

## **Company Directive**

### **STANDARD TECHNIQUE : CA1AB/1**

#### **Relating to the Procedures for Making Low Voltage Mains Three Core Wavecon Connection/Disconnection Joints**

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**June 2012**

**Approved by:**



**Policy Manager**

**Date:**

**1 June 2012**

# **ST: CA1AB Relating to the Procedures for Making Low Voltage Mains Three Core Wavecon Connection/Disconnection Joints**

## **INTRODUCTION**

This Standard Technique Document contains the approved LV mains three core Wavecon connection/disconnection joints, which shall be implemented in conjunction with the appropriate General Requirements contained in ST:CA1C, including: -

1. General Cleanliness and Accident Prevention
2. General Jointing Procedures – Dead Cables
3. General Jointing Procedures and Safety Precautions – Live Cables

**Note: - Resin encapsulated joints must not be broken down**

If the need arises to undertake a Mains connection/disconnection joint configuration (i.e. non-standard) not covered within this Standard Technique the Policy Manager, Head Office, is to be consulted.

## **CONTENTS**

8.101 Three Core Wavecon – Three Core Wavecon

**ST: CA1AB RELATING TO THE PROCEDURES FOR MAKING LOW VOLTAGE  
MAINS THREE CORE WAVECON CONNECTION/DISCONNECTION JOINTS**

**JOINTING PROCEDURE 8.101**

**THREE CORE WAVECON - THREE CORE WAVECON  
MAINS CABLE BRANCH JOINT**

**This procedure is to be read in conjunction with the appropriate  
General Requirements ST: CA1C Section 6 Pt 1  
of the LV Jointing Manual**

## **JOINTING PROCEDURE 8.101**

### **JOINT KIT REFERENCES**

<b>CABLE SIZE</b>		<b>JOINT KIT REFERENCES</b>
<b>FROM</b>	<b>TO</b>	<b>BRANCH JOINT</b>
95W	95W	MB 1
	185W	MB 2
	300W	MB 3
185W	185W	MB 2
	300W	MB 3
300W	300W	MB 3

**Note: - 70mm<sup>2</sup> and 120mm<sup>2</sup> Wavecon used in South Wales will be sized as 95mm<sup>2</sup> (70) and 185mm<sup>2</sup> (120).**

## JOINTING PROCEDURE 8.101

### JOINT KIT MATERIALS

KIT REF.	SHELL			RESIN		CONNECTORS				EARTH TAIL
	1589	1588	1587	5 litre	6.5 litre	UBR 95	UBR 185	UBR 300	BCNE 3	LVCU 1700/5
MB 1	1			2	1	3			2	1
MB 2		1		5			3		2	1
MB 3			1	8				3	2	1

### ADDITIONAL ITEMS FOR EACH JOINT

Insulation patch  
Black cotton tape  
Sealing putty  
Cable ties  
Shell support  
Tinned copper braid (15 x 1.5)  
16 swg tinned copper wire  
PVC tape  
De-solvit 1000FD  
Workhorse dry wipes

