

CLEANLINESS:

CLEANLINESS IN THE WHOLE JOINTING PROCESS OF XLPE CABLES IS CRITICAL TO ACHIEVING RELIABLE JOINTS HAVING A HIGH INSULATION RESISTANCE. JOINTS ARE OFTEN REGARDED AS THE WEAK LINK IN A CABLE CIRCUIT BUT THE WEAKNESS IS USUALLY THE RESULT OF POOR WORKMANSHIP.

IT IS THE JOINER'S RESPONSIBILITY TO ENSURE THAT THE PREPARED CABLE, JOINT COMPONENTS AND THE ASSEMBLY PROCESS ARE CONTAMINATION FREE. CONTAMINATION CAN BE DIRT, WATER, SWEAT OR RUBBINGS OF SEMI-CON OR COPPER WIRES.

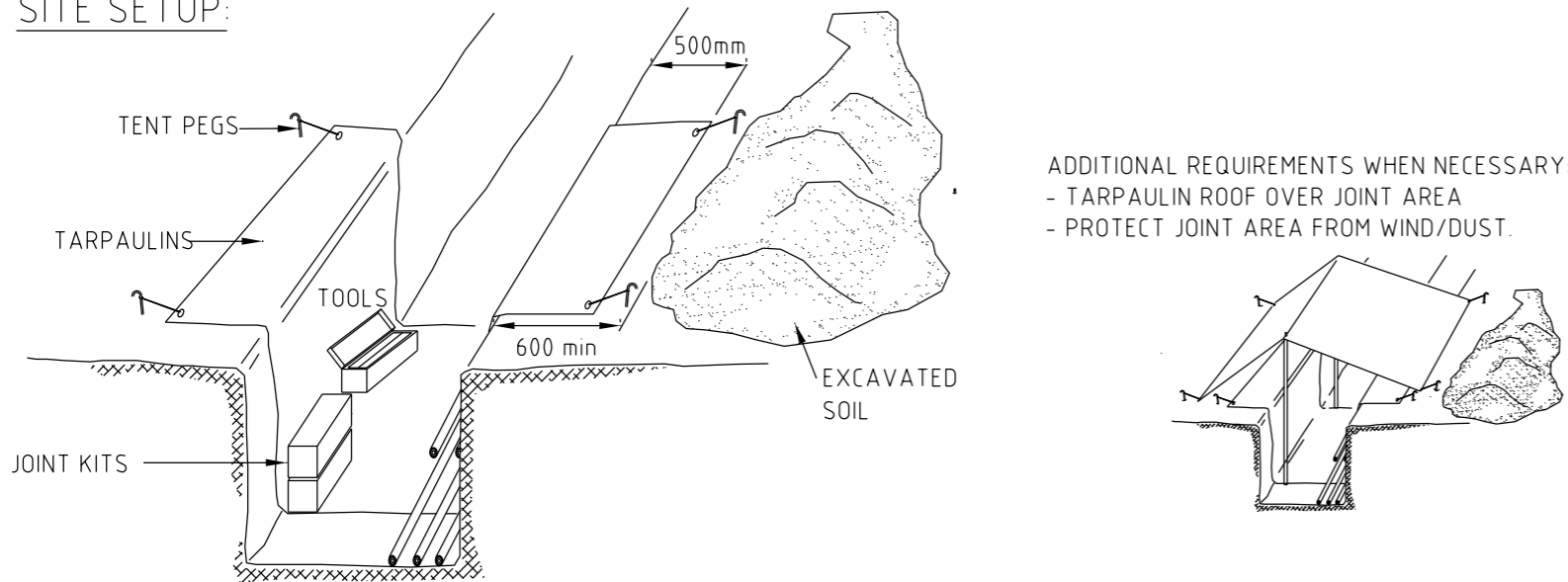
WORK IN A CLEAN ENVIRONMENT, USE TARPAULINS AND PLASTIC SHEETING IN THE WORK AREA. DECLARE A "CLEAN AREA", SET OUT REQUIRED TOOLS AND JOINT KITS AND THEN REFRAIN FROM ENTERING OR EXITING THE AREA UNNECESSARILY.

