

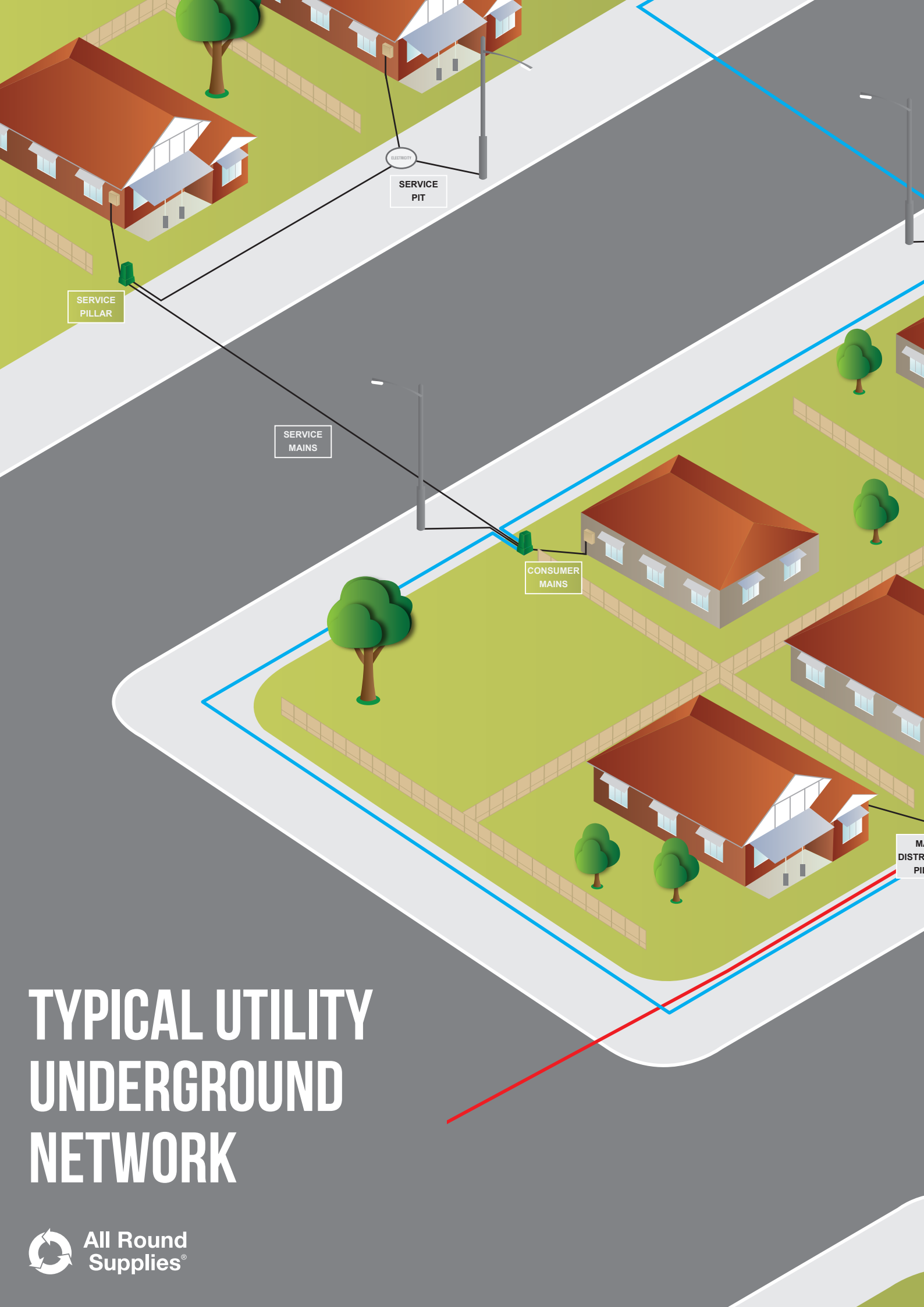


All Round
Supplies

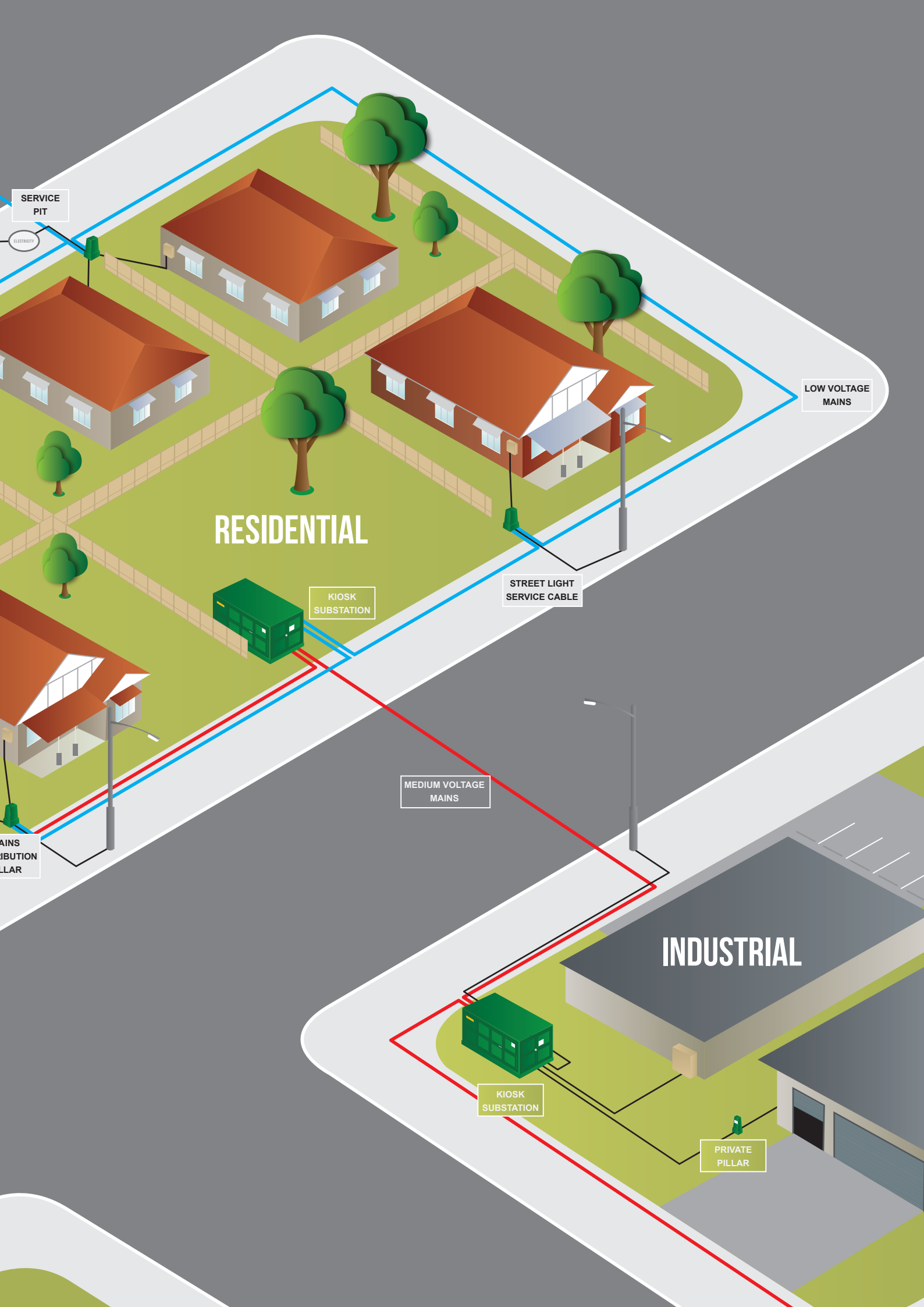
Ausgrid

Low Voltage Underground

Version 3



TYPICAL UTILITY UNDERGROUND NETWORK



SERVICE
PIT

ELECTRICITY

LOW VOLTAGE
MAINS

RESIDENTIAL

KIOSK
SUBSTATION

STREET LIGHT
SERVICE CABLE

MEDIUM VOLTAGE
MAINS

MAINS
DISTRIBUTION
PILLAR

INDUSTRIAL

KIOSK
SUBSTATION

PRIVATE
PILLAR



AUSGRID LOW VOLTAGE UNDERGROUND CATALOGUE

All Round Supplies is your one-stop specialist distributor for all the materials an electrical contractor needs. We carry an extensive range of utility-approved products for use on electrical infrastructure networks across Australia.

Our range of products make it easy for you to complete your overhead or underground project saving you time and money. We are committed to providing you with the best products, brands and service from many of the world's leading manufacturers.

All Round Supplies has a branch network covering Sydney (Prestons), Nowra and Newcastle (Beresfield), each staffed with industry specialists that understand your needs and are waiting to help.

WHAT WE OFFER:

- ▶ Huge range of stock in all branch locations.
- ▶ Project-specific packaging & labelling of deliveries.
- ▶ Coordinate deliveries to meet project deadlines.
- ▶ Kitting and ARSsemblies for ease of ordering.
- ▶ Ability to order in non-stocked items on request.
- ▶ Technical expertise and advice.
- ▶ Utility approved products.

