox, Engineering and Technical Director</p>
Issue 2 July 2022	<p>Commodity Code 789851 added for Heavy Duty PVC Tape</p> <p>Prepared by: Philip Howell Approved by: Policy Approval Panel and signed on its behalf by Steve Cox, DSO Director</p>
Issue 3 November 2022	<p>All weather tape Commodity Code 789851 removed Manufacturers reference for Heavy Duty PVC tape added</p> <p>Prepared by: Philip Howell Approved by: Policy Approval Panel and signed on its behalf by Steve Cox, DSO Director</p>

Contents

1	Introduction	5
2	Scope	5
3	Definitions	6
4	General Requirements for Approvals and Testing	7
	4.1 Product not to be Changed	7
	4.2 Electricity North West Technical Approval	7
	4.3 Quality Assurance	7
	4.4 Formulation	8
	4.5 Identification Markings	8
	4.6 Minimum Life Expectancy	8
	4.7 Product Conformity	8
	4.8 Confirmation of Conformance	8
5	Requirements for Type and Routine Testing	9
	5.1 Requirement for Type Tests at Suppliers Premises	9
	5.2 Requirement for Routine Tests at the Supplier's Premises	9
6	Technical Requirements	9
	6.1 PVC Tapes	9
	6.2 Abrasive Cloths	10
	6.3 Anti-Corrosion Tapes	10
	6.4 Specialist / Other Tapes	11
	6.5 Degreasing Wipes	14
	6.6 Sealing Mastics and Compounds	14
	6.7 Miscellaneous Items	16
7	Documents Referenced	17
8	Keywords	18
	Appendix A – Scope of Materials	19
	A1 : PVC Tapes	19
	A2 : Abrasive Cloths	19
	A3 : Anti-Corrosion Tapes	20

A4 : Specialist/ Other Tapes	20
A5 : Degreasing Wipes	20
A6 : Mastics and Sealing Compounds	21
A7 : Miscellaneous Items	21
Appendix B – Conformance Declaration	22

All Rights Reserved

The copyright of this document, which contains information of a proprietary nature, is vested in Electricity North West Limited. The contents of this document may not be used for purposes other than that for which it has been supplied and may not be reproduced, either wholly or in part, in any way whatsoever. It may not be used by, or its contents divulged to, any other person whatsoever without the prior written permission of Electricity North West Limited.

2 Introduction

This specification document details various tapes, abrasives, degreasing wipes, sealing mastics and other products which are used by Electricity North West in cable jointing activities and other similar tasks.

3 Scope

This specification comprises general and technical requirements for a range of materials used on the electricity distribution network (Network) owned by Electricity North West Limited, as Distribution Licensee.

The specification covers a range of PVC tapes and other tapes, sealing mastics and compounds, degreasing wipes and other consumable items which are required when carrying out inspection, cleaning, preparation and jointing of cables on the network. In addition, they may be used for associated tasks where appropriate.

Appendix A summarises the items covered by this specification. The list is not exhaustive and other consumable materials may be required for certain tasks.

Some of the materials covered may be included within Electricity North West approved joints and termination kits – in this case the provided material in the kit should be used in preference to the items listed in this specification where relevant.

Solder metals are covered in separate specification document ES400S1

Insulating Rubber Patch material is covered in separate specification document ES400P1

4 Definitions

Approval	Sanction by the Electricity North West Circuits Policy Manager that specified criteria have been satisfied
Contract	The agreement between Electricity North West and the Contractor for the execution of the Works including therein all documents to which reference may properly be made in order to ascertain the rights and obligations of the parties under the said agreement.
Contractor	The person or person's firm or company, including personal representatives, successors and permitted assigns, who's Tender has been accepted by Electricity North West.
MDPE	Medium Density Polyethylene
PVC	Poly Vinyl Chloride
Specification	The Specifications and schedules (if any) agreed by the parties for the purpose of the Contract.
Sub-Contractor	Any person (other than the Contractor) named in the Contract for any part of the Works or any person to whom any part of the Contract has been sub-let with the consent in writing of the Electricity North West Circuit Policy Manager, and the legal representatives, successors and assigns of such person.
Supplier	Any person or person's firm or company who supplies goods to Electricity North West or to its Contractor.
Tender	An offer in writing to execute work or supply goods at a fixed price.
Tenderer	The person or person's firm or company, including personal representatives, successors and permitted assigns, invited by Electricity North West to submit a Tender.
XLPE	Cross Linked Polyethylene

5 General Requirements for Approvals and Testing

5.1 Product not to be Changed

No change in the product, packaging or labelling shall be made after Approval has been granted without prior notice to the Electricity North West Circuit Policy Manager, and receipt of a written agreement to the proposed change from the Electricity North West Circuit Policy Manager.