**Note: - Individual material item numbers (SHOPS) are to be found in Section 4 - Part I of the LV Jointing Manual.**

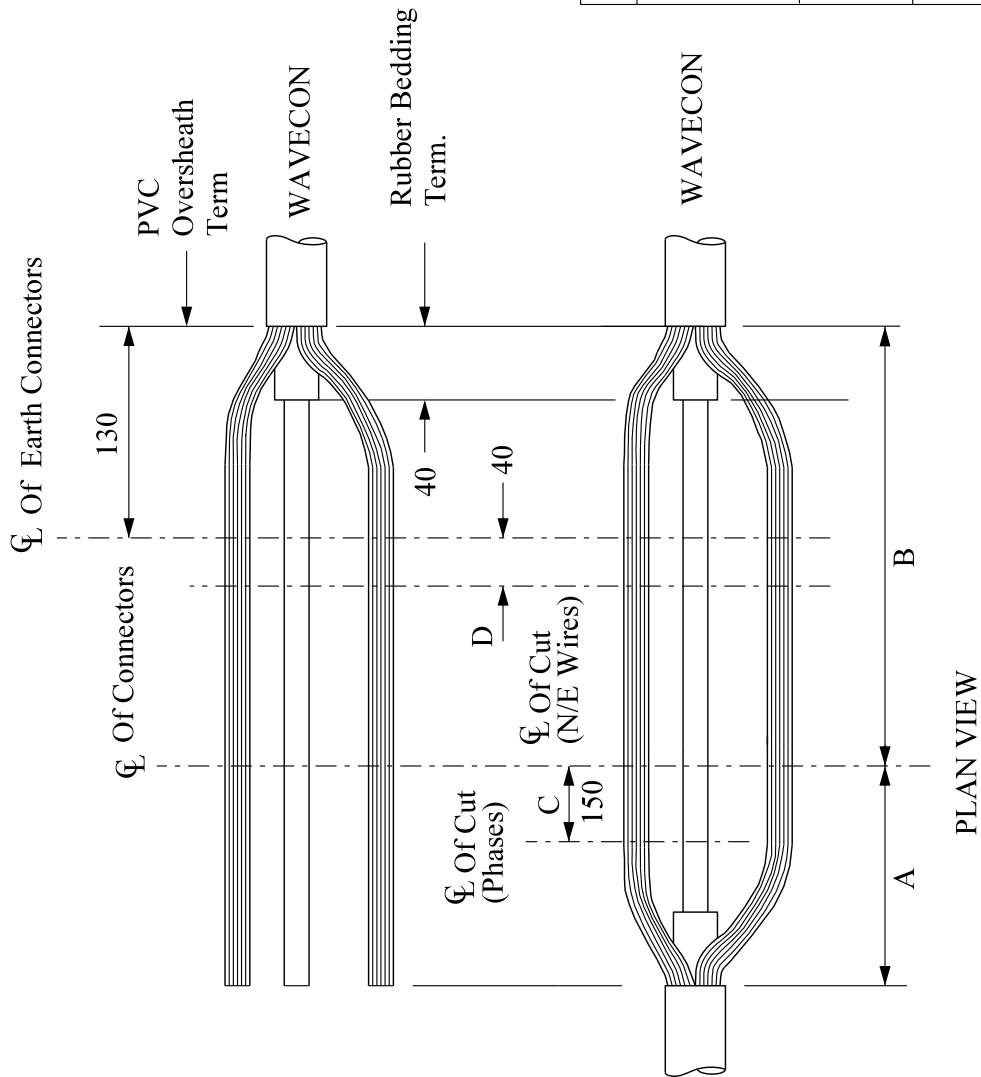
## JOINTING PROCEDURE 8.101

Actions	General Requirements (ST: CA1C)
Refer to Drawing <b>LVJ 8.101.1, 8.101.2</b> whilst undertaking this Jointing Procedure	
1 Set up and mark cables	4
<b>BRANCH CABLE – Preparation</b>	
2 Open and cut cable in accordance with General Requirement 6.14	14
3 Prepare the neutral/earth wires for jointing	8
<b>MAIN CABLE - Preparation</b>	
4. Remove PVC oversheath	6
5. Prepare the neutral/earth wires for jointing	8
6. Remove rubber bedding	9
<b>COMPLETION OF JOINT</b>	
7. Set cores in joint position	27
8. Connect the neutral/earth wires including a equalisation bond and copper earth tail	29
9. Remove temporary earth connection applied in 2	--
10. Apply temporary shrouding	21
11. Make and insulate phase connections	29/30
12. Cut and insulate phase conductors in accordance General Requirement 6.14	14
13. Remove temporary shrouding applied in 10	--
14. <b>NOTE: - If the cable is to remain as a Live stop end then an earth rod is to be connected to the neutral/earth wires via a copper earth tail as per Jointing Procedure 7.301.</b>	--
15. Form neutral/earth wires into their final positions	--
16. Abrade and build-up oversheaths	32

## **JOINTING PROCEDURE 8.101 – Continued**

<b>Actions</b>	<b>General Requirements (ST: CA1C)</b>
17. Thoroughly degrease the joint	35
18. Apply mastic water block to copper earth tail	33
19. Remove temporary binders	--
20. Prepare and fit shell, ensuring 15mm clearance	36
21. Mix and pour resin.	37