CONTENTS:

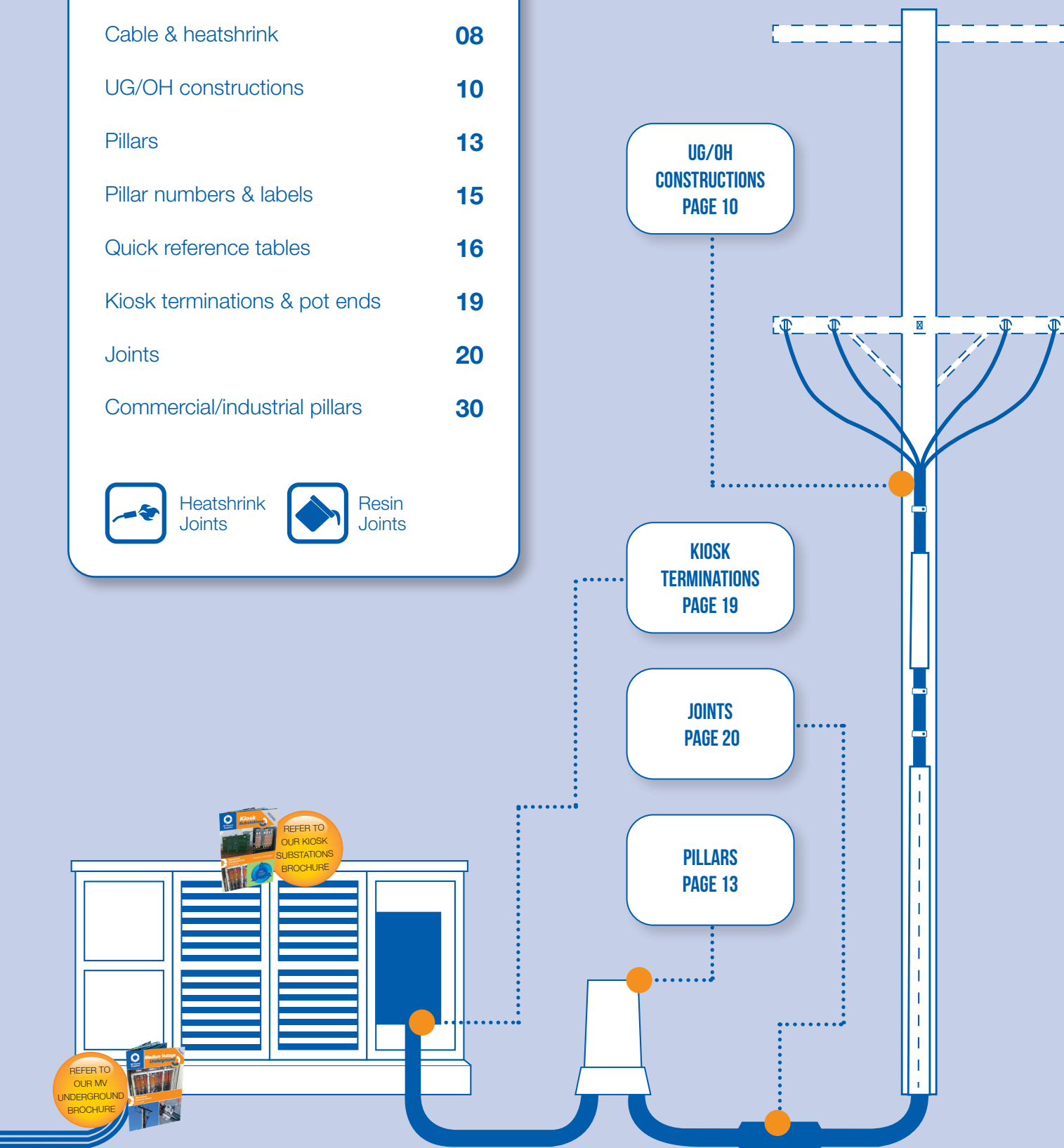
Cable nomenclature	06
Cable examples	07
Cable & heatshrink	08
UG/OH constructions	10
Pillars	13
Pillar numbers & labels	15
Quick reference tables	16
Kiosk terminations & pot ends	19
Joints	20
Commercial/industrial pillars	30



Heatshrink Joints



Resin Joints



AUSGRID CABLE NOMENCLATURE

WHAT THE CODE LETTERS MEAN:

415V	240	AL3	XQ	CU (NW)	Z	/SAC
Voltage rating	Conductor size (mm ²)	Conductor type & no. of cores	Insulation	Neutral or screen wires (if applicable)	Sheath	Other information (if applicable)

BEFORE SLASH /

PHASE-TO-PHASE VOLTAGE, CROSS-SECTIONAL AREA (MM²), NUMBER OF CORES, INSULATING AND PROTECTING LAYERS.

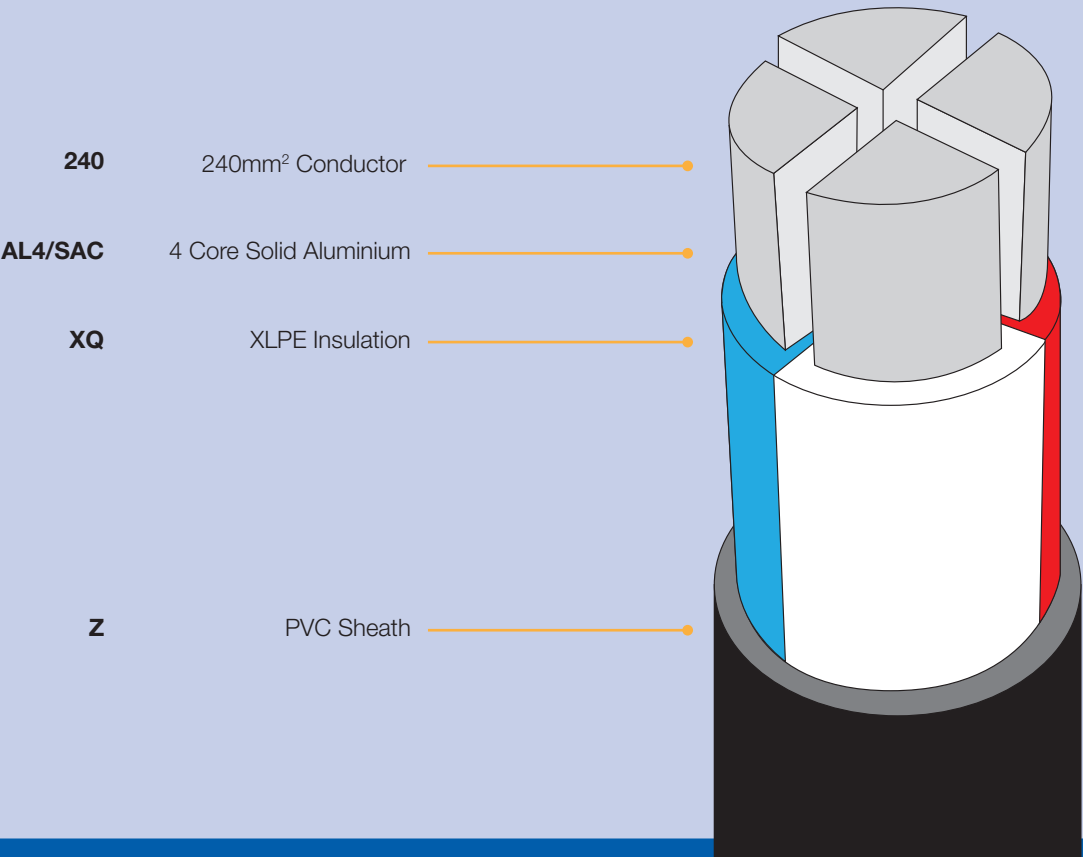
AL	Aluminium
AW	Alumoweld
BR	Butyl Rubber
CDCU	Cadmium Copper
CM	Cambric
CQ	Cellular Polythene
CU	Copper
CW	Copper Weld
DB	Double Brass Tape
DRT	Double Steel Reinforcing Tape
DT	Double Steel Tape Armour
DW	Double Steel Wire Armour
E	Thermo Plastic Elastomer
EPR	Ethylene Propylene Rubber
F	Filled Core
FE	Steel
FO	Fibre Optic Equipped
G	Semiconductive Screen
H	Hochstadter Screen
J	Jute or Hessian Sheath
L	Lead Sheath
MB	Moisture Barrier

MF	Water Swellable Yarns Medium-Density Polyethylene
MQ	Concentric Neutral
(N)	Wavewound Concentric Neutral
(NW)	Nylon (Termite Barrier)
NY	Paper Insulation
P	Polyethylene/Aluminium Tape Laminate Sheath
PA	Pair
PR	Polyethylene Insulation
Q	Rubber Insulation
R	Single Fibre-reinforced Plastic Rod Armour
SF	Single Lead Sheath
SL	Stainless Steel Sheath
SS	Single Steel Tape Armour
ST	Single Steel Wire Armour
SW	Tough Rubber Insulation
TR	Tree Retardant Cross-Linked Polyethylene
TRXQ	Taped Screen
(TS)	Stranded Wire Screen
(WS)	Cross-linked Polyethylene
XQ	High-density Polyethylene
YQ	Polyvinyl Chloride (PVC)
Z	