5.2 Electricity North West Technical Approval

The Tenderer shall submit, with this Tender, proposals for testing which will demonstrate, to the satisfaction of the Electricity North West Circuit Policy Manager, compliance with this Specification. Such tests shall be carried out without expense to Electricity North West.

Alternatively, technical reports and other data may be submitted that the Tenderer considers will demonstrate, to the satisfaction of the Electricity North West Circuit Policy Manager, compliance with this Specification. Acceptance of this evidence shall be at the discretion of the Electricity North West Circuit Policy Manager but will not be unreasonably withheld.

Where relevant, approval shall be 'factory specific' and is not transferable to another factory without the written Approval of the Electricity North West Circuits Policy Manager.

The Supplier and product shall comply with all the relevant requirements of Electricity North West document CP311.

5.3 Quality Assurance

The Tenderer shall confirm whether or not Approval is held in accordance with a quality assurance scheme accredited under ISO 9000. If not, the Tenderer shall submit a statement of the quality assurance procedures employed to control the quality of the product, including the performance of Suppliers and Sub-Contractors.

The right is reserved for the repeat of such tests, from time to time, that the Electricity North West Circuit Policy Manager may deem to be reasonably necessary to demonstrate continued compliance with the Specification.

The Tenderer shall submit, with the Tender, a list of tests and inspections which are carried out on the product prior to despatch which shall demonstrate, to the satisfaction of the Electricity North West Circuit Policy Manager, fitness for installation and service.

The Tenderer shall provide free of charge to Electricity North West such samples as may, in the opinion of the Electricity North West Circuit Policy Manager, be reasonably required for inspection and/or retention as quality control samples. The Electricity North West Circuit Policy Manager will confirm the requirement for samples at the time of Tendering.

The right is reserved for inspections to be made of Tenderer's facilities, from time to time, as deemed reasonably necessary by the Electricity North West Circuit Policy Manager to ensure compliance with this Specification and any Contract of which it forms a part.

The Tenderer shall submit, with the Tender, such details of product packaging disposal, as will enable Electricity North West to comply with the requirements of BS EN ISO 14001 - Environmental Management Systems.

5.4 Formulation

The Tenderer shall submit, with the Tender, such details of the formulation and use of the product and associated substances as will enable Electricity North West to comply with the obligations of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations, in the use, storage and disposal of the product. The Tenderer may stipulate, prior to submission of such information, that it is to remain confidential, and the Electricity North West Circuit Policy Manager will, if requested, confirm agreement to this prior to receipt of the information.

5.5 Identification Markings

The Tenderer shall submit, with the Tender, details of markings which it is proposed to apply to the product or packaging to identify manufacturing batches or items. The forms and content of such markings shall be subject to the Approval of the Electricity North West Circuit Policy Manager and shall in all cases include the Electricity North West approved description and commodity code number.

The Tenderer shall submit, with the Tender, such details of marking gross weight on components, assemblies and packages, as will enable Electricity North West to comply with the Health and Safety Manual Handling Operation Regulations, for components, assemblies and packages supplied with a gross weight over 1kg. The forms and content of such markings shall be subject to the Approval of the Electricity North West Circuit Policy Manager.

5.6 Minimum Life Expectancy

The products detailed within this specification are consumable items, however wherever relevant, items used within cable joints or other similar assets installed on the network should perform their intended function for the same life period as the whole equipment, which is typically 60 years.

Products which have a shelf life shall be clearly identified with the expiry date on the packaging.

5.7 Product Conformity

Preference will be given to those Suppliers who can provide suitable product conformity certification to a recognised or specified standard, or an equivalent certification.

The products described within this specification shall comply with all current versions of the relevant International standards, British Standard Specifications and all relevant Energy Networks Association Technical Specifications (ENA TS) current at the time of supply.

