

GENERAL INTRUCTIONS

USE A PROPANE (PREFERRED) OR BUTANE GAS TORCH.

ENSURE THE TORCH IS ALWAYS USED IN A WELL-VENTILATED ENVIRONMENT.

ADJUST THE TORCH TO OBTAIN A SOFT BLUE FLAME WITH A YELLOW TIP.

PENCIL LIKE BLUE FLAME SHOULD BE AVOIDED.

KEEP THE TORCH AIMED IN THE SHRINK DIRECTION TO PREHEAT THE MATERIAL.

KEEP THE FLAME MOVING CONTINUOUSLY TO AVOID SCORCHING THE MATERIAL.

CLEAN & DEGREASE ALL PARTS THAT WILL COME INTO CONTACT WITH ADHESIVE.

IF A SOLVENT IS USED FOLLOW THE MANUFACTURER'S HANDLING INSTRUCTIONS.

TUBING SHOULD BE CUT SMOOTHLY WITH A SHARP KNIFE LEAVING NO JAGGED EDGES.

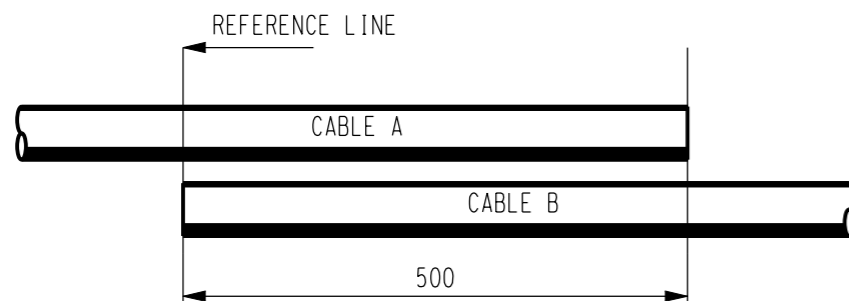
START SHRINKING THE TUBING AT THE POSITION RECOMMENDED IN THE INSTRUCTION.

ENSURE THAT THE TUBING IS SHRUNK SMOOTHLY ALL AROUND BEFORE CONTINUING ALONG THE CABLE.

TUBING SHOULD BE SMOOTH AND WRINKLE FREE WITH INNER COMPOENTS CLEARLY DEFINED.

1 CABLE PREPARATION

CUT THE CABLE TO ALLOW A 500 mm OVERLAP AS SHOWN.



12kV

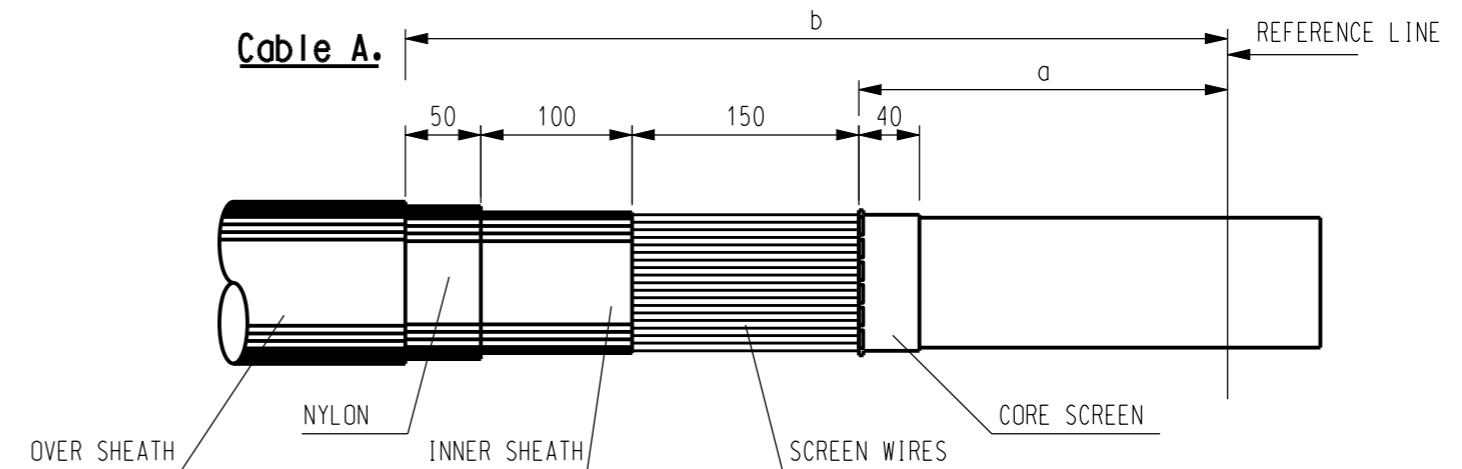
KIT NUMBER	KIT RANGE mm ²	a mm	b mm	c mm	l mm
PAWA 22	95-240	170	470	320	60
PAWA 21	240-400	190	490	340	80

