

# **Electricity Specification 400P4**

Issue 2 January 2022

**Proximity Protection Sleeving for LV ABC Mural Wiring** 





ES400P4

## **Amendment Summary**

ISSUE NO. DATE	DESCRIPTION	
Issue 2	New template applied.	
January 2021	Prepared by:	D M Talbot
	Approved by:	Policy Approval Panel and signed on its behalf by Steve Cox, Engineering and Technical Director



ES400P4

#### **Contents**

1	Introduction		
2	Scope		
3	Defi	nitions	4
4	General Requirements for Approvals and Testing		
	4.1	Product not to be Changed	5
	4.2	Electricity North West Technical Approval	5
	4.3	Quality Assurance	5
	4.4	Formulation	6
	4.5	Identification Markings	6
	4.6	Minimum Life Expectancy	6
	4.7	Product Conformity	6
	4.8	Confirmation of Conformance	6
5	Requ	uirements for Type and Routine Testing	6
	5.1	Requirement for Type Tests at Suppliers Premises	6
	5.2	Requirement for Routine Tests at the Supplier's Premises	7
6	Technical Requirements		
	6.1	General	7
	6.2	Delivery	7
7	Docu	uments Referenced	7
8	Keyv	words	8
Appe	ppendix A – Conformance Declaration		
Appe	ndix E	3 – Purpose of Proximity Protection Sleeving	11

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### 1 Introduction

This Specification comprises general and technical requirements for proximity protection sleeving for use on LV ABC mural wiring systems owned by Electricity North West Limited (Electricity North West), as Distribution Licensee.

### 2 Scope

This Specification covers proximity protection sleeving for use on LV ABC mural wiring systems. Refer to Appendix B for a definition of the purpose of this sleeving.

The proximity protection sleeving shall be suitable for use with 2x35mm<sup>2</sup> to 5x35mm<sup>2</sup> LV ABC conductors.

### 3 Definitions

Approval	Sanction by the Electricity North West Overhead Line 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.
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 Overhead Line Circuits 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.

ES400P4

### 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 Overhead Line Circuits Policy Manager, and receipt of a written agreement to the proposed change from the Electricity North West Overhead Line Circuits Policy 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 Overhead Line Circuits 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 Overhead Line Circuits Policy Manager, compliance with this Specification. Acceptance of this evidence shall be at the discretion of the Electricity North West Overhead Line Circuits Policy 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 Overhead Line Circuits Policy Manager.

The Supplier and product shall comply with all the relevant requirements of Electricity North West document 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 Overhead Line Circuits 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 Overhead Line Circuits 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 Overhead Line Circuits Policy Manager, be reasonably required for inspection and/or retention as quality control samples. The Electricity North West Overhead Line Circuits 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 Overhead Line Circuits Policy Manager to ensure compliance with this Specification and any Contract of which it forms a part.



ES400P4

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 Overhead Line Circuits Policy 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 Overhead Line Circuits 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 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 Overhead Line Circuits Policy 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 A</u>. Failure to complete these declaration sheets may result in an unacceptable bid.

### 5 Requirements for Type and Routine Testing

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

#### 5.1 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 Overhead Line Circuits Policy Manager.

ES400P4

These may or may not be destructive tests.

### 5.2 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 Overhead Line Circuits 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 Overhead Line Circuits Policy Manager.

### 6 Technical Requirements

#### 6.1 General

Proximity protection sleeving for LV ABC mural wiring shall:

- Be suitable for providing protection in those situations described in Appendix B.
- Be in the form of black, split non-conducting tubing with a minimum wall thickness of 1.5mm.
- Be suitable for use with the LV ABC range of conductors specified in the Scope above.
- Meet the requirements of ENA TS 43-14.

### 6.2 Delivery

The proximity protection sleeving shall be supplied in agreed lengths.

#### 7 Documents Referenced

	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	



ES400P4

BS EN ISO 14001	Environmental management systems. Requirements with guidance for use
ENA TS 43-14	Insulated Aerial Bundled Conductors for Low Voltage Overhead Distribution Systems – Conductor Fittings and Associated Apparatus.
CP311	Equipment Approval Policy and Process

## 8 Keywords

Not applicable.

ES400P4

## **Appendix A – 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.			

C4 =	proposes to modify and test the product in order to conform.			
Manufacturer:				
Product/Service Description:				
Product/Service Reference:				
Name:				
Company:				
Signature:				

ES400P4

#### **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	<b>Quality Assurance</b>		
4.4	Formulation		
4.5	Identification Markings		
4.6	Minimum Life Expectancy		
4.7	<b>Product Conformity</b>		
4.8	Confirmation of Conformance		
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5.2	Requirement for Routine Tests at the Supplier's Premises		
6.1	General		
6.2	Delivery		

<sup>\*</sup> 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.

#### **Additional Notes:**

ES400P4

### **Appendix B – Purpose of Proximity Protection Sleeving**

The purpose of proximity protection sleeving is to prevent surface contact between mural ABC and third parties, metallic downpipes or other cables.

Proximity protection sleeving is applied to mural ABC in those situations where vehicular damage is unlikely, but where:

- Contact by third parties with the ABC is possible from normal access positions.
- Contact with metallic pipes or other cable is possible, i.e. in close proximity to metallic pipes or cables.

Examples of these situations are those regions identified by "additional protection required" shown in Drawing I-40004-GA-025 that are above 2400mm.

Where there is a risk of damage, other protection which is outside the scope of this specification, is required.