5.8 Confirmation of Conformance

The Tenderer shall complete the conformance declaration sheets in Appendix A. Failure to complete these declaration sheets may result in an unacceptable bid.

6 Requirements for Type and Routine Testing

The Electricity North West Circuit Policy Manager shall set out the requirement of the following tests to be carried out by the Supplier at the Supplier's cost.

6.1 Requirement for Type Tests at Suppliers Premises

These are a series of one-off type tests, which are carried out to ensure the satisfactory performance of the product design, under extremes of operating stresses, and of endurance, as may be appropriate, to be determined by the Electricity North West Circuit Policy Manager.

These may or may not be destructive tests.

6.2 Requirement for Routine Tests at the Supplier's Premises

These tests may be required to be carried out on every individual unit or component, as specified, or at some regular frequency to be determined by the Electricity North West Circuit Policy Manager.

The results of these tests may be required to be supplied to Electricity North West with each unit purchased or retained for inspection, at a period to be determined by the Electricity North West Circuit Policy Manager.

7 Technical Requirements

7.1 PVC Tapes

7.1.1 Phase Marker Tapes

These items are listed in [Appendix A1](#), Items 1 to 4

Used as a marking tape to identify the relevant phase or neutral core. It shall be applied on top of and around the conductor insulation.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements.
- The tape shall be adhesive, white, PVC based, weather resistant, non-conductive and be pre-printed with black alphanumeric characters for phase identification (L1 / L2 / L3 or N).
- The alphanumeric characters shall be large and easily visible.
- Service temperature range -18°C to 90°C
- Thickness: 0.15mm (minimum)

7.1.2 General Purpose Colour PVC Tapes

These items are listed in [Appendix A1](#), Items 5 to 11

Used for colour identification and general harnessing of neutral and earth wire strands in cable joints

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements.
- The tape shall be adhesive, fade resistant, PVC based, abrasion and weather resistant. It shall be resistant to moisture, alkalis, acids, ultraviolet light and corrosion.
- Service temperature range -18°C to 90°C
- Thickness: 0.15mm (minimum)

7.1.3 Heavy Duty PVC Tapes

These items are listed in [Appendix A1](#), Item 12

Used for insulating purposes in LV joints. For covering paper insulated cores and over taping void filling putty tape and vinyl mastic tape to give moisture tight and mechanical protection.

Heavy Duty Grade can be used for reinstating PVC sheaths on LV cables after drying out wet cables.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements.
- The tape shall be adhesive lined, black, PVC based. It shall be resistant to abrasion, moisture, alkalis, acids, corrosion and varying weather conditions (including ultraviolet exposure).
- Service temperature range -18°C to 90°C
- Thickness:
 - Heavy Duty 0.2mm (minimum)

7.2 Abrasive Cloths

7.2.1 P60 Grade

This item is listed in [Appendix A2](#), Items 14.

Used to abrade the PVC/MDPE outer sheaths of cables to provide a key for resin bonding.

Essential Features

- The tape shall comply with the relevant section of BS 871 and meet the following requirements. The cloth tape shall be Aluminium oxide abrasive on a flexible cotton backing.
- Abrasive Type: Roll
- Abrasive Grade: P60

7.2.2 P240 / P320 / P400 / P500 Grade

These items are listed in [Appendix A2](#), Items 15 to 18.

Used to progressively polish the surface of XLPE or EPR cable insulation to a smooth finish during preparation for jointing.

Essential Features

- The tape shall comply with the relevant section of BS 871 and meet the following requirements.
- The cloth tape shall be Aluminium oxide abrasive on a flexible cotton backing.
- Abrasive Type: Roll
- Abrasive Grade: P240 / P320 / P400 / P500

7.3 Anti-Corrosion Tapes

7.3.1 Grease impregnated Denso Tape

This item is listed in [Appendix A3](#), Item 19.

Used for the protection of buried or exposed earth rod fittings/connections from corrosion and for temporary sealing of cable ends from moisture.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3, meet the following requirements
- The tape shall be manufactured from non-woven synthetic fibre fabric impregnated and coated with a neutral petroleum compound and inert siliceous fillers.
- It shall be non-conductive, non-hardening and non-cracking and be resistant to water, Acids, Alkalis and Salts.
- Breaking Strength: minimum 200 N/50mm
- Elongation at break: 10% average
- Breakdown voltage (55% Overlap): 16kV minimum
- Temperature range (application): -5°C to 45°C
- Thickness: 1.15mm average
- Weight: 1.44kg/m² average

7.3.2 Black Anti-corrosion tape

This item is listed in [Appendix A3](#), Item 20.