24kV

KIT NUMBER	KIT RANGE mm ²	a mm	b mm	c mm	l mm
PAWA 24	25-95	160	460	310	30
PAWA 23	95-240	190	490	340	60

(TABLE 1)

2



Cable A.

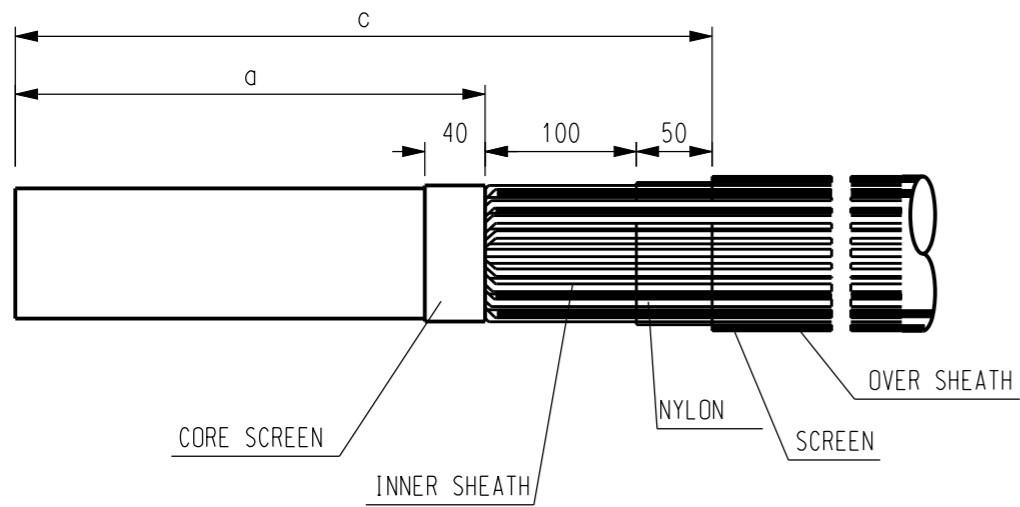
REMOVE THE OVERSHEATH "b" mm FROM THE REFERENCE LINE.
 CLEAN THE REMAINING OVERSHEATH FOR ABOUT 600mm
 REMOVE THE NYLON & INNER SHEATH TO THE DIMENSIONS AS SHOWN.
 APPLY A WIRE BINDER AROUND THE SCREEN WIRES 150mm FROM THE END OF THE INNER SHEATH.
 CUT THE SCREEN WIRES LEVEL WITH THE WIRE BINDER.
 CUT THE CORE AT THR REFERENCE LINE.
 THOROUGHLY REMOVE THE CORE SCREEN 40mm FROM THE END OF THE SCREEN WIRES, SO THAT
 THE INSULATION SURFACE IS FREE FROM ALL TRACES OF CONDUCTIVE MATERIAL.

NOTE: DO NOT NICK THE INSULATION!