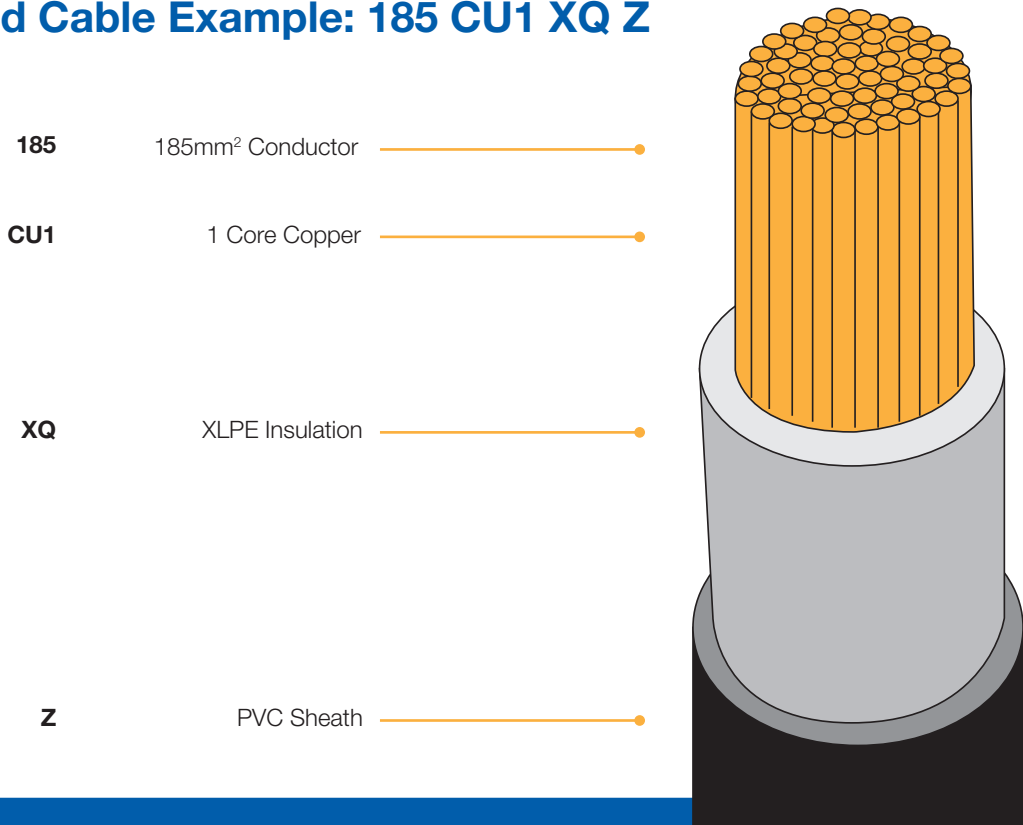
/ AFTER SLASH

SAC	Solid Aluminium Conductor
TX	Triplex
LDS	Light Duty Individual Screen
ZFR	Fire Retardant PVC
ISC	Individually Screen Cores
COM	Compacted Conductor
HDS	High Duty Individual Screen

Ausgrid Cable Example: 240 AL4 XQ Z/SAC



Ausgrid Cable Example: 185 CU1 XQ Z



Cable - LV Underground

Description	Cable Diameter	Code	Unit of Measure
415V 240 AL4 XQ Z/SAC	50mm	02727N	M
415V 185 CU1 XQ Z	24mm	02462N	M
415V 185 CU1 XQ Z (Cut in House)	24mm	02462C	M
415V 50 CU4 XQ Z	31mm	00111N	M
415V 50 CU4 XQ Z (Cut in House)	31mm	00111C	M
415V 16 CU4 XQ Z	22mm	06864N	M
415V 16 CU4 XQ Z	22mm	00681N	M
415V 16 CU2 XQ Z	19mm	06673N	M
415V 16 CU2 XQ Z	19mm	06790N	M

Triple End Seal Kits

Description	Code	Unit of Measure
TRIPLE END SEAL, 95-240 MULTICORE	05038	Each
TRIPLE END SEAL, 185-300 4X1C LV CABLE	07816	Each
WIRE, FUSE 80AMP 1.63MM	03793	Coil 0.5kg

Heatshrink End Caps – Adhesive Lined

Description	Code	Unit of Measure
HEATSHRINK,END CAP 4-8 OD BLK LIN	04072	Each
HEATSHRINK,END CAP 8-17 OD BLK LIN	02646	Each
HEATSHRINK,END CAP 17-30 OD BLK LIN	02194	Each
HEATSHRINK,END CAP 30-45 OD BLK LIN	02422	Each
HEATSHRINK,END CAP 45- 65 OD BLK LIN	00197	Each
HEATSHRINK,END CAP 65-95 OD BLK LIN	02496	Each
HEATSHRINK,END CAP 95-115 OD BLK LIN	05034	Each

Heatshrink Tubing - Adhesive Lined

Description	Code	Unit of Measure
HEATSHRINK,TUBE LV 35/12MW BLK LND 1.2M	00318	1.2m Lgth
HEATSHRINK,TUBE LV 50/16MW BLK LND 1.2M	00129	1.2m Lgth
HEATSHRINK,TUBE LV 63/19MW BLK LND 1.2M	00547	1.2m Lgth
HEATSHRINK,TUBE LV 140/42MW BLK LND 1.5M	04892	1.5m Lgth

ELECTRICAL SHORTING AND MOISTURE SEALING CABLES

In accordance with The Ausgrid network standards all power and control cables shall be protected against moisture ingress at all times, including while being laid, regardless of site and/or weather conditions.

Cable ends which are not intended to be worked on immediately after laying must be electrically shorted and sealed against moisture ingress as soon as they are cut. This requirement applies to all cable ends, including cables in pillars and pillar-standards, cables intended to be abandoned or temporarily decommissioned, and cables still on cable drums.

The seals and electrical shorts must not be removed until the cables are

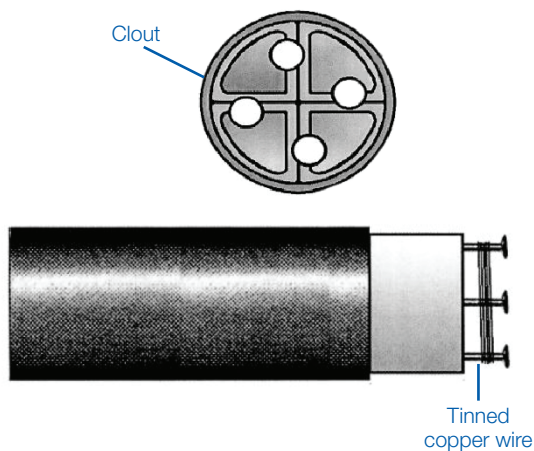
ready to be connected. Stripping of the outer sheathing of LV service cables and connection of any of the cores must not be carried out until connection of supply is required.

Where LV cables/service cables enter a customer's premises, the cable shall be at least single sealed to avoid the risk of water entering the premises via the cable.

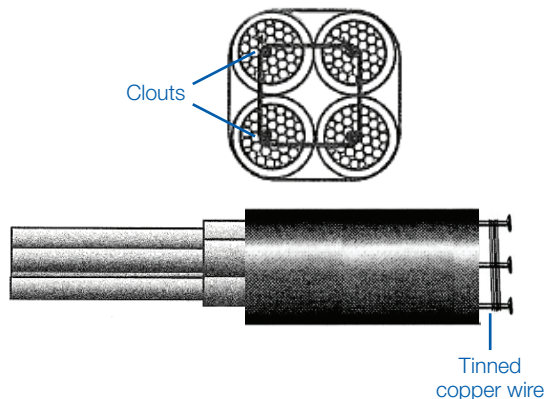
A triple end seal arrangement is required for all HV cables. A triple end seal arrangement is required for all exposed LV Distributor cables. Only a single seal cap is required for LV Distributor cables which are enclosed (e.g. cables left in a LV pillar or inside a kiosk for future connection).

ELECTRICAL SHORTING OF CABLES

4 core solid conductor cables



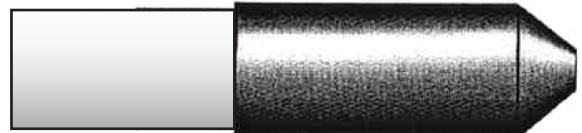
4 x 1 core single cables



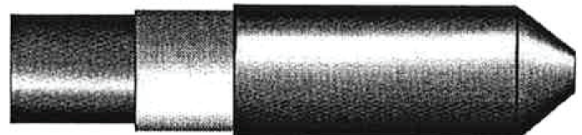
MOISTURE SEALING OF CABLES

Note that cable surfaces which will come into contact with adhesive-lined heatshrink components must be thoroughly cleaned, then degreased and abraded before applying the heatshrink components.

Single end seal



4 core triple end seal*



4 x 1 core triple end seal*



*Triple end seals shall be constructed in accordance with the installation instruction supplied in the triple end seal kit.