The tape shall be used for general weatherproofing on electrical equipment and provide temporary to build up cable diameters to suit joint shells etc.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3
- The tape shall be of a cotton cloth material with a blended rubber adhesive insulating compound coated on both sides
- Breaking Strength: minimum 200 N/cm
- Service Temperature -50°C to +80°C
- Application Temperature +10°C to +45°C

7.4 Specialist / Other Tapes

7.4.1 Black Cotton Friction Tape

This item is listed in [Appendix A4](#), Item 21

The tape shall be used as a friction tape binder over cores in cable jointing.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3
- The tape shall be a cotton cloth tape coated on both sides with an entirely solvent-free adhesive consisting primarily of synthetic rubber, inorganic fillers and oil
- Thickness 0.36mm
- Breaking Strength: minimum 210N/25mm

7.4.2 PIB Self Amalgamating Tape

This item is listed in [Appendix A4](#), Item 22.

The tape shall be used to build up cable connections, fill out major irregularities and voids in LV joints/connections to obtain a uniform base for further taping.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements
- The Self amalgamating tape shall be based on Polyisobutylene (PIB).
- The tape shall be interleaved with an easy to remove plastic film and must be non-tacky, easy to handle and capable of being formed and moulded with moderate finger tension.
- The tape shall amalgamate rapidly when applied under tension and provide a void free homogenous wrapping without the need for external heat or pressure. It shall be compatible with polyethylene, cross-linked polyethylene, ethylene propylene rubber, PVC, butyl and neoprene cable insulation and polyurethane resins.
- The tape must be highly resistant to prolonged immersion in water, resistant to ozone and compatible with hot pouring compounds up to 125°C used in cable joint-boxes.
- It shall be non-corrosive and will not dry out with aging.
- Service temperature range -40°C to 90°C
- Thickness: 0.5mm (minimum)

7.4.3 Silicone Self Amalgamating Tape

This is listed in [Appendix A4](#), Items 23 and 24

The tape shall be used with silicone rubber cable terminations to provide an effective moisture seal and prevent shrink back at the cable lug exit position.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements
- The Self amalgamating tape shall be based on Silicone Rubber
- The tape shall be interleaved with an easy to remove plastic film and must be non-tacky, easy to handle and capable of being formed and moulded with moderate finger tension.
- The tape shall amalgamate rapidly when applied under tension and provide a void free homogenous wrapping without the need for external heat or pressure.
- It shall be non-corrosive and will not dry out with aging.
- Service temperature range -45°C to 200°C
- Thickness: 0.4mm (minimum)

7.4.4 Scotch 69 Glass Cloth Tape

This is listed in [Appendix A4](#), Item 25

The tape shall be used to provide heat proofing of cable sheaths and other items subject to elevated temperatures, or for fireproofing when used in conjunction with Scotch 77 Tape.

Essential Features

- The tape shall be white glass cloth tape with thermosetting pressure sensitive adhesive and designed to perform continually at 130°C.
- The tape must adhere to any clean dry surface and have good adhesion over a range of ambient temperatures between 0°C and 30°C.
- Thickness: 0.177mm (minimum)
- Breaking Strength: minimum 314N/10mm

7.4.5 Scotch 77 Fire Retardant Arc Proofing Tape

This is listed in [Appendix A4](#), Item 26

The tape shall be used to protect cable sheaths and other items from fire when used in conjunction with Scotch 69 Tape as an outer layer.

Essential Features

- Flexible unsupported elastomer
- Provides fault arc protection to adjacent wrapped cables and accessories.
- Self-extinguishing, will not propagate flame.

7.4.6 Duct Tape

This is listed in [Appendix A4](#), Item 27

This tape is for general non-electrical repairs.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements
- Duct tape is cloth backed pressure-sensitive tape, coated with polyethylene.
- Colour: Silver
- Thickness 0.2mm

7.4.7 Temporary Protection Rubber Tape

This is listed in [Appendix A4](#), Item 28

The tape shall be used as an inner bedding layer on temporary joints prior to applying Denso grease impregnated tape.

