

Electricity Specification 400TT1

Issue 1 April 2021

Polyethylene Warning Tape, Protection
Tape and Protection Tiles for Underground
Cables





Amendment Summary

ISSUE NO. DATE	DESCRIPTION
1	This Specification replaces ES400T2 and ES400T8 which are hereby withdrawn.
April 2021	Restructure and reformatting of Model Electricity Specification. This new issue constitutes a complete revision and re-issue of Model Electricity Specification in its entirety.
	Prepared by: David M Talbot Approved by: Policy Approval Panel and signed on its behalf by Steve Cox, Engineering and Technical Director



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1 Introduction

This specification details warning tape, protection tape and protection tiles to be placed over underground cables and ducts used on the electricity distribution network owned by Electricity North West Limited (Electricity North West). There is a statutory requirement to warn or protect cables when laying new cables or joints for new connections, planned or fault work undertaken by Electricity North West.

2 Scope

This Specification covers the general and technical requirements for warning tape, protection tape and protection tiles for underground cables and ducts used on the electricity distribution network owned and operated by Electricity North West Limited (Electricity North West).

3 Definitions

Approval	Sanction by the Electricity North West Underground Circuits 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.
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 Underground Circuits 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



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assigns, invited by Electricity North West to submit a Tender.

4 General Requirements for Approvals and Testing

4.1 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 Underground Circuits Manager, and receipt of a written agreement to the proposed change from the Electricity North West Underground Circuits Manager.

4.2 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 Underground Circuits 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 Underground Circuits Manager, compliance with this Specification. Acceptance of this evidence shall be at the discretion of the Electricity North West Underground Circuits Manager but will not be unreasonably withheld.

Approval shall be 'factory specific' and is not transferable to another factory without the written Approval of the Electricity North West Underground Circuits Manager.

The Supplier and product shall comply with all the relevant requirements of Electricity North West documents EPD311 and CP311.

4.3 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 Underground Circuits 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 Underground Circuits 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 Underground Circuits Manager, be reasonably required for inspection and/or retention as quality control samples. The Electricity North West Underground Circuits Manager will confirm the requirement for samples at the time of Tendering.



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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 Underground Circuits 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.

4.4 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 1974 and the Control of Substances Hazardous to Health Regulations 2002, 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 Underground Circuits Manager will, if requested, confirm agreement to this prior to receipt of the information.

4.5 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 Underground Circuits 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 1992, 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 Underground Circuits Manager.

4.6 Minimum Life Expectancy

The minimum life expectancy of all products covered by this Specification is 40 years.

4.7 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.

4.8 Confirmation of Conformance

The Tenderer shall complete the conformance declaration sheets in <u>Appendix B</u>. Failure to complete these declaration sheets may result in an unacceptable bid.

5 Requirements for Type and Routine Testing

Type and Routine tests shall be carried out at the Supplier's Premises and shall be as specified in ENA TS 12-23.



6 Technical Requirements

6.1 General

The tape and tiles listed in Table 1 (please see Appendix A) below shall comply fully with ENA TS 12-23

6.2 Logo

The Electricity North West logo (for positioning as shown in ENA TS 12-23) is available on request, in a variety of file types.

7 Documents Referenced

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

	DOCUMENTS REFERENCED
Health and Safety at Work Act 1974	
Control of Substances Hazardous to Health Regulations 2002	
Manual Handling Operations Regulations 1992	
BS EN ISO 9000	Quality management systems
BS EN ISO 14001	Environmental management systems. Requirements with guidance for use
ENA TS 12-23	Polyethylene Warning Tape, Protection Tape and Protection Tiles for Underground Cables
EPD311	Approval of Equipment
CP311	Equipment Approval Process

8 Keywords

Tape; Tile



Appendix A

Table 1 – Tape and Tiles

ITEM	COMMODITY CODE
Tape, Warning	179213
Tape, Protection	ТВА
Tile, Protection, Class 1	ТВА
Tile, Protection, Class 2	221821



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:	

Manufacturer:
Product/Service Description:
Product/Service Reference:
Name:
Company:
Signature:

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SECTION-BY-SECTION CONFORMANCE Conformance Remarks * **Section Section Topic Declaration** (must be completed if code is not C1) Code Product not to be 3.1 Changed **Electricity North West** 3.2 **Technical Approval** 3.3 **Quality Assurance Formulation** 3.4 **Identification Markings** 3.5 **Minimum Life** 3.6 **Expectancy** 3.7 **Product Conformity Confirmation of** 3.8 Conformance **Requirements for Type**

Additional Notes:

4

5.1

5.2

Tests at the Supplier's

Premises

General

Logo

^{*} 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.