UG/OH CONSTRUCTIONS

UG/OH Construction - Service Cable Connections (LV1-14)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 16 CU XLPE 1 X 150 ABC NM	LV1-14	A3002	Kit
AUSLVUGOH 4C 16 CU XLPE 1 X 95 ABC NM	LV1-14	A3003	Kit
AUSLVUGOH 4C 16 CU XLPE TO BARE AL NM	LV1-14	A3004	Kit
AUSLVUGOH 4C 16 CU XLPE TO BARE CU NM	LV1-14	A3005	Kit
AUSLVUGOH 4C 50 CU XLPE 1 X 150 ABC NM	LV1-14	A3006	Kit
AUSLVUGOH 4C 50 CU XLPE 1 X 95 ABC NM	LV1-14	A3007	Kit
AUSLVUGOH 4C 50 CU XLPE TO BARE AL NM	LV1-14	A3008	Kit
AUSLVUGOH 4C 50 CU XLPE TO BARE CU NM	LV1-14	A3009	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC or 240 CU4 XQ Z to Bare OH Mains (LV1-43)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 SOL AL XLPE 50-70 CU NM	LV1-43	A3010	Kit
AUSLVUGOH 4C 240 SOL AL XLPE 70-95 CU NM	LV1-43	A3011	Kit
AUSLVUGOH 4C 240 SOL AL XLPE BARE AL NM	LV1-43	A3012	Kit
AUSLVUGOH 4C 240 CU XLPE BARE AL NM	LV1-43	A3013	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC to Single Circuit of LVABC (LV1-70)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 SOL AL XLPE 1X150ABC NM	LV1-70	A3014	Kit
AUSLVUGOH 4C 240 SOL AL XLPE 1X95ABC NM	LV1-70	A3015	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC to Double Circuit of LVABC (LV1-44)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 SOL AL XLPE 2X95ABC NM	LV1-44	A3016	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC to Single Circuit of LVABC with Switch (LV1-71)



Description	Ausgrid Ref	Non-Metallic Guard	Unit of Measure
AUSLVUGOH 4C 240 SOL AL-1X150ABC SW NM	LV1-71	A3017	Kit
AUSLVUGOH 4C 240 SOL AL-1X95ABC SW NM	LV1-71	A3018	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC to Double Circuit of LVABC with Switch (LV1-46)



Description	Ausgrid Ref	Non-Metallic Guard	Unit of Measure
AUSLVUGOH 4C 240 SOL AL-2X95ABC SW NM	LV1-46	A3019	Kit

UG/OH Construction - 240 AL4 XQ Z/SAC to Bare OH Mains with Switch (LV1-5)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 SOL AL-2XBARE AL SW NM	LV1-5	A3020	Kit
AUSLVUGOH 4C 240 SOL AL-2XBARE CU SW NM	LV1-5	A3021	Kit

UG/OH Construction - Single Core Cables to Bare OH Mains (LV1-3)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU SDI TO 50-70 CU NM	LV1-3	A3022	Kit
AUSLVUGOH 4X1C 185 CU SDI TO 70-95 CU NM	LV1-3	A3023	Kit
AUSLVUGOH 4X1C 185 CU SDI TO BARE AL NM	LV1-3	A3024	Kit

UG/OH Construction - Single Core Cables to Single Circuit of LVABC (LV1-72)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU SDI 1X150 ABC NM	LV1-72	A3025	Kit
AUSLVUGOH 4X1C 185 CU SDI 1X95 ABC NM	LV1-72	A3026	Kit

UG/OH Construction - Single Core Cables to Double Circuit of LVABC (LV1-47)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU SDI 2X95 ABC NM	LV1-47	A3027	Kit

UG/OH Construction - Single Core Cables to Single Circuit of LVABC with Switch (LV1-73)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU - 1X95 ABC SW NM	LV1-73	A3028	Kit
AUSLVUGOH 4X1C 185 CU - 1X150 ABC SW NM	LV1-73	A3029	Kit

UG/OH Construction - Single Core Cables to Double Circuit of LVABC with Switch (LV1-48)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU - 2X95 ABC SW NM	LV1-48	A3030	Kit

UG/OH Construction - Single Core Cables to Bare OH Mains with Switch (LV1-6)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4X1C 185 CU - BARE CU SW NM	LV1-6	A3031	Kit
AUSLVUGOH 4X1C 185 CU - BARE AL SW NM	LV1-6	A3668	Kit

UG/OH Construction - 240 CU4 XQ Z to Double Circuit of LVABC with Switch (LV1-49)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 CU-2X95ABC SWITCH NM	LV1-49	A3032	Kit

UG/OH Construction - 240 CU4 XQ Z to Double Circuit of Bare OH Mains with Switch (LV1-7)



Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVUGOH 4C 240 CU - 2xBARE CU SWITCH	LV1-7	TBA	Kit
AUSLVUGOH 4C 240 CU - 2xBARE AL SWITCH	LV1-7	TBA	Kit



PILLARS



Service Pillar Terminations 16 and 50 CU4 XQ Z Cables (LV1-32)

Description	Ausgrid Ref	Stock Code	Unit of Measure
PILLAR, SMALL C/W BASE TOP & B BOLTS		A0401	Kit
TERMINAL BLOCK, 6 HOLE 50MM2 (4 required per service pillar)		00028	Each

Distribution Pillar (Two-Way) 240 AL4 XQ Z/SAC Cables (LV1-33)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR, 2 WAY CMPBL2EA CABAC BOLTED	CMPBL2EA	A1071	Kit

Distribution Pillar (Three-Way) 240 AL4 XQ Z/SAC Cables (LV1-34)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR, 3 WAY CMPBL3EA CABAC BOLTED	CMPBL3EA	A1072	Kit

Distribution Pillar (Solid Connection) for Single Core Cables (LV1-35)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR, 4 X 1C 185 CU - 2 WAY	LV1-35	A0359	Kit
AUSLVPILLAR, 4 X 1C 185 CU - 3 WAY	LV1-35	A0360	Kit

Single Link Distribution Pillar (LV1-37)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR, LV1-37 SINGLE LINK 4C 240 SOL AL or 4XIC 185 CU	LV1-37	A0212	Kit

Double Link Distribution Pillar (LV1-60)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR,4C 240 SOL AL- DOUBLE LINK	LV1-60	A0474	Kit
AUSLVPILLAR,4 X 1C 185 CU - DOUBLE LINK	LV1-60	A0475	Kit

Switch Pillar for 240 AL4 XQ Z/SAC Cables (LV1-61)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR,4C 240 SOL AL - K&N SWITCH	LV1-61	06925	Each
AUSLVPILLAR,4C 240 SOL AL - K&N INC LOCK	LV1-61	A1165	Kit

Underground SLCP Without Contactor (LV1-91)

Description	Ausgrid Ref	Stock Code	Unit of Measure
AUSLVPILLAR, SLCP WITHOUT CONTACTOR	LV1-91	A1123	Each



PILLAR NUMBERS & LABELS

25mm Black on Silver Embossed Numbers for slide in holder

Number	ARS Code	Number	ARS Code	Number	ARS Code
0	03800	1	03801	2	03802
3	03803	4	03804	5	03805
6	03806	7	03807	8	03808
9	03806				

25mm Black on Silver Embossed Letters for slide in holder

Letter	ARS Code	Letter	ARS Code	Letter	ARS Code
A	03796	B	04256	C	04257
D	04258	E	03985	F	04259
G	04260	H	03819	I	04108
J	04261	K	04262	L	04219
M	03820	N	04263	O	03800
P	03797	Q	04264	R	03950
S	03957	T	04050	U	04519
V	03818	W	03820	X	04265
Y	04254	Z	04266		

Quick Reference Guide

SERVICE UG/OH TERMINATIONS WITHOUT FUSE/LINK DISCONNECTOR

Underground Cable	Overhead Mains Cable			
	Bare Al	Bare Cu	1 x 4c 95 ABC	1 x 4c 150 ABC
16 CU4 XQ Z	A3304 LV1-14	A3005 LV1-14	A3003 LV1-14	A3002 LV1-14
50 CU4 XQ Z	A3008 LV1-14	A3009 LV1-14	A3007 LV1-14	A3006 LV1-14

MAINS UG/OH TERMINATIONS WITHOUT FUSE/LINK DISCONNECTOR

Underground Cable	Overhead Mains Cable					
	Bare Al	Bare Cu (50-70mm ²)	Bare Cu (70-95mm ²)	1 x 4c 95 ABC	1 x 4c 150 ABC	2 x 4c 95 ABC
185 CU1 XQ Z	A3024 LV1-3	A0322 LV1-3	A3023 LV1-3	A3026 LV1-72	A3025 LV1-72	A3027 LV1-47
240 AL4 XQ Z/SAC	A3012 LV1-43	A3010 LV1-43	A3011 LV1-43	A3015 LV1-70	A3014 LV1-70	A3016 LV1-44
240 CU4 XQ Z	A3013 LV1-43					

DISTRIBUTION PILLARS

Underground Cable	Pillar Termination Type				
	2-Way	3-Way	Single Link	Double Link	K&N Switch
185 CU1 XQ Z	A0359 LV1-35	A0360 LV1-35	A0212 LV1-37	A0475 LV1-60	N/A
240 AL4 XQ Z/SAC	A1071 LV1-33	A1072 LV1-34	A0212 LV1-37	A0474 LV1-60	06925 - No lock A1165 - With lock LV1-61

MAINS UG/OH TERMINATIONS WITH FUSE/LINK DISCONNECTOR

Underground Cable	Overhead Mains Cable				
	Bare Al	Bare Cu	1 x 4c 95 ABC	1 x 4c 150 ABC	2 x 4c 95 ABC
185 CU1 XQ Z	A3668 LV1-6	A3031 LV1-6	A3028 LV1-73	A3029 LV1-73	A3030 LV1-48
240 AL4 XQ Z/SAC	A3020 LV1-5	A3021 LV1-5	A3018 LV1-71	A3017 LV1-71	A3019 LV1-46
240 CU4 XQ Z					A3032 LV1-49

STRAIGHT THROUGH JOINT KITS FOR XLPE CABLES

Underground Cable					
	16 CU4 XQ Z	50 CU4 XQ Z	185 CU1 XQ Z	240 AL4 XQ Z/SAC	240 CU4 XQ Z
16 CU4 XQ Z	1 x 03986 4 x 02988	N/A	N/A	N/A	N/A
50 CU4 XQ Z	N/A	1 x 04879 4 x 02987	N/A	N/A	N/A
185 CU1 XQ Z	N/A	N/A	1 x 03215* 1 x 03214*	1 x 03290 4 x 03289	1 x 03290 4 x 03209
240 AL4 XQ Z/SAC	N/A	N/A	1 x 03290 4 x 03289	1 x 02903**	1 x 06931 4 x 04073
240 CU4 XQ Z	N/A	N/A	1 x 03290 4 x 03209	1 x 06931 4 x 04073	1 x 06931 4 x 03605

* One required per phase

** Includes mechanical links

'Danger Electricity' Label

Description	Code	Unit of Measure
LABEL, DANGER ELECTRICITY - TRIANGLE	08353	Each

Numeral Holder

Description	Code	Unit of Measure
NUMERAL,HOLDER SLIDE IN 195MM LONG	03795	Each

Primer

Description	Code	Unit of Measure
PRIMER 94, AMPOULE 0.66ML	04540	Each

Double Sided Tape

Description	Code	Unit of Measure
TAPE, ACRYLIC FOAM DOUBLE SIDED	03814	Each





KIOSK TERMINATIONS & POT ENDS

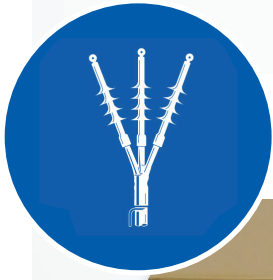


Kiosk Terminations for 240 AL4 XQ Z/SAC and 185 CU1 XQ Z Cables (LV1-41)

Description	Ausgrid Ref	Code	Unit of Measure
AUSLVSUB TERM, 4C 240 SOLID AL XLPE HEAT	LV1-41	A0205	Kit
AUSLVSUB TERM, 4 X 1C 185 CU XLPE HEAT	LV1-41	A1168	Kit
AUSLVSUB TERM, 4C 240 CU XLPE HEAT	LV1-41	A1194	Kit

Pot End (Live End Seal) for 240 AL4 XQ Z/SAC and 185 CU1 XQ Z Cables (LV1-50)

Description	Ausgrid Ref	Code	Unit of Measure
LES, LV 4C 240 XLPE HEATSHRINK	LV1-50	04094	Each
LES, LV 1C 95-300 XLPE HEATSHRINK	LV1-50	04316	Each



JOINTS



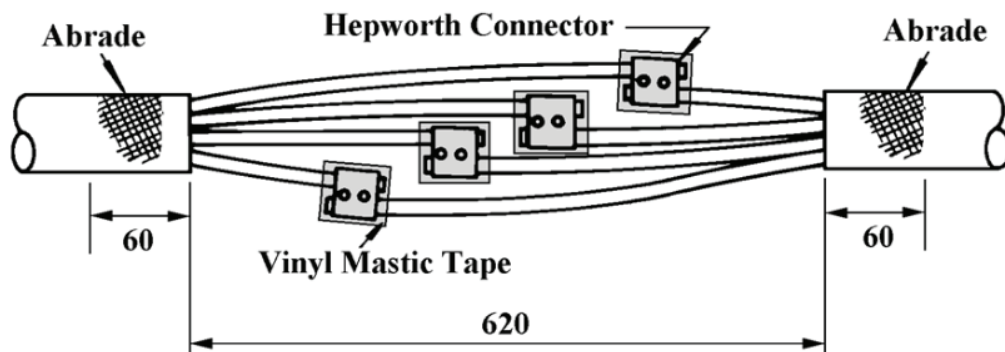
Straight Through Joints for 240 AL4 XQ Z/SAC Cables (LV2-35)

Heatshrink Joint Kit 

Description	Ausgrid Ref	Code	Unit of Measure
STJ, LV 240 4C AL XLPE C/W SHEARBOLTS EA	LV2-35	02903	Each

Cold Pour Resin Joint Kit 

Description	Qty per kit	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT TWST30-30	1	03932	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL	4	03390	Each
MASTIC TAPE, INSULATING VINYL BACKED	1	03388	3m roll



Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Straight Through Joints for 240 CU4 XQ Z to 240 CU4 XQ Z, 240 AL4 XQ Z or 240 AL4 XQ Z/ SAC Cables (LV2-34)

NS127 - Table 40 (Straight Through Joint Kits) 

Straight Through Joints		Joint Kit Stock Code	Connector Stock Code
Cable Type	Cable Type		
240 CU4 XQ Z	240 AL4 XQ Z/SAC	06931	4 x 04073
240 CU4 XQ Z	240 AL4 XQ Z	06931	4 x 02105
240 CU4 XQ Z	240 CU4 XQ Z	06931	4 x 03605

Four-to-One Heatshrink Joints for 240 Four Core Cables to 4x185 CU1 XQ Z or 4x300 AL1 XQ Z Cables (LV2-36)

NS127 - Table 41 (Four-to-One Joint Kits) 

Straight Through Joints		Joint Kit Stock Code	Connector Stock Code
Cable Type	Cable Type		
240 AL4 XQ Z	300 AL1 XQ Z	03290	4 x 00539
240 AL4 XQ Z	185 CU1 XQ Z	03290	4 x 02757
240 AL4 XQ Z/SAC	300 AL1 XQ Z	03290	4 x 03436
240 AL4 XQ Z/SAC	185 CU1 XQ Z	03290	4 x 03289
240 CU4 XQ Z	185 CU1 XQ Z	03290	4 x 03209

Straight Through Joint for Single Core Cables (LV2-24)

NS127 - Table 42.1 (Straight Through Joint Kits for Single Core Polymeric Cables) 

Straight Through Joints		Joint Kit Stock Code	Connector Stock Code
Cable Type	Cable Type		
185 CU1 XQ Z	185 CU1 XQ Z	03215	1 x 03214
300 AL1 XQ Z	300 AL1 XQ Z	03215	1 x 02079
300 CU1 XQ Z	300 CU1 XQ Z	03215	1 x 04159
300 AL1 XQ Z	185 CU1 XQ Z	03215	1 x 03510

NS127 - Table 42.2 (Straight Through Joint Kits for Single Core Polymeric Cables) 

Straight Through Joints		Joint Kit for Phase Conductor	Joint Kit for Neutral Conductor*	Earthing Kit Stock Code**	Phase Connector Stock Code
Cable Type	Cable Type				
185 CU1 XQ Z	185 CU1 PL Z	04373	08926	09154	1 x 03214
185 CU1 XQ Z	194 CU1 PL Z	04373	08926	09154	1 x 04012
300 CU1 XQ Z	300 CU1 PL Z	04373	08927	09154	1 x 04159
300 CU1 XQ Z	323 CU1 PL Z	04373	08927	09154	1 x 06737

* The neutral connector is included in the neutral joint kit.

** One earthing kit is sufficient to bond the sheaths of four single core PILC cables. All four tinned copper braids are bolted together using a M12 x 35mm SS bolt (02900), two M12 SS flat washers (00020), one SS spring washer (00751) and one M12 SS nut (00019).

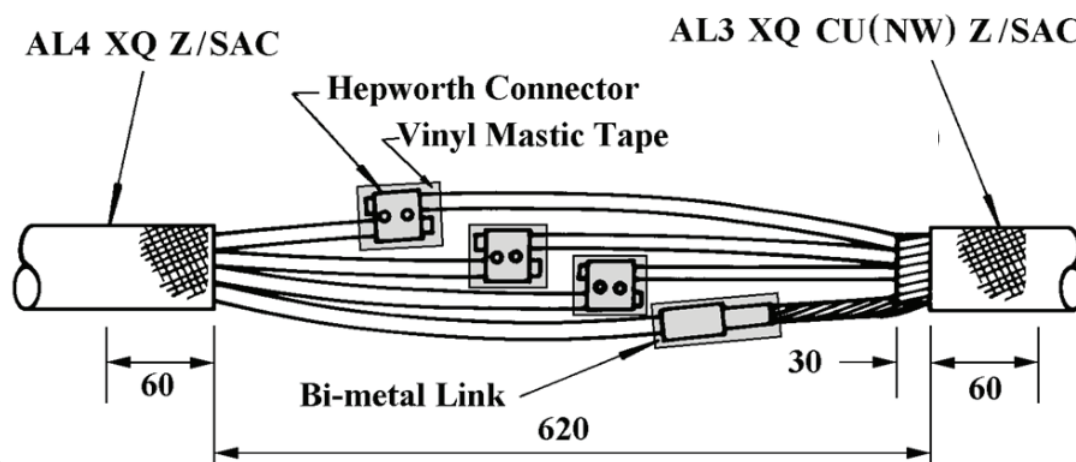
NS127 - Table 42.3 (Straight Through Joint Kits for Single Core PILC Cables) 

Straight Through Joints		Joint Kit Stock Code	Earthing Kit Stock Code	Connector Stock Code
Cable Type	Cable Type			
185 CU1 PL Z	185 CU1 PL Z	04373	09023	1 x 03214
300 CU1 PL Z	300 CU1 PL Z	04373	09023	1 x 04159