Essential Features

- Non-tacky rubber tape
- Good elongation properties

7.4.8 HV Fusion Tape

This is listed in [Appendix A4](#), Item 29

The tape shall be used for protection and insulation of cable terminals/busbars up to 33kV

Essential Features

- 50mm wide, Silicone self-fusing tape with excellent ant-tracking properties
- Busbar insulation class ≤ 36 kV
- The tape shall amalgamate rapidly when applied under tension and provide a void free homogenous wrapping without the need for external heat or pressure.
- Service temperature range 0°C to 90°C

7.4.9 Heat Shrink Busbar Insulating Tape

This is listed in [Appendix A4](#), Item 30 & Item 31

The tape shall be used for protection and insulation enhancement of cable terminals and busbar sections up to 33kV

Essential Features

- Polyolefin cross linked material, expanded and coated with heat activated adhesive
- Excellent ant-tracking properties
- Dielectric Strength > 20 kV/mm
- Service temperature range -40°C to 90°C

7.5 Degreasing Wipes

This is listed in [Appendix A5](#), Item 32

Solvent wipes for cleaning and degreasing during cable preparation and jointing operations

Essential Features

- Lint free cloth pre-saturated with high flash point, residue free solvent
- Impregnating solvent to be compatible with materials found in power networks including insulation materials, joints, metal, varnish, baked enamel and resins

7.6 Sealing Mastics and Compounds

7.6.1 Insulating and Void Filling Putty

This is listed in [Appendix A6](#), Item 33

Used to build up cable connections, fill out major irregularities and voids in LV joints/connections in order to obtain a uniform base for further taping. It is also used to form part of a cable crutch seal.

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements. The tape shall be a rubber based and capable of being formed and moulded with moderate finger tension. It shall be non-corrosive and will not dry out with aging.
- Service temperature range -18°C to 90°C
- Thickness: 2.5mm (minimum)

7.6.2 Sealing Putty

This is listed in [Appendix A6](#), Item 34 and 35

Used for gap filling and sealing of plastic joint shells prior to resin filling.

Essential Features

- A stiff mastic based on petrolatum jelly, inert filler and stable red oxide pigment.
- Easily moulded by hand at room temperature
- Mouldable at 0°C
- Contains no Volatile Organic Compounds

7.6.3 Densyl Mastic

This is listed in [Appendix A6](#), Item 36

Used for duct sealing and around pipes and cables where they enter buildings to prevent the passage of water or gas.

Essential Features

- Densyl Mastic is a petrolatum compound containing inert siliceous fillers and vegetable fibres. It contains no Volatile Organic Compounds
- Suitable for use up to 90°C

7.6.4 Mastic Sealing Tape

This is listed in [Appendix A6](#), Item 37 and 38

Butyl mastic tape used for moisture seals on lead sheaths in cable joints

Essential Features

- The tape shall comply with the relevant section of BS EN 60454-3 and meet the following requirements.
- The tape shall have sealant and adhesive properties.
- It shall be non-hardening and permanently elastic. It must be able to stop the ingress of moisture between the interfaces of the sheath of a cable and the cured resin used in cable jointing.
- The adhesive strength of the sealing tape shall be sufficient to cause cohesive failure of the sealer before loss of adhesion to the cable sheath or resin, when pulled in tension.
- Service temperature range -18°C to 90°C
- It shall be provided on suitable wax lined release paper
- Thickness: 2mm (minimum)

7.6.5 Weatherproof Compound

This is listed in [Appendix A6](#), Item 39

Used to seal and insulate around electrical terminals and connectors to provide an effective moisture and mechanical seal

Essential Features

- Compound of synthetic liquid polymers and mineral fillers
- Putty like consistency which can be moulded easily by hand
- Non-hardening
- Dielectric Breakdown Strength 18kV/mm
- Service temperature range -20°C to 80°C

7.6.6 Electrical Jointing (Inhibitor) Compound

This is listed in [Appendix A6](#), Item 40

Used to prevent galvanic corrosion and to enhance connection in electrical joints and terminals.

