

# ELECTRICAL and TELECOMMUNICATIONS DUCTING and CONDUIT (PVC and POLYETHYLENE SYSTEMS)











#### **PVC RIGID ELECTRICAL CABLE DUCT:**

Iplex PVC electrical cable ducts are "rigid conduits" as defined in AS / NZS 2053.1.

They are intended for durable underground installation using conventional open cut trench methods, to identify and protect contained underground electrical cables. If used unprotected from the sun above ground, UV / weathering resistance of the duct will be limited and colour fading (whitening), with some loss of impact strength will occur over time.

- DN 80, 100 and 150mm NB ducts colored orange are manufactured in accordance with AS/NZS 2053.2:2001"Conduits and fittings for electrical installations Part 2: Rigid plain conduits and fittings of insulating material"
- DN 32, 40 and 50 NB ducts colored orange are manufactured to the OD and wall thickness dimensions of AS / NZS 1260:2009





2700.50.6 SOE

2700.100HD.6SOE

#### Technical data and product range available:

+	Iplex Order Code	*Classification	Colour	#Joint Type	Outside Diameter (mm)	Wall Thickness (mm)
32mm	2700.32.6 SOE	N.A.	Orange	Spigot/Socket SCJ	36.2 - 36.4	2.1 - 2.4
40mm	2700.40.6 SOE	N.A.	Orange	Spigot/Socket SCJ	42.9 – 43.1	2.0 - 2.6
50mm	2700.50.6 SOE	N.A.	Orange	Spigot/Socket SCJ	55.8 – 56.0	2.2 - 2.6
80mm	2700.80LD.6SOE	Light duty	Orange	Spigot/Socket SCJ	82.3 - 82.7	2.2 - 2.6
100mm	2700.100LD.6SOE	Light Duty	Orange	Spigot/Socket SCJ	110.0 - 110.4	2.9 - 3.4
150mm	2700.150LD.6SOE	Light Duty	Orange	Spigot/Socket SCJ	160.0 – 160.5	4.2 - 4.8
100mm	2700.100HD.6SOE	Heavy Duty	Orange	Spigot/Socket SCJ	110.0 - 110.4	5.7 - 6.5
150mm	2700.150HD.6SOE	Heavy Duty	Orange	Spigot/Socket SCJ	160.0 – 160.5	8.3 - 9.3

<sup>\*</sup>Classification: as depicted in Table 101, AS/NZS 2053.2:2001

# SCJ = Solvent Cement Joint

#### **PVC RIGID ELECTRICAL CONDUIT:**

Iplex PVC Electrical Conduits are "pliable conduits" as defined in AS/NZS 2053.2:2001 They are colored either orange or grey and intended for durable above-ground installation inside commercial and domestic buildings, to identify and protect contained electrical wiring or cables. If used unprotected from the sun above ground, UV / weathering resistance of the conduit will be limited and colour fading (whitening), with some loss of impact strength will occur over time.

• 20mm, 25mm, 32mm, 40mm and 50mm NB PVC conduits colored orange or grey are manufactured in accordance with AS/NZS 2053.2:2001"Conduits and fittings for electrical installations - Part 2: Rigid plain conduits and fittings of insulating material" – Medium Duty





2800.25.4 SOE (Grey)

2800.25.4 SOE (Orange)

#### Technical data and range available:

+	Iplex Order Code	*Classification	Colour	Joint Type	Outside Diameter	Wall Thickness
					(mm)	(mm)
20mm	2800.20.4 SOE	Medium Duty	Grey	Spigot/Socket SCJ	19.7 - 20.0	1.8 - 2.1
25mm	2800.25.4 SOE	Medium Duty	Grey	Spigot/Socket SCJ	24.7 - 25.0	1.8 - 2.1
32mm	2800.32.4 SOE	Medium Duty	Grey	Spigot/Socket SCJ	31.7 - 32.0	2.1 - 2.4
40mm	2800.40.4 SOE	Medium Duty	Grey	Spigot/Socket SCJ	39.7 - 40.0	2.4 - 2.7
50mm	2800.50.4 SOE	Medium Duty	Grey	Spigot/Socket SCJ	49.7 - 50.0	2.8 - 3.1
20mm	2850.20.4 SOE	Medium Duty	Orange	Spigot/Socket SCJ	19.7 - 20.0	1.8 - 2.1
25mm	2850.25.4 SOE	Medium Duty	Orange	Spigot/Socket SCJ	24.7 - 25.0	1.8 - 2.1
32mm	2850.32.4 SOE	Medium Duty	Orange	Spigot/Socket SCJ	31.7 - 32.0	2.1 - 2.4
40mm	2850.40.4 SOE	Medium Duty	Orange	Spigot/Socket SCJ	39.7 - 40.0	2.4 - 2.7
50mm	2850.50.4 SOE	Medium Duty	Orange	Spigot/Socket SCJ	49.7 - 50.0	2.8 - 3.1

<sup>\*</sup>Classification: as depicted in Table 101, AS/NZS 2053.2:2001

## PVC TELECOMMUNICATION DUCTING (Chorus Branded): (Sold only to Chorus approved installers\*)

Iplex Pipeline's range of PVC telecommunication ducting is available for telecommunication projects requiring cable protection

#### **PVC Telecommunication duct (Chorus Branded)**

<sup>\*</sup> Only approved Chorus Contractors can purchase and install these products. For further details please contact Iplex Pipelines..