Transition Joint for AL4 XQ Z/SAC to AL3 XQ CU(NW) Z/SAC Cable (LV2-37)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT TWST30-30	1	03932	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL	3	03390	Each
MASTIC TAPE, INSULATING VINYL BACKED	1	03388	3m roll
LINK, COMP 240 4C SOLID AL/120 CU	1	03723	Each
CABLE, LV 120 CU 1C NEUTRAL BONDING	1	TBA	M



Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Heatshrink Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
STJ, LV 240 4C AL XLPE C/W SHEARBOLTS EA	1	02903	Each
LINK, COMP 240 4C SOLID AL/120 CU	1	03723	Each
HEATSHRINK,TUBE LV 35/12MW BLK UNL 30M	1	08174	30m roll

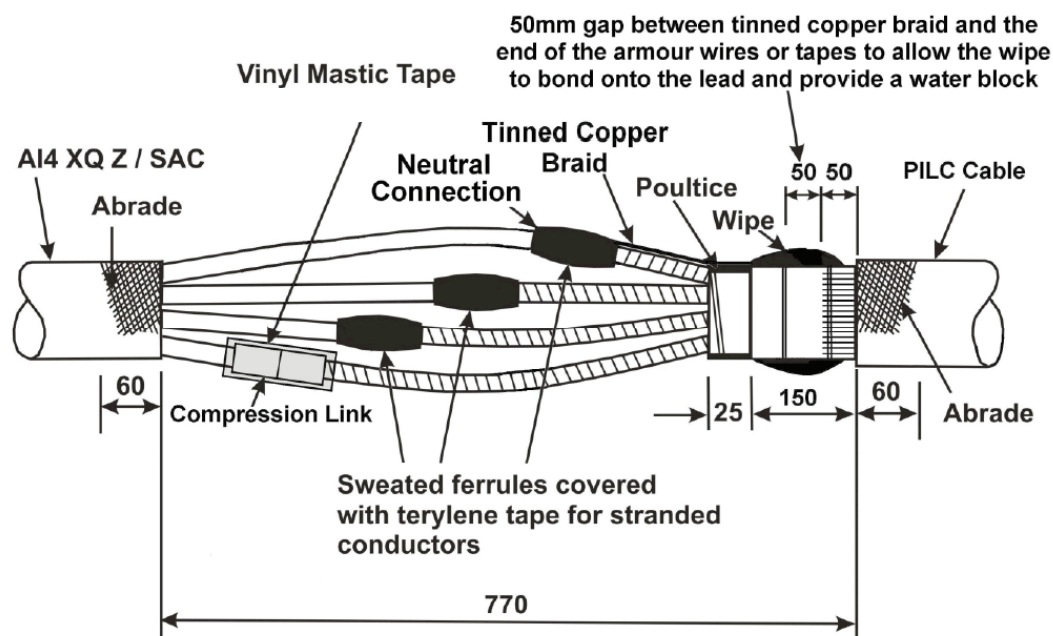
Multicore Transition Joint For PILC Cables (LV2-41)

NS127 - Table 44.1 (Connectors and Earth Bond) 

Multicore Transition Joints		Phase Connector	Weak Back Ferrule	Earth Bond
PILC Cable	Solid Polymeric Cable	Stock Code	Neutral Connector	
0.15 inch2 (97mm2) CU4	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	TBA
185mm2 CU3.5	240 AL4 XQ Z/SAC	3 x 03289	1 x 04397	02099
185mm2 CU4	240 AL4 XQ Z/SAC	3 x 03289	1 x 04397	02099
185mm2 AL4	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
0.3 inch2 (194mm2) CU3.5	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
0.3 inch2 (194mm2) CU3.5	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
0.3 inch2 (194mm2) AL4	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
0.3 inch2 (194mm2) AL3.5	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
240mm2 AL4	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	02099
300mm2 CU4	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	TBA
0.5 inch2 (323mm2) CU3.5	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	TBA
0.5 inch2 (323mm2) AL3.5	240 AL4 XQ Z/SAC	3 x 04397	1 x 04397	TBA

NS127 - Table 44.2 (Joint Mould, Resin and Tapes)

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT TWST30-30	1	03932	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
TAPE, TERYLENE VARNISHED 19MM X 23M ROLL (if required)	1	02155	23m roll
MASTIC TAPE, INSULATING VINYL BACKED (if required)	1	03388	3m roll



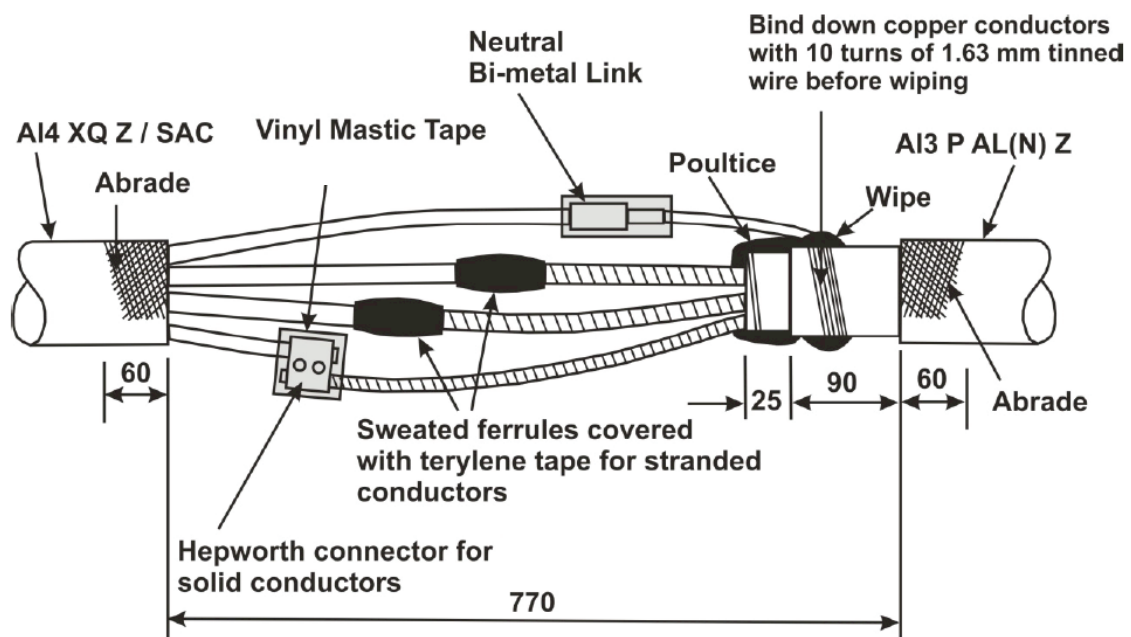
Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Multicore Transition Joint for CONSAC Cables AL4 XQ Z/SAC to AL3 PAL(N) Z Cable (LV2-38)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT TWST30-30	1	03932	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL (for solid Al conductors)	3	03390	Each
LINK, WEAK BACK FERRULE 300 TINNED CU (for stranded Al conductors)	3	04397	Each
MASTIC TAPE, INSULATING VINYL BACKED (if required)	1	03388	3m roll
TAPE, TERYLENE VARNISHED 19MM X 23M ROLL (if required)	1	02155	23m roll
LINK, COMP 240 4C SOLID AL/120 CU	1	03723	Each
CABLE, LV 120 CU 1C NEUTRAL BONDING	1	TBA	M
WIRE, FUSE 80AMP 1.63MM (if required)	1	03793	Coil 0.5kg



Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Straight Through Joint for AL4 XQ Z/SAC to 194-323 AL4 Z AL Z/SAC Cables (LV2-39)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT 3736-037	1	05880	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	4	02922	Each
RING, ARMOUR CLAMPING EPPA-022-5	1	05881	Each
LINK, SHEAROFF 70-300 AL/CU SHEARBOLT	3	05876	Each
LINK, SHEAROFF 70-300 AL SERVICE CONNECT	1	05877	Each
INSULATING PAD, 180X150 RESIN JOINTS	3	05878	Each
INSULATING PAD, 200X180 RESIN JOINTS	1	05879	Each
CABLE, LV 35 CU 1C PVC GREEN/YELLOW	2m	03129	M
LUG, COMP 35 CU M10 1 HOLE	2	03336	Each

Note: The joint shall be constructed in accordance with the Installation Instruction located in Annexure A of NS127.

Four-to-One Straight Through Joint for 194-323 AL4 Z AL Z/SAC to 185CU1 XQ Z Cables (LV2-40)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV INLINE JOINT 3736-037	1	05880	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	4	02922	Each
RING, ARMOUR CLAMPING EPPA-022-5	1	05881	Each
LINK, SHEAROFF 70-300 AL/CU SHEARBOLT	3	05876	Each
LINK, SHEAROFF 70-300 AL SERVICE CONNECT	1	05877	Each
INSULATING PAD, 180X150 RESIN JOINTS	3	05878	Each
INSULATING PAD, 200X180 RESIN JOINTS	1	05879	Each
CABLE, LV 35 CU 1C PVC GREEN/YELLOW	2m	03129	M
LUG, COMP 35 CU M10 1 HOLE	2	03336	Each
HEATSHRINK,GLOVE 4 F 185-300 BLACK LINED	1	00050	Each
HEATSHRINK,TUBE LV 35/12MW BLK LND 0.3M (cut into 2 x 150mm pieces)	2	05274	Each

Note: The joint shall be constructed in accordance with the Installation Instruction located in Annexure B of NS127.