Essential Features

- Natural (petroleum) grease base with aluminum complex thickener
- Can be used for applications where insulation will not be applied to the joint such as substations and switchgears
- Flash Point > 200°C
- Service temperature range -18°C to 150°C

7.7 Miscellaneous Items

7.7.1 Tinned Copper Binding wire

This is listed in [Appendix A7](#), Item 41 to 44

Used for binding wires in cable joints and terminations

Essential Features

- Conforms to the BS EN 13602:2013 CW004A standard.
- Minimum elongation 22%
- Supplied in following diameters (+/-1%)
 - 20 swg = 0.91mm
 - 18 swg = 1.22mm
 - 16 swg = 1.626mm
 - 14 swg = 2mm

7.7.2 Nylon Blind Cord

This is listed in [Appendix A7](#), Item 45 to 46

Used for making circumferential cuts in plastic sheathed cables by garrotting.

7.7.3 Cotton Twine

This is listed in [Appendix A7](#), Item 47

Used as a binder on paper insulated cores (should be impregnated with oil before use)

Essential Features

- 100% cotton twisted twine rope
- Low elasticity
- Approximate diameter 2mm
- 250g ball

8 Documents Referenced

All references to documents listed below are to the latest versions, unless stated otherwise.

DOCUMENTS REFERENCED	
Health and Safety at Work Act	
Control of Substances Hazardous to Health Regulations	
Manual Handling Operations Regulations	
BS EN ISO 9000	Quality management systems
BS EN ISO 14001	Environmental management systems. Requirements with guidance for use
BS 871:1981	Specification for abrasive papers and cloths
BS EN 13602:2013	Copper and copper alloys. Drawn, round copper wire for the manufacture of electrical conductors
BS EN 29862: 2019	Self-adhesive tapes. Determination of peel adhesion properties
BS EN 60454-1:1995	Specifications for pressure-sensitive adhesive tapes for electrical purposes. General requirements
BS EN 60454-3-2:2006	Pressure-sensitive adhesive tapes for electrical purposes. Specifications for individual materials. Requirements for polyester film tapes with rubber thermosetting, rubber thermoplastic or acrylic crosslinked adhesives
BS EN 60454-3-4:2007	Pressure-sensitive adhesive tapes for electrical purposes. Specifications for individual materials. Cellulose paper, creped and non-creped, with rubber thermosetting adhesive
BS EN 60454-3-6:1998	Specifications for pressure-sensitive adhesive tapes for electrical purposes. Specifications for individual materials. Polycarbonate film tapes with acrylic thermoplastic adhesive
BS EN 60454-3-7:1998	Specifications for pressure-sensitive adhesive tapes for electrical purposes. Specifications for individual materials. Polyimide film tapes with pressure-sensitive adhesive

<p>BS EN 60454-3-8:2006</p>	<p>Pressure-sensitive adhesive tapes for electrical purposes. Specifications for individual materials. Woven fabric tapes with pressure-sensitive adhesive based on glass, cellulose acetate alone or combined with viscose fibre</p>
<p>CP311</p>	<p>Equipment Approval Policy and Process</p>

9 Keywords

Tapes , Abrasives , Mastics , Degreasing Wipes , Consumables

Appendix A – Scope of Materials

A1 : PVC Tapes

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
1	General Purpose Marker L1	15mm x 10m roll	790339
2	General Purpose Marker L2	15mm x 10m roll	790340
3	General Purpose Marker L3	15mm x 10m roll	790341
4	General Purpose Marker N	15mm x 10m roll	790342
5	General Purpose Red	19mm x 33m roll	660021
6	General Purpose Blue	19mm x 33m roll	179175
7	General Purpose Grey	19mm x 33m roll	179192
8	General Purpose Brown	19mm x 33m roll	179193
9	General Purpose Yellow	19mm x 33m roll	789848
10	General Purpose Green/Yellow	19mm x 33m roll	179434
11	General Purpose Green	19mm x 33m roll	660016
12	Heavy Duty Black – 3M Scotch Super 33+	19mm x 33m roll	789851

Nov 22

A2 : Abrasive Cloths

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
14	Aluminium Oxide Cloth P60 grade	25mm x 50m roll	787857
15	Aluminium Oxide Cloth P240 grade	25mm x 50m roll	789846
16	Aluminium Oxide Cloth P320 grade	25mm x 50m roll	789845
17	Aluminium Oxide Cloth P400 grade	25mm x 50m roll	789847
18	Aluminium Oxide Cloth P500 grade	25mm x 50m roll	TBA