KEEP YOUR HANDS CLEAN AND DRY WITH PARTICULAR ATTENTION TO HAND CLEANING AFTER ANY "DIRTY" STAGE, EG. CRIMPING AND GREASE REMOVAL.

USE PLASTIC WRAP TO PROTECT PREPARED CABLE AND JOINT COMPONENTS.

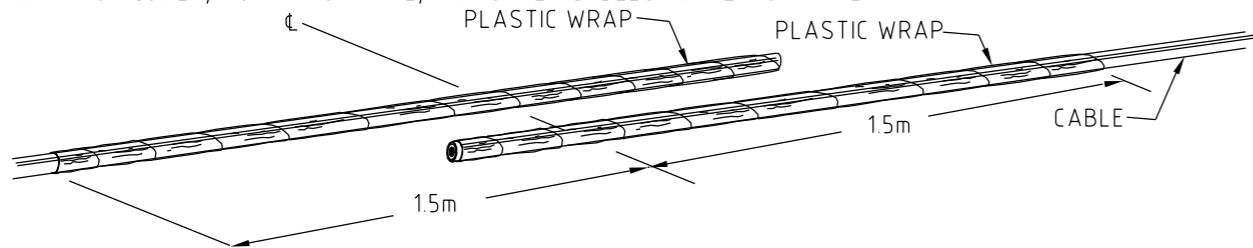
ONCE CABLE AND/OR JOINT COMPONENTS HAVE BEEN PREPARED AND CLEANED DON'T TOUCH THEM WITH YOUR FINGERS/HANDS.

SITE SETUP:



CABLE PREPARATIONS:

CLEAN AND PLASTIC WRAP ALL CABLES TO BE WORKED ON FOR 1.5m EACH SIDE OF THE JOINT CENTRE LINE. PLASTIC WRAP OR COVER, AS APPROPRIATE, ANY OTHER CABLES IN THE WORK AREA.



CRITICAL AREAS OF JOINTING:

SEMI-CON STRIPPING: SEMI-CON IS TO BE STRIPPED GRADUALLY USING APPROPRIATE TOOLING WITH CARE TAKEN TO PREVENT DAMAGE TO INSULATION.

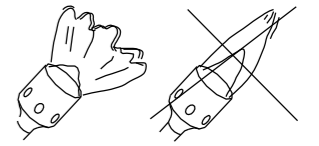
CONDUCTOR PREPARATION: TO PREVENT "HOT JOINTS" IT IS ESSENTIAL TO "WET" WIRE BRUSH THE ALUMINIUM CONDUCTOR BEFORE CRIMPING. APPLY A THIN LAYER OF JOINTING COMPOUND TO THE CONDUCTOR AND VIGOROUSLY WIRE BRUSH THE WHOLE SURFACE - DON'T WIPE IT OFF. APPLY THE CONNECTOR AND CRIMP IMMEDIATELY.

CABLE INSULATION: TREAT THE CABLE INSULATION SURFACE WITH GREAT CARE - ENSURE THAT THE SURFACE IS NOT "NICKED". CLEAN THE INSULATION SURFACE - REFER INSTRUCTION THIS DRAWING. KEEP IT CLEAN WITH TEMPORARY PLASTIC WRAP IF NECESSARY AND DON'T TOUCH THE CLEANED SURFACE WITH YOUR HANDS.

