



# Emtelle DUCT SOLUTIONS

## SECTION 1



Emtelle provide a range of ducted products to suit all customer requirements. Main Duct is manufactured from PVC and provides a cost effective, low friction jointing system. Sub Duct provides a pre-roped or cable blowable solution to network construction where required.

Emtelle's Multi Duct offering comes in two types; Quadcom and Opticom. Quadcom is a rugged sturdy trunk route cable management system, ideal for congested urban and inner city areas and routes with shallow depth burial. Opticom takes the Quadcom idea to the