						DES R.S.		POWER STANDARD DRAWING	
						DRN K.I		CABLE JOINTING & TERMINATION RAYCHEM CABLE JOINING KIT FOR SINGLE CORE CABLE WITH SHEAR BOLT	
						CKD R.S.			
						APPD S.C.			
						SCALE N.T.S.			
						ISSUED MAR'07		A3 DRAWING	
						ALL DIM. IN mm		NUMBER 902-2-2-49	
						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT — DO NOT AMEND MANUALLY	
1	SUPERSEDED	A.T.	DEC'12	B.C.	B.C.				
B	RE-ISSUED FOR COMMENTS	K.I.	11-4-07	R.S.	S.C.				
NO	DESCRIPTION	DRN	DATE	CKD	APPD				
AMENDMENTS									



5 Cable B.

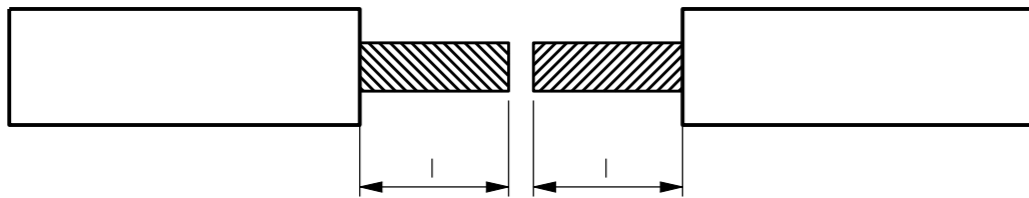


Cable B.

REMOVE THE OVERSHEATH "c" mm FROM THE REFERENCE LINE.
 REMOVE THE NYLON & INNER SHEATH TO THE DIMENSIONS AS SHOWN.
 BEND BACK THE SCREEN WIRES ONTO THE OVERSHEATH AND TEMPORARY TAPE INTO PLACE.
 THOROUGHLY REMOVE THE CORE SCREEN 40mm FROM THE END OF INNER SHEATH SO THAT
 THE INSULATION SURFACE IS FREE FROM ALL TRACES OF CONDUCTIVE MATERIAL.

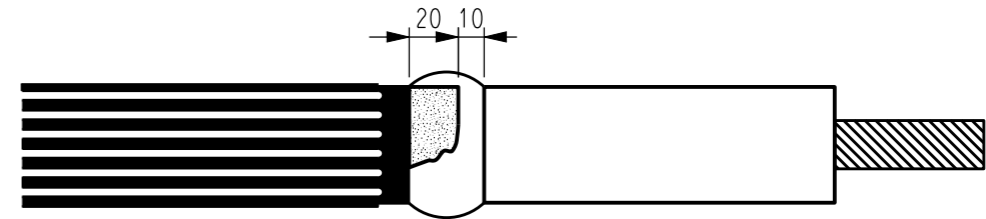
NOTE: DO NOT NICK THE INSULATION!

4



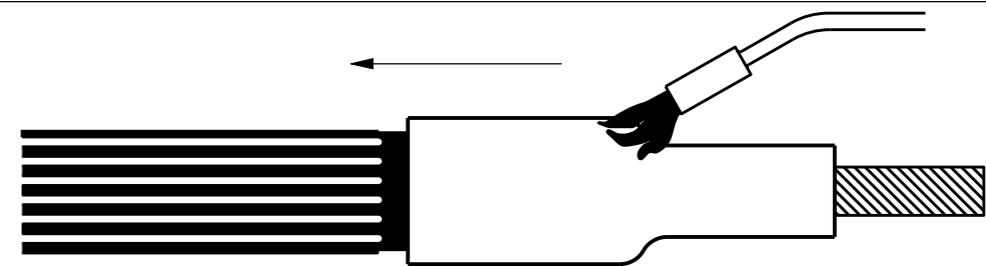
MEASURE THE CONDUCTOR BORE DEPTH OF THE CONNECTOR AND REMOVE
 THE INSULATION ON BOTH CORES EQUAL TO INSERT DEPTH l (SEE TABLE).

5



TAKE THE YELLOW VOID FILLING STRIP FROM THE ALU FOIL PACKET.
 REMOVE THE RELEASE PAPERS FROM THE STRIP WITH THE POINTED ENDS.
 WRAP THE VOID FILLER AROUND THE CORE SCREEN STARTING 20mm
 FROM THE END OF THE SCREEN AND CONTINUE ONTO THE INSULATION
 FOR 10mm.
 STRETCH THE STRIP TO HALF OF ITS ORIGINAL WIDTH TO ACHIEVE A FINE
 THIN EDGE.