				(mm)	(mm)
20mm x 6m	10012937	Green	Spigot/Socket,SCJ	26.6 – 26.9	1.3 – 1.6
20mm x 6m	10013281	White	Spigot/Socket, SCJ	26.6 - 26.9	1.3 - 1.6
50mm x 6m	P4001	Green	Rubber Ring Joint	60.2 - 60.5	2.4 - 2.9
100mm x 6m	P4000	Green	Rubber Ring Joint	110.0 – 110.4	2.7 - 3.3



20mm Telecommunications Duct (Chorus branded)

#### PVC Telecommunication repair sleeve (Chorus Branded)

Size	Iplex Order Code	Colour	Joint Type	Internal Diameter	Wall Thickness
				(mm)	(mm)
50mm x 2m	10013103	Green	Plain end,SCJ	60.5	2.4 - 2.9
100mm x 2m	10013102	White	Plain end, SCJ	110.4	2.7 - 3.3





100mm PVC Repair sleeve

50mm PVC Repair sleeve

Repair sleeve slides over the outside of the PVC telecommunication duct, and is joined to the duct with PVC solvent cement.



100 mm green PVC Telecommunication ducts, showing horizontal separation in the trench space from other services such as recycled water (purple), potable water (white) and gas (Yellow)

Also trench wall is marked to locate backfill compaction zones above the pipes

#### POLYETHYLENE ELECTRICAL and TELECOMMUNICATION DUCTING:

Iplex Pipeline's range of polyethylene cable ducting complements the use of trenchless installation methods, including Horizontal Directional Drilling, under roads and built up areas, or where conventional open cut trenching is impractical.

Iplex Pipeline's ability to color or color- stripe polyethylene ducting, assists the duct asset owner with identification in multiple duct applications.

The available PE duct range conforms dimensionally to AS/NZS 4130, "PE Pipes for Pressure Applications", for SDR17 duct using PE80 (MDPE) materials.

#### POLYETHYLENE ELECTRICAL DUCT:



Two DN 110 PE electrical ducts in 50m coils on a dual-coil dispensing trailer



DN 110 PE electrical ducts with pull heads in place, ready for pull-in by horizontal directional drilling

Technical data and range available:

#### COILED PE ELECTRICAL CABLE DUCT SDR 17 (ORANGE)

OD	Iplex Code	Colour	Coil Length	SDR	Outside	Wall
mm				Rating	Diameter (mm)	Thickness (mm)
32	CABLE DUCT OR 32/25.200	All Orange	200m	17	32.0 - 32.3	1.9 - 2.2
32	CABLE DUCT OR 32/25.500	All Orange	500m	17	32.0 - 32.3	1.9 - 2.2
63	CABLE DUCT OR 63/55.100	All Orange	100m	17	63.0 - 63.6	3.8 - 4.3
63	CABLE DUCT OR 63/55.150	All Orange	150m	17	63.0 - 63.6	3.8 - 4.3
90	CABLE DUCT OR 90/79.50	All Orange	50m	17	90.0 - 90.9	5.4 - 6.1
90	CABLE DUCT OR 90/79.100	All Orange	100m	17	90.0 - 90.9	5.4 - 6.1
110	CABLE DUCT OR 110/97.50	All Orange	50m	17	110.0 - 111.0	6.6 - 7.4
110	CABLE DUCT OR 110/97.100	All Orange	100m	17	110.0 - 111.0	6.6 - 7.4
125	CABLE DUCT OR 125/110.100	All Orange	100m	17	110.0 - 111.0	7.4 - 8.3

#### COILED PE TELECOMMUNICATION DUCT



DN 32 PE telecommunication duct in a 500m coil on a coil dispensing trailer



DN 110mm PE telecommunication duct in a 100m coil on a coil dispensing trailer

Technical data and range available:

#### **COILED PE TELECOMMUNICATION DUCT SDR 17 (Green)**

O.D	Iplex Code	Colour	Coil	SDR	Outside	Wall
			Length	Rating	Diameter	Thickness
					(mm)	(mm)
32	TELEDUCT PE32/25.200	Lime Green	200m	11	32.0 - 32.3	2.9 - 3.3
32	TELEDUCT PE32/25.500	Lime Green	500m	11	32.0 - 32.3	2.9 - 3.3
63	TELEDUCT PE63/55.100	Lime Green	100m	17	63.0 - 63.6	3.8 - 4.3
63	TELEDUCT PE63/55.150	Lime Green	150m	17	63.0 – 63.6	3.8 - 4.3
110	TELEDUCT PE110/97.50	Lime Green	50m	17	110.0 - 111.0	6.6 - 7.4
110	TELEDUCT PE110/97.100	Lime Green	100m	17	110.0 - 111.0	6.6 - 7.4