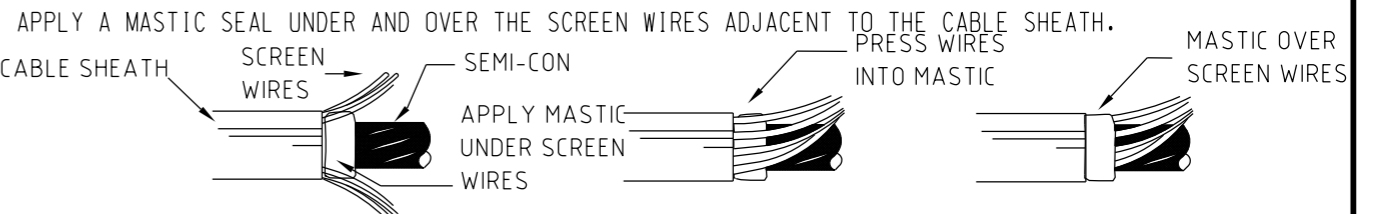
STRESS RELIEF MASTIC: APPLY STRICTLY AS PER THE JOINT INSTRUCTION. REMOVE ONE OF THE PROTECTIVE PAPERS FROM THE STRIP AND ROLL IT UP MASTIC SIDE OUT. DON'T USE EXCESSIVELY, OR TOUCH OR SHAPE IT WITH YOUR FINGERS AFTER APPLIED.

STRESS CONTROL, INSULATION AND INSULATION/SEMI-CON TUBES: THESE TUBES ARE CRITICAL TO THE RELIABILITY OF THE JOINT. AVOID CONTAMINATION INSIDE AND OUTSIDE THE TUBES. PROTECT THEM WHILE PARKED USING PLASTIC WRAP. AVOID TOUCHING THE TUBE SURFACES

HEATING: USE A PROPANE TORCH. ADJUST FOR A SOFT, "FLUFFY" BLUE FLAME WITH A SLIGHT YELLOW TIP. KEEP THE FLAME MOVING TO PREVENT SCORCHING. FULLY SHRINK AROUND THE TUBE BEFORE CONTINUING ALONG THE TUBE.



PREVENTION OF WATER INGRESS:



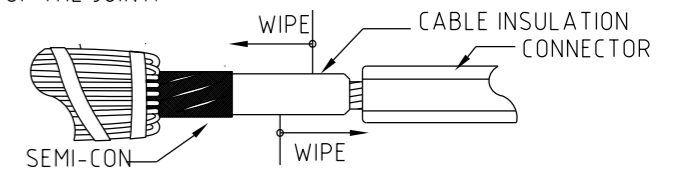
CLEANING METHOD:

THE AIM IS TO PREVENT CONTAMINATED OR CONDUCTING MATERIALS FROM BEING TRANSFERRED ONTO AN INSULATING SURFACE. THIS PROCESS IS CRITICAL TO ACHIEVING HIGH INSULATION RESISTANCE AND PREVENTING PREMATURE FAILURE.

USE A CLEAN RAG MOISTENED WITH SOLVENT (OR CLEANING PAD SUPPLIED IN KIT). START NEAR THE CENTRE OF THE CABLE INSULATION AND CLEAN TOWARDS THE SEMI-CON. DISCARD THE RAG OR PAD. WITH A CLEAN RAG OR NEW PAD START NEAR THE CENTRE OF THE CABLE INSULATION AND CLEAN TOWARDS THE CONNECTOR. DISCARD THE RAG OR PAD. REPEAT AT THE OTHER END OF THE JOINT.

REPEAT IF NECESSARY.

DO NOT WIPE FROM SEMI-CON OR CONNECTOR ONTO THE INSULATION SURFACE



NO	DESCRIPTION	DRN	DATE	CKD	APPD
2	REFORMATTED TEXT. EDITED SEMI-CON STRIPPING DETAILS.	A.N.	JUL'21	A.N.	B.V.
1	TITLEBLOCK & DRAWING NUMBER FORMATTED	K.T.	FEB'19	C.C.	C.C.
AMENDMENTS					



DES	-	POWER STANDARD DRAWING		
DRN	J.A.L.	CABLE JOINTING AND TERMINATIONS GENERAL JOINTING INSTRUCTIONS 11 & 22kV HEAT SHRINK JOINTS		
CKD	A.T.			
APPD	P.J.D			
SCALE	N.T.S.			
ISSUED	DEC'95	A3	DRAWING NUMBER	S02-02-02-20
ALL DIM.	IN mm	DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY