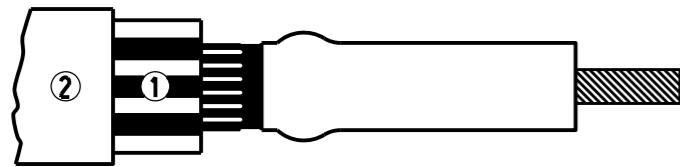
6



SLIDE THE STRESS CONTROL TUBING (BLACK) OVER THE PLASTIC CABLE
 CORE LEVEL WITH THE END OF THE INSULATION CUT BACK.
 SHRINK DOWN STARTING FROM THE INSULATION CUT BACK TOWARDS
 THE OVERSHEATH AS SHOWN IN DRAWING.

						DES R.S.		POWER STANDARD DRAWING			
						DRN K.I.		CABLE JOINTING & TERMINATION RAYCHEM CABLE JOINING KIT FOR SINGLE CORE CABLE WITH SHEAR BOLT CONNECTOR			
						CKD R.S.					
						APPD S.C.					
						SCALE N.T.S.					
						ISSUED MAR'07		A3	DRAWING NUMBER 502-2-2-49		
						ALL DIM. IN mm			NUMBER (SHEET 2 OF 5)		
						DRAFTING STANDARD TO A.S.1100		CAD PRODUCT — DO NOT AMEND MANUALLY			AMDT
1	SUPERSEDED	A.T.	DEC'12	B.C.	B.C.						
B	RE-ISSUED FOR COMMENTS	K.I.	11-4-07	R.S.	S.C.						
NO	DESCRIPTION	DRN	DATE	CKD	APPD						
AMENDMENTS											

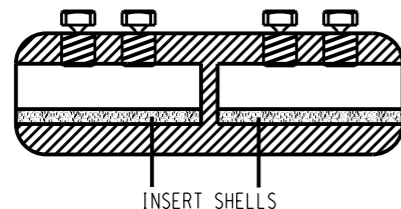
7



COMPLETION OF JOINT

SLIDE A COMBINED TUBING SET OVER ONE PLASTIC CABLE CORE.
 1 - SCREENED INSULATION SLEEVE (BLACK & RED)
 2 - OUTER SLEEVE (BLACK)

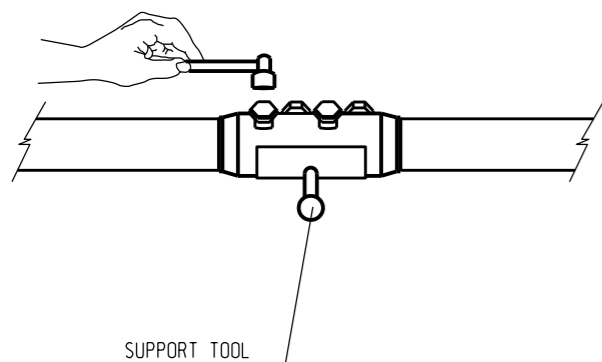
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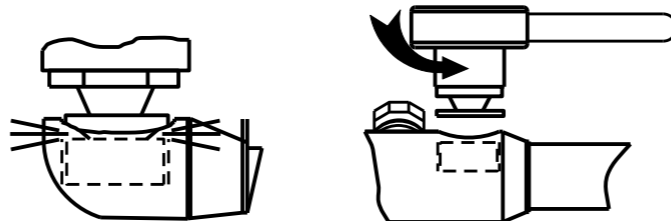
INSTALLATION OF THE MECHANICAL CONNECTOR

THE CONNECTOR IS SUPPLIED WITH INSERT HALF SHELLS WHICH HAVE TO BE USED ON SMALL CROSS SECTIONS.
 CHECK BEFORE INSTALLATION IF THE CONDUCTOR CAN BE INSERTED INTO THE CONNECTOR WITH HALF SHELLS INSTALLED.
 IN CASE THE CONDUCTOR CAN NOT BE INSERTED, REMOVE THE INSERTS FROM THE CONNECTOR BORE.

9



10



CLEAN AND ABRASE SURFACE OF THE EXPOSED CONDUCTORS.

INSERT CONDUCTORS SO THAT THE INSULATION BUTTS UP WITH THE END OF THE CONNECTOR. HAND TIGHTEN THE SHEAR BOLTS SO THAT THE CONNECTOR STAYS IN PLACE.

FOR CONNECTORS USING MORE THAN ONE SHEAR BOLT PER SIDE, TIGHTEN THE BOLTS ALTERNATELY AND SHEAR THEM OFF STARTING WITH THE OUTER BOLTS (SEE ALSO SEQUENCE SHOWN IN THE DRAWING).

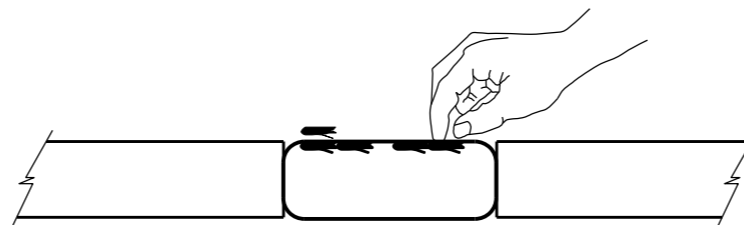
NOTES

- WHEN A CORDLESS IMPACT WRENCH IS IN USE THE TIGHTENING INTERVALS SHOULD BE IN THE RANGE OF 2 SECONDS.
- AVOID CORE BENDING ON SMALLER CROSS SECTIONS BY USING A SUPPORT TOOL AVAILABLE.

SMOOTH OUT ANY SHARP EDGES OF PROTRUDING BOLTS WHERE APPROPRIATE. CLEAN AND DEGREASE THE CONNECTOR AREA AND THE INSULATION WITH A CLEANING WIPE.

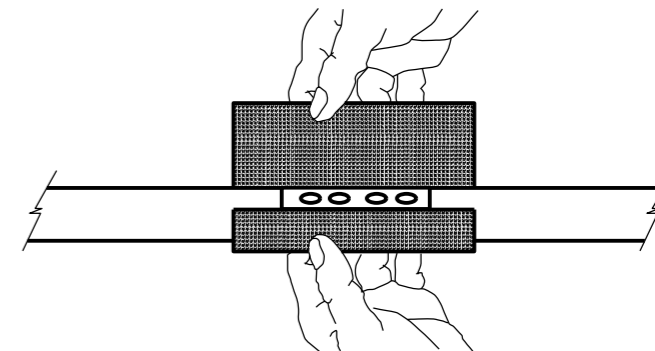
IT COULD BE POSSIBLE THAT THE BOLT SHEARS BUT THE TOP IS RETAINED IN THE CONNECTOR BODY. IN THAT CASE UNSCREW THE HEAD OF THE BOLT UNTIL IT IS REMOVED FROM THE CONNECTOR.

11



CLEAN AND DEGREASE THE CABLE CORES AND THE CONNECTOR. FILL RAYCHEM CLAY OVER THE SHEARED OFF BOLTS TO OBTAIN A SMOOTH FINISH.

12



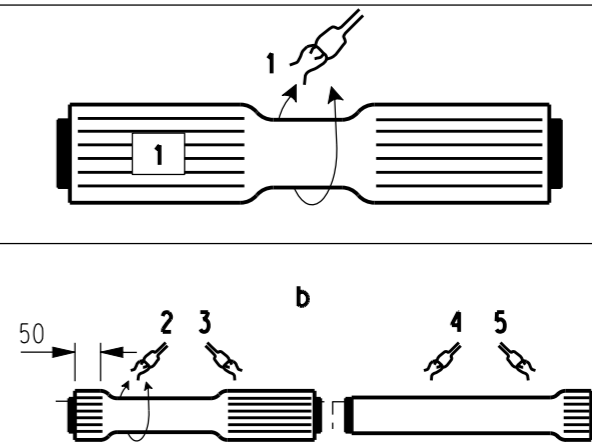
REMOVE THE RELEASE PAPER FROM THE STRESS GRADING PATCH (BLACK). POSITION THE PATCH CENTRALLY OVER THE CONNECTOR AREA.

NOTE IN CASE OF RECTANGULAR PATCH APPLY THE LONG SIDE ACROSS THE CONNECTOR.

WRAP THE PATCH OVER THE CONNECTOR AREA STRATING AT THE CONNECTOR BOLTS.

NOTE DO NOT STRECH THE PATCH.

13



POSITION THE SCREENED INSULATING SLEEVE (BLACK AND RED) CENTRALLY OVER THE CONNECTOR AREA.

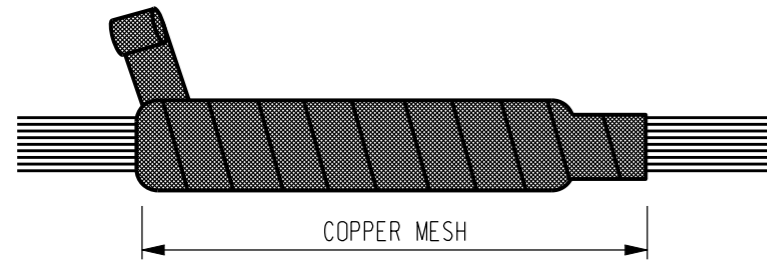
- a. START SHRINKING THE SLEEVE IN THE CENTRE (1).
- b. CONTINUE SHRINKING BY WORKING TOWARDS ONE SIDE (2). STOPPING 50mm FROM THE END. SHRINK THE OTHER HALF IN THE SAME WAY (3).
- c. SHRINK DOWN THE FIRST END (4) AND FINALLY THE SECOND (5). THE SLEEVE SHOULD BE FULLY SHRUNK WITHOUT LEAVING RIDGES.

1	SUPERSEDED	A. T.	DEC'12	B. C.	B. C.
B	RE-ISSUED FOR COMMENTS	K. I.	11-4-07	R. S.	S. C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					

DES	R. S.	POWER STANDARD DRAWING		
DRN	K. I.	CABLE JOINTING & TERMINATION RAYCHEM CABLE JOINING KIT FOR SINGLE CORE CABLE WITH SHEAR BOLT CONNECTOR		
CKD	R. S.			
APPD	S. C.			
SCALE	N. T. S.			
ISSUED	MAR'07			
ALL DIM. IN mm	A3	DRAWING NUMBER	S02-2-2-49	(SHEET 3 OF 5)
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT — DO NOT AMEND MANUALLY		1 AMDT

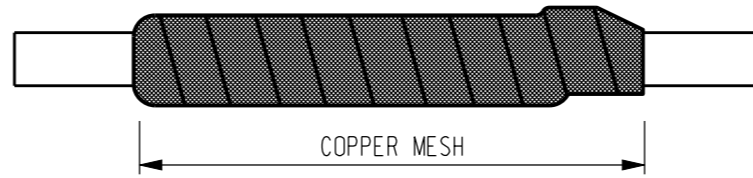


14



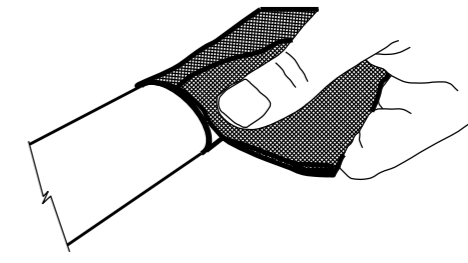
REMOVE THE BINDER FROM THE END OF THE SCREEN WIRES ON CABLE 'A' AND TWIST THEM TOGETHER TO FORM A SINGLE EARTH CONDUCTOR. WRAP A SHORT LENGTH OF OVERSHEATH OVER THE EXPOSED CORE SCREEN. WRAP ONE LAYER OF COPPER MESH AROUND THE JOINT WITH A 50% OVERLAP SO THAT THE WHOLE JOINT AREA IS COVERED FROM INNER SHEATH TO INNER SHEATH.

17



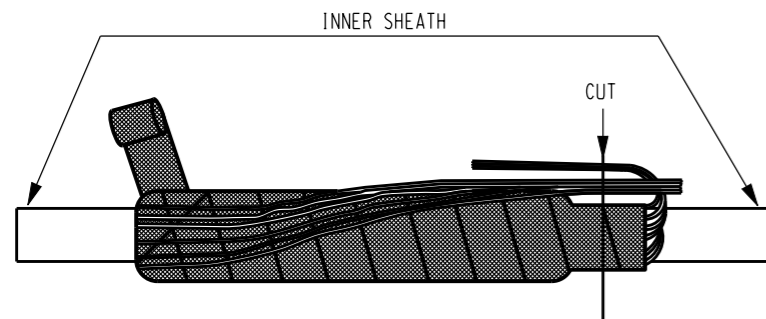
WRAP A SECOND LAYER OF COPPER MESH ROUND THE JOINT WITH A 50% OVERLAP. COVER THE COMPLETE JOINT AREA INCLUDING THE MECHANICAL SHIELD CONNECTOR.

20



WRAP THE FLAP AROUND THE CABLE.

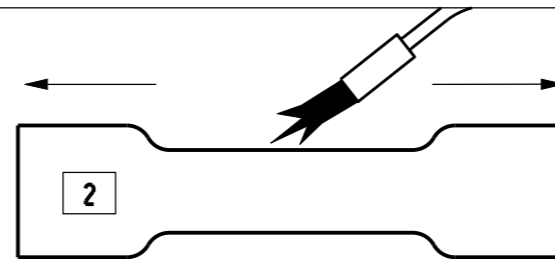
15



CABLE SIDE WITH LONG SHIELD WIRES:
BEND THE SHIELD WIRES BACK OVER THE JOINT AREA.
CABLE SIDE WITH SHORT SHIELD WIRES:
BEND THE SHIELD WIRES BACK OVER THE JOINT AREA CLOSE TO THE COPPER MESH.

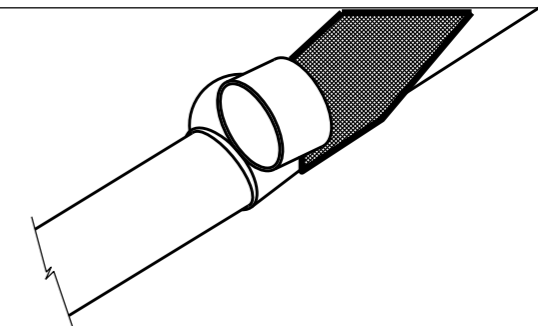
GATHER THE WIRES TOGETHER AND CUT THEM IN PREPARATION FOR JOINING.

18



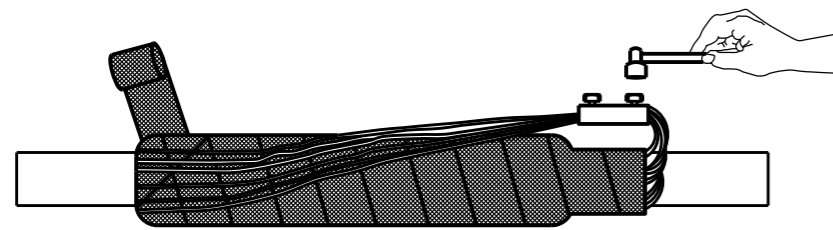
CLEAN AND DEGREASE THE INNER SHEATH. CENTRE THE OUTER SLEEVE (BLACK) OVER THE COPPER MESH AREA. START IN THE CENTRE, WORKING TOWARDS THE END.

21



WRAP THE ROLL SPRING AROUND THE END OF THE MESH IN THE SAME DIRECTION AS THE FLAP. TIGHTEN THE ROLL SPRING WITH A TWISTING ACTION AND COVER WITH THE COTTON FABRIC TAPE.

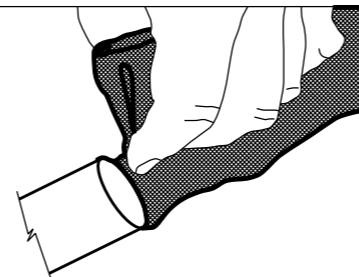
16



INSERT EACH END INTO THE MECHANICAL SHIELD CONNECTOR SUPPLIED. TIGHTEN THE BOLTS WITH AN ALLEN KEY UNTIL THE HEADS SHEAR OFF.

NOTE: THE CONNECTOR SHOULD BE POSITIONED IN THE AREA ABOVE THE SHORT LENGTH OF THE OVERSHEATH.