A3 : Anti-Corrosion Tapes

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
19	Grease impregnated Denso Tape	50mm wide x 10m roll	179280
20	Black Anti-corrosion tape	19mm wide x 33m roll	179361

A4 : Specialist/ Other Tapes

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
21	Black Cotton Cloth Fiction Tape	19mm x 20m roll	179337
22	Rubber Self-Amalgamating tape	38mm x 1.5m roll	660325
23	Silicone Rubber Self Amalgamating Tape	25mm x 11m roll	163807
24	Silicone Rubber Self Amalgamating Tape	3 x 450mm pack	163808
25	Scotch 69 Glass Cloth Tape	50 x 33m roll	299512
26	Scotch 77 Fire Proofing Tape	76mm x 6m roll	299511
27	Duct Tape	50mm x 50m roll	995346
28	Temporary Protection Rubber Tape (TPRT) 0.9mm thick	50mm x 10m roll	168387
29	HV Fusion Tape	50mm x 11m roll	155780
30	Heat Shrinkable Busbar Insulating Tape	25mm x 5m roll	163810
31	Heat Shrinkable Busbar Insulating Tape	50mm x 5m roll	163811

A5 : Degreasing Wipes

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
32	Solvent Degreasing Wipes	Plastic tub of 250 wipes	250301

A6 : Mastics and Sealing Compounds

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
33	Insulating Putty	38mm x 1.5mm	159506
34	Sealing Putty (No2 compound)	3.5kg pack	158984
35	Sealing Putty (Sicame)	250g stick	161056
36	Densyl Mastic	3kg x 6 blocks	158951
37	Butyl Mastic tape	20mm x 1.5m	161038
38	Red butyl mastic tape rolls	25mm x 350mm roll x 10pk	120034
39	Weatherproofing Compound (R391)	500g pack	158690
40	Electrical Joint Compound (BiconX)	225ml tube	250842

A7 : Miscellaneous Items

ITEM NO.	ORDERING SPECIFICATION	PACK SIZE	COMMODITY CODE
41	Tinned Copper Binding wire (20 swg)	20 swg (0.66mm ²) X 5kg reel	046825
42	Tinned Copper Binding wire (18 swg)	18 swg (1.2mm ²) X 5kg reel	046809
43	Tinned Copper Binding wire (16 swg)	16 swg (2.1mm ²) X 5kg reel	046878
44	Tinned Copper Binding wire (14 swg)	14 swg (2.5mm ²) X 5kg reel	045853
46	Nylon Blind Cord No1	1.5mm x 100m	144500
47	Nylon Blind Cord No3	3mm x 100m	144551
48	Cotton Twine	250g ball	179884

Appendix B – Conformance Declaration

SECTION-BY-SECTION CONFORMANCE WITH SPECIFICATION

The Tenderer shall declare conformance or otherwise for each product/service or range of products/services, section-by-section, using the following Conformance Declaration Codes.

Conformance Declaration Codes:

N/A =	Clause is not applicable/appropriate to the product/service.
C1 =	The product/service conforms fully with the requirements of this clause.
C2 =	The product/service conforms partially with the requirements of this clause.
C3 =	The product/service does not conform to the requirements of this clause.
C4 =	The product/service does not currently conform to the requirements of this clause, but the manufacturer proposes to modify and test the product in order to conform.

Manufacturer:

Product/Service Description:

Product/Service Reference:

Name:

Company:

Signature:

SECTION-BY-SECTION CONFORMANCE

Section	Section Topic	Conformance Declaration Code	Remarks * (must be completed if code is not C1)
4.1	Product not to be Changed		
4.2	Electricity North West Technical Approval		
4.3	Quality Assurance		
4.4	Formulation		
4.5	Identification Markings		
4.6	Minimum Life Expectancy		
4.7	Product Conformity		
4.8	Confirmation of Conformance		
5.1	Requirements for Type Tests at the Supplier's Premises		
5.2	Requirement for Routine Tests at the Supplier's Premises		
6.1	PVC Tapes		
6.2	Abrasive Cloths		
6.3	Specialist/Other Tapes		
6.4	Degreasing Wipes		
6.5	Sealing Mastics and Compounds		
6.6	Miscellaneous		

* Applicable specifications shall be stated in the Remarks column where alternatives are quoted within a section. The Remarks column shall also be used to indicate cases where the products or services exceed the quoted specifications.