#### COILED PE TELECOMMUNICATION DUCT (Chorus Branded)

ORDER CODE	COLOUR	SIZE mm	COIL LENGTH m
20021793	GREEN	20mm	200m
10012829	BLACK with RED TRI-STRIPE	32mm	1000m
10012829500	BLACK with RED TRI-STRIPE	32mm	500m
10012830	BLACK with GREEN TRI-STRIPE	32mm	1000m
10012830500	BLACK with GREEN TRI-STRIPE	32mm	500m
10012831	BLACK with VIOLET TRI-STRIPE	32mm	1000m
10012831500	BLACK with VIOLET TRI-STRIPE	32mm	500m
10012832	BLACK with BROWN TRI-STRIPE	32mm	1000m
10012832500	BLACK with BROWN TRI-STRIPE	32mm	500m





DN 32 PE sub- ducts inside 100mm PVC carrier ducts, at a roadside connection pit

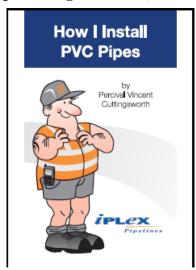
#### **Electrical and Telecommunication Fittings**

Iplex Pipelines has a range of PVC and polyethylene fittings for use with electrical and telecommunication ducting. The most common fittings are the post-formed bends. Other fittings, such as tees, y-junctions, couplers etc are available. For more information on these fittings contact Iplex Pipelines.

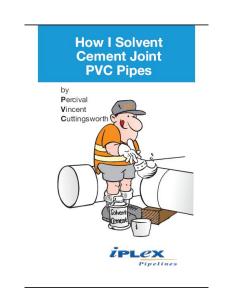
<sup>\*</sup> Only approved Chorus Contractors can purchase and install Chorus branded products. For further details please contact Iplex Pipelines..

RDER CODE	COLOUR	SIZE mm	QTY	
10012582	GREEN	20mm x 90° ROD* 240	1	
10013280	GREEN	20mm x 90° ROD* 400	1	
10012939	GREEN	20mm x 90° ROD* 530	1	
10013279	WHITE	20mm x 90° ROD* 100	1	
10012940	WHITE	20mm x 90° ROD* 300	1	20MM FORMED BEND
10013084	GREEN	50mm x 30° ROD*350	1	
10013087	GREEN	50mm x 45° ROD*200	1	
0013086	GREEN	50mm x 45° ROD*350	1	
10013100	GREEN	50mm x 45° ROD*900	1	
0013088	GREEN	50mm x 90° ROD*350	1	50MM FORMED BEND
10013099	GREEN	50mm x 90° ROD*900	1	M&F
0013098	GREEN	100mm x 22° ROD*900	1	
10013091	GREEN	100mm x 30° ROD*300	1	
0013093	GREEN	100mm x 45° ROD*300	1	
0011337	GREEN	100mm x 90° ROD*350	1	
0013095	GREEN	100mm x 90° ROD*400	1	100MM FORMED BEND
0013094	GREEN	100mm x 90° ROD*600	1	M&F
0013096	GREEN	100mm x 90° ROD*900	1	
ladius of Diamete		10011111 x 30 1105 300		
RDER CODE	COLOUR	SIZE mm	QTY	
0013109	GREEN	50mm	1	
				COUPLER
0012938	GREEN	F0 20		COULTER
	QVEEN	50mm x 20mm	1	
0012330	GREEN	Summ x 2umm	1	REDUCING SADDLE
	BLACK	50mm x 20mm	1	REDUCING SADDLE
P4004 P4005				REDUCING SADDLE  DUST CAP
P4004 P4005 VC-U CABLE D	BLACK BLACK DUCT BENDS (WHIT	50mm 100mm	1	
P4004 P4005 VC-U CABLE D RDER CODE	BLACK BLACK DUCT BENDS (WHIT	50mm 100mm E) IZE mm QTY	1	DUST CAP SOCKET ONE END
°4004 °4005 /C-U CABLE D	BLACK BLACK DUCT BENDS (WHIT	50mm 100mm	1	DUST CAP SOCKET ONE END

#### Pipe Joining Lubricant, solvent cement, and cleaner primer:







Refer to "How I solvent Cement Joint PVC Pipes" available at http://www.iplex.co.nz

### **Contact us:**

Ph: +649 625 4389

email: civil@tropex.co.nz





Tropex Civil provides for projects in the Pacific Islands and Papua New Guinea only