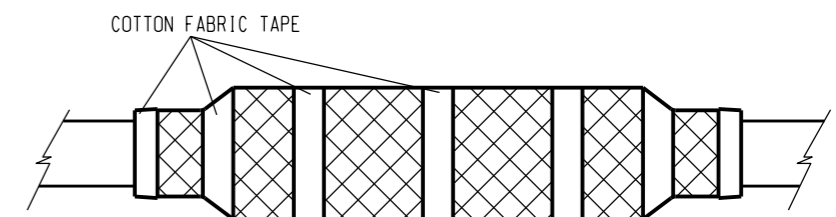
19



CENTRE THE TERMIMESH SLEEVE OVER THE JOINT WITH THE SEAM ON TOP. THE SLEEVE SHOULD OVERLAP THE NYLON SHEATH EQUALLY ON BOTH SIDES OF THE JOINT. CUT THE TERMIMESH SLEEVE TO BE FLUSH WITH THE NYLON OVERSHEATH CUTBACK.

NOTE: THE MESH SHOULD NOT OVERLAP ONTO THE OVERSHEATH. PULL BACK THE MESH UP AGAINST THE CORE. SQUEEZE THE MESH TOGETHER ON TOP OF THE CABLE TO FORM A FLAP.

22



REPEAT 19 AND 21 ON THE OTHER SIDE OF THE JOINT.

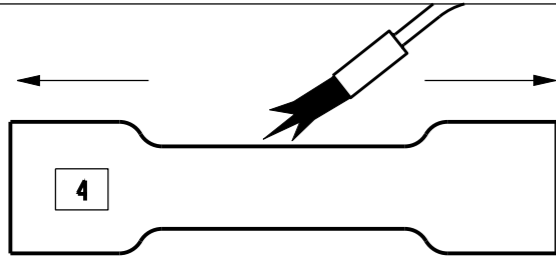
THE EXCESS MESH IN THE CENTRE OF THE JOINT SHOULD BE FOLDED OVER AND HELD IN PLACE USING THE COTTON FABRIC TAPE.

1	SUPERSEDED	A. T.	DEC'12	B. C.	B. C.
B	RE-ISSUED FOR COMMENTS	K. I.	11-4-07	R. S.	S. C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					

DES	R. S.	POWER STANDARD DRAWING		
DRN	K. I.			
CKD	R. S.	CABLE JOINTING & TERMINATION RAYCHEM CABLE JOINING KIT FOR SINGLE CORE CABLE WITH SHEAR BOLT CONNECTOR		
APPD	S. C.			
SCALE	N. T. S.	A3	DRAWING NUMBER	S02-2-2-49 (SHEET 4 OF 5)
ISSUED	MAR'07			
ALL DIM.	IN mm	CAD PRODUCT — DO NOT AMEND MANUALLY		
DRAFTING STANDARD TO A.S.1100		AMDT		



23

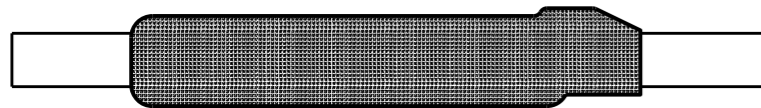


CLEAN AND DEGREASE THE OVERSHEATH.
 CENTRE THE OUTER SLEEVE (BLACK) OVER THE JOINT AREA.
 START SHRINKING IN THE CENTRE, WORKING TOWARDS THE END.

INSTALL THE ROLL SPRING IN THE SAME DIRECTION AS THE MASH FLAP.

REPEAT THE ABOVE PROCEDURE ON THE OTHER SIDE OF THE JOINT.

24



JOINT COMPLETED.
 ALLOW THE JOINT TO COOL BEFORE APPLYING ANY MECHANICAL STRAIN.

	1	SUPERSEDED	A.T.	DEC'12	B.C.	B.C.	PowerWater	DES	R.S.	POWER STANDARD DRAWING			
	B	RE-ISSUED FOR COMMENTS	K.I.	11-4-07	R.S.	S.C.		DRN	K.I.	CABLE JOINTING & TERMINATION RAYCHEM CABLE JOINING KIT FOR SINGLE CORE CABLE WITH SHEAR BOLT CONNECTOR			
NO	DESCRIPTION		DRN	DATE	CKD	APPD	APPD	S.C.	SCALE				N.T.S.
		AMENDMENTS						ISSUED	MAR'07	DRAFTING STANDARD TO A.S.1100		CAD PRODUCT — DO NOT AMEND MANUALLY	