Four-to-One Transition Joints for CONSAC Cables (LV2-42)

NS127 - Table 47.1 (Four-to-One Transition Joint Kits) 

Four-to-One Transition Joints		Joint Kit Stock Code	Phase Connector Stock Code
Cable Type	Cable Type		
185 AL3 PAL(N) Z/SAC	185 CU1 XQ Z	04213	3 x TBA
185 AL3 PAL(N) Z	185 CU1 XQ Z	04213	3 x 03430
0.3 (194) AL3 PAL(N) Z/SAC	185 CU1 XQ Z	04213	3 x 05331
0.3 (194) AL3 PAL(N) Z	185 CU1 XQ Z	04213	3 x 04395
300 AL3 PAL(N) Z/SAC	185 CU1 XQ Z	04213	3 x 07281
300 AL3 PAL(N) Z	185 CU1 XQ Z	04213	3 x 03510
0.5 (323) AL3 PAL(N) Z	185 CU1 XQ Z	04213	3 x 04371

NS127 - Table 47.2 (Neutral Bonding Cable for Four-to-One Transition Joints)

Cable Type	Neutral Bonding Cable	Code	Neutral Connector
185 AL3 PAL(N) Z/SAC	120mm2 Copper Cable	TBA	1 x 04769
185 AL3 PAL(N) Z	120mm2 Copper Cable	TBA	1 x 04769
0.3 (194) AL3 PAL(N) Z/SAC	120mm2 Copper Cable	TBA	1 x 04769
0.3 (194) AL3 PAL(N) Z	120mm2 Copper Cable	TBA	1 x 04769
300 AL3 PAL(N) Z/SAC	185mm2 Copper Cable	TBA	1 x 03214
300 AL3 PAL(N) Z	185mm2 Copper Cable	TBA	1 x 03214
0.5 (323) AL3 PAL(N) Z	185mm2 Copper Cable	TBA	1 x 03214

Four-To-One Transition Joints For PILC Cables (LV2-43)

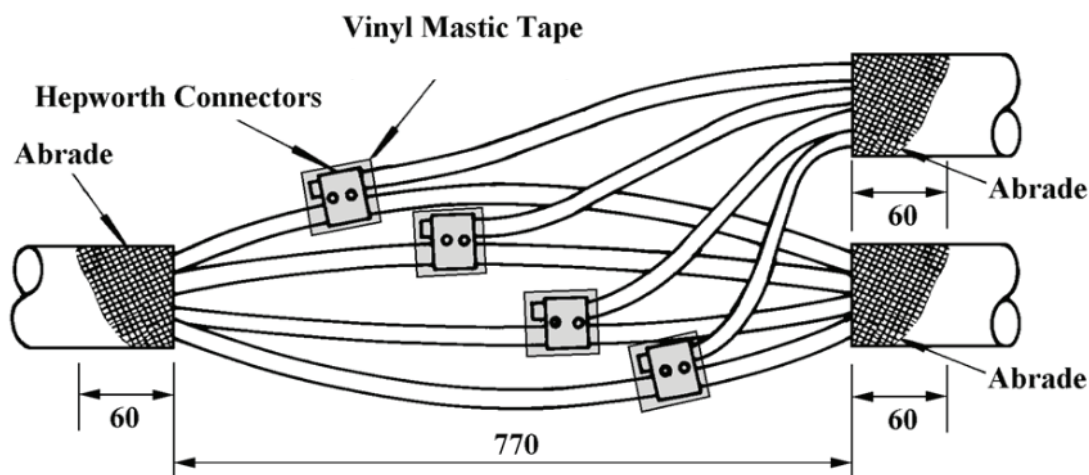
NS127 - Table 49.1 (Four-to-One Transition Joint Kits for PILC cables) 

Four-to-One Transition Joints		Joint Kit Stock Code	Phase Connector Stock Code	Neutral Connector Stock Code
PILC Cable	Polymeric Cable			
185mm2 CU3.5	185mm2 CU1	08928	3 x 03214	1 x 08931
185mm2 CU4	185mm2 CU1	08928	3 x 03214	1 x 08932
185mm2 AL4	185mm2 CU1	08928	3 x 03430	1 x 08933
0.3 inch2 (194mm2) CU3.5	185mm2 CU1	08928	3 x 04012	1 x 08931
0.3 inch2 (194mm2) CU4	185mm2 CU1	08928	3 x 04012	1 x 08932
0.3 inch2 (194mm2) AL4	185mm2 CU1	08928	3 x 04395	1 x 08933
0.3 inch2 (194mm2) AL3.5	185mm2 CU1	08928	3 x 04395	1 x 08934
300mm2 CU4	185mm2 CU1	08929	3 x 04159	1 x 08935
0.5 inch2 (323mm2) CU3.5	185mm2 CU1	08929	3 x 06737	1 x 08936
0.5 inch2 (323mm2) AL3.5	185mm2 CU1	08930	3 x 04371	1 x 08933

Lay-On Tee Joint AL4 XQ Z/SAC Cables (LV3-40)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV BRANCH JOINT TWB18-18	1	03387	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL	4	03390	Each
MASTIC TAPE, INSULATING VINYL BACKED (if required)	1	03388	3m roll



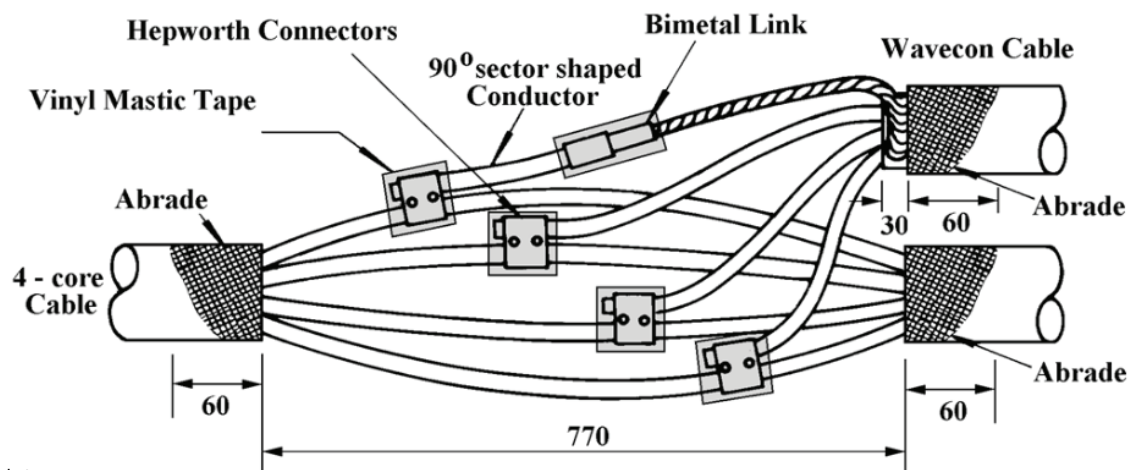
Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Lay-On Tee Joint AL4 XQ Z/SAC to AL3 XQ CU(NW) Z/SAC Cable (LV3-41)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV BRANCH JOINT TWB18-18	1	03387	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	2	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL	4	03390	Each
LINK, COMP 240 4C SOLID AL/120 CU	1	03723	Each
MASTIC TAPE, INSULATING VINYL BACKED	1	03388	3m roll



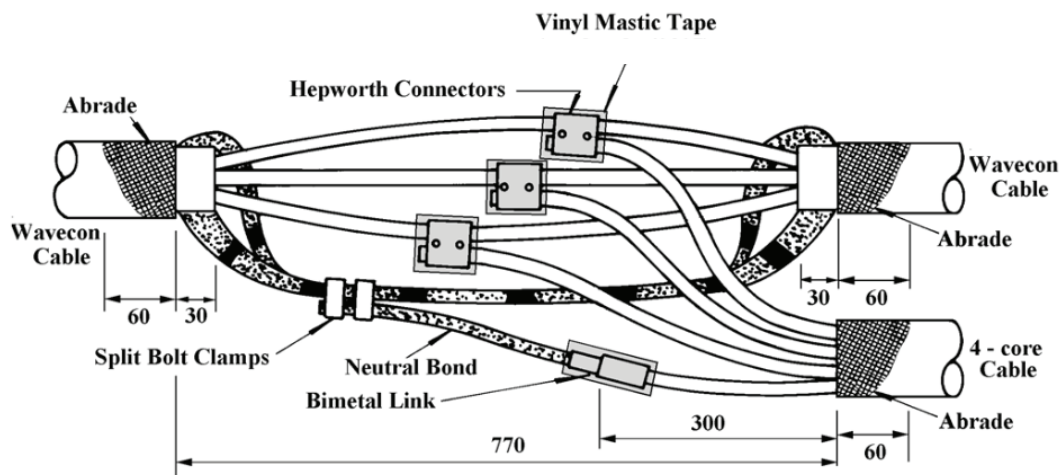
Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Lay-On Tee Joint AL3 XQ CU (NW) Z/SAC to AL4 XQ Z/SAC Cables (LV3-43)

Cold Pour Resin Joint Kit 

Description	Quantity per Joint	Code	Unit of Measure
BOX MOULD, LV BRANCH JOINT TWB18-18	1	03387	Each
TAPE, ADHESIVE FOAM	1	03389	10m roll
RESIN, POLYURETHANE 6 LITRE	3	02922	Each
CONNECTOR, HEPWORTH 240 SOLID AL	3	03390	Each
LINK, COMP 240 4C SOLID AL/120 CU	1	03723	Each
MASTIC TAPE, INSULATING VINYL BACKED	1	03388	3m roll
CABLE, LV 120MM2 NEUTRAL BONDING	1	TBA	M
CONNECTOR, SPLIT BOLT B26 95 BRASS	2	00246	Each



Notes:

1. Joint mould omitted for clarity.
2. Vinyl mastic tape (03388) is applied with the ends left unsealed to allow the resin to flow around the connector.

Disconnection Link Box (Four-Way) For Single Core Cables (LV5-9)

Description	Quantity per Joint	Code	Unit of Measure
TERM, LV 4 WAY LINK BOX 185 1C	1	07596	Each
LUG, COMP 185 CU M12 1 HOLE SEALED	16	02907	Each
CONCRETE SLAB, 4 WAY LINK BOX	2	TBA	Each
FRAME, CAST IRON FOR 4 WAY LINK BOX	1	07597	Each
HEATSHRINK, TUBE LV 35/12MW BLK LND 0.3M (cut into 2 x 150mm pieces)	8	05274	Each
RESIN, POLYURETHANE 6 LITRE	4	02922	Each

Straight Through Joints For Service Cables (LV2-45)

NS127 - Table 52.1 (Straight Through Joint Kits for Service Cables) 

Four-to-One Transition Joints		Joint Kit Stock Code	Connector Stock Code
Cable Type	Cable Type		
16 CU4 XQ Z	16 CU4 XQ Z	03986	4 x 02988
16 CU4 XQ Z	16 CU3 XQ CU(N) Z	03986*	4 x 02988
50 CU4 XQ Z	50 CU4 XQ Z	04879	4 x 02987
16 CU4 XQ Z	16 CU1 Z Z	TBA	4 x 02988
16 CU4 XQ Z	25 AL3 P AL(N) Z/SAC	04619	4 x 03843

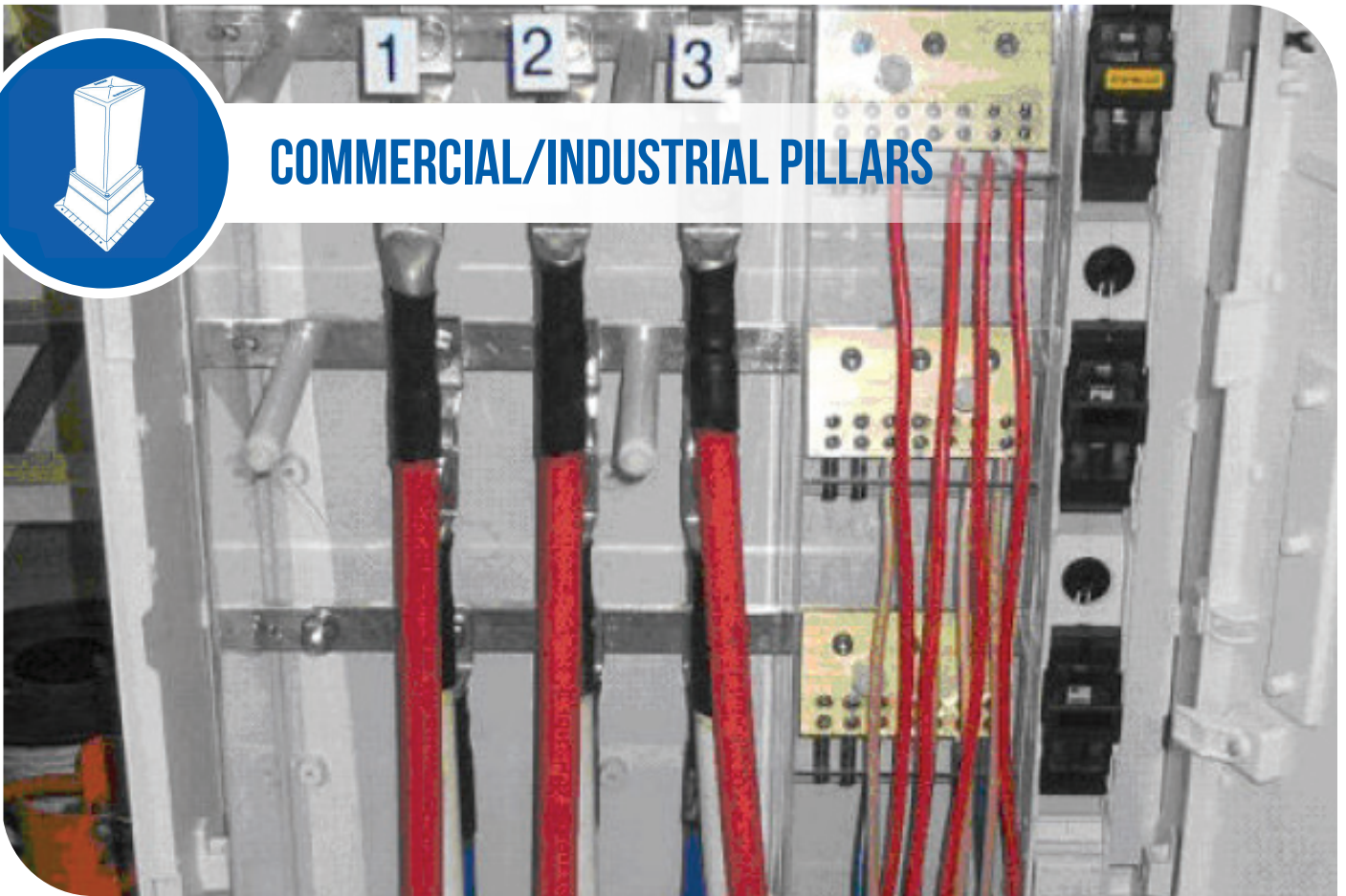
*The neutral insulating sleeve for the ceander cable is to be cut to length from 40m roll (stockcode 08176).

NS127 - Table 52.2 (Neutral Bonding Cable fo Multicore PILC Service Cable)

Service Cable	Neutral Bonding Cable	Stock Code
25mm2 Aluminium Multicore PILC Service Cable	16mm2 Copper Cable	03232



COMMERCIAL/INDUSTRIAL PILLARS



Cabinets (excluding base unit)

Description	Stock Code	Unit of Measure
CABINET, LV SWITCHGEAR CONFIG A AUSGRID	08377	Each
CABINET, LV SWITCHGEAR CONFIG B AUSGRID	08378	Each
CABINET, LV SWITCHGEAR CONFIG C AUSGRID	08379	Each
CABINET, LV SWITCHGEAR CONFIG D AUSGRID	08380	Each
CABINET, LV SWITCHGEAR CONFIG E AUSGRID	08381	Each
CABINET, LV SWITCHGEAR CONFIG F AUSGRID	08382	Each

Direct Buried Base Units with Whipper Snipper Protection

Description	Stock Code	Unit of Measure
CABINET BASE, CONFIG A AUSGRID - WSP	08383	Each
CABINET BASE, CONFIG B AUSGRID - WSP	08384	Each
CABINET BASE, CONFIG C AUSGRID - WSP	08385	Each
CABINET BASE, CONFIG D AUSGRID - WSP	08386	Each
CABINET BASE, CONFIG E AUSGRID - WSP	08387	Each
CABINET BASE, CONFIG F AUSGRID - WSP	08388	Each

Direct Buried Base Units without Whipper Snipper Protection

Description	Stock Code	Unit of Measure
CABINET BASE, CONFIG A AUSGRID - W/O WSP	TBA	Each
CABINET BASE, CONFIG B AUSGRID - W/O WSP	TBA	Each
CABINET BASE, CONFIG C AUSGRID - W/O WSP	TBA	Each
CABINET BASE, CONFIG D AUSGRID - W/O WSP	08870	Each
CABINET BASE, CONFIG E AUSGRID - W/O WSP	TBA	Each
CABINET BASE, CONFIG F AUSGRID - W/O WSP	TBA	Each

Streetlighting Switchgear Module

Description	Stock Code	Unit of Measure
SWITCHGEAR, SL FUSE MODULE 3PH AUSGRID	08090	Each

Fuses for Streetlighting Switchgear Module

Description	Stock Code	Unit of Measure
FUSE, LINK CARTRIDGE 10A 500V DIN 00	08952	Each
FUSE, LINK CARTRIDGE 32A 500V DIN 00	08091	Each
FUSE, LINK CARTRIDGE 50A 500V DIN 00	08823	Each
FUSE, LINK CARTRIDGE 63A 500V DIN 00	TBA	Each

Commercial/Industrial Pillar Numbers and Labels

25mm x 15mm Black on White Numbers

Number	ARS Code	Number	ARS Code	Number	ARS Code
0	08116	1	08117	2	08118
3	08119	4	08120	5	08879
6	08880	7	08121	8	08122
9	08125				

25mm x 15mm Blank Tile

Tile	ARS Code
Blank	08881

25mm x 15mm Black on White Letters

Number	ARS Code	Number	ARS Code	Number	ARS Code
A	08953	B	08954	C	08955
D	08956	E	08957	F	08958
G	08446	H	08959	I	08123
J	08960	K	08871	L	08447
M	08961	N	08962	O	08963
P	08964	Q	08965	R	08913
S	08124	T	08966	U	08872
V	08967	W	08968	X	08969
Y	08970				

All Round Supplies
13 Progress Circuit,
Prestons, NSW, 2170

P 1300 087 579
E sales@ars.com.au
W ars.com.au



**All Round
Supplies®**