All dimensions in mm



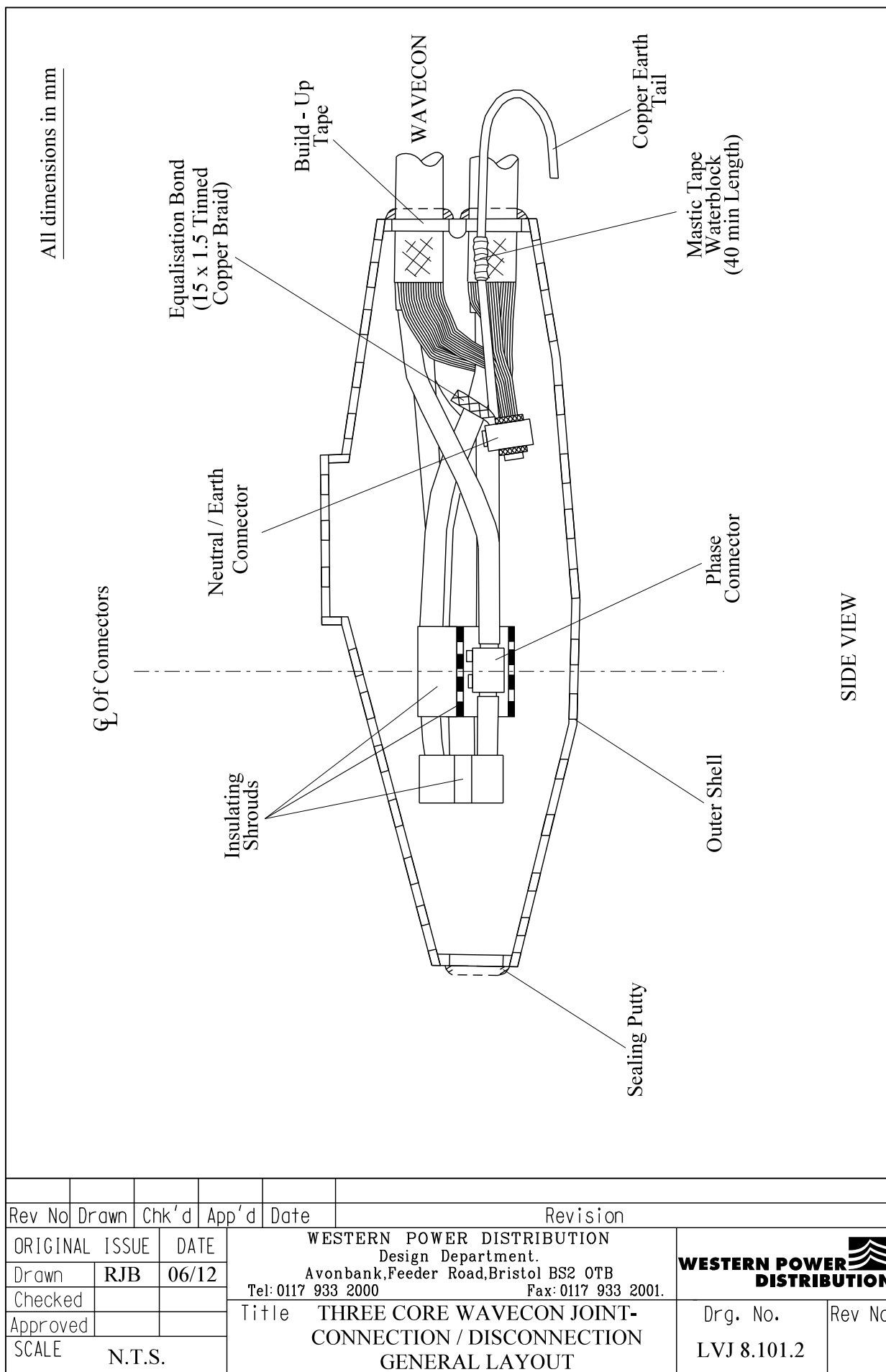
CABLE SIZE		A	B
95 mm <sup>2</sup>	70 - 95 mm <sup>2</sup>	435	325
	70 - 185 mm <sup>2</sup>	475	425
185 mm <sup>2</sup>	300 mm <sup>2</sup>	525	525
	70 - 185 mm <sup>2</sup>	475	425
300 mm <sup>2</sup>	300 mm <sup>2</sup>	525	525
	70 - 300mm <sup>2</sup>	525	525

NOTE:- Where The Jointing Of Dissimilar Size Cables Is Required All Dimensions Will Be Taken To The Largest Cable Size.

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## **APPENDIX A**

### **SUPERSEDED DOCUMENTATION**

This Standard Technique supersedes ST:CA1AB dated January 2012 which should now be withdrawn.

## **APPENDIX B**

### **ASSOCIATED DOCUMENTATION**

ST: CA1B, ST: CA1C/5, ST: CA1 D, ST: CA1E, ST: CA1F, ST: CA1G, ST: CA1H, ST: CA1I, ST: CA1U, ST: CA1W, ST: CA1X, ST: CA1Y, ST: CA1Z, ST: CA1AA, ST: CA1AB, ST: CA7A, ST: CA7B, ST: CA7C, ST: CA7D.

## **APPENDIX C**

### **IMPACT ON COMPANY POLICY**

None, as this document has formalised procedures which have been undertaken in the past.

## **APPENDIX D**

### **IMPLEMENTATION OF POLICY**

This Standard Technique shall be communicated to all relevant WPD engineers and site staff at the next Team Briefing by the Team Manager.

## **APPENDIX E**

### **KEY WORDS**

LV Mains three core Wavecon connection/disconnection joints.

## **APPENDIX F**

### **DOCUMENT LAST REVIEWED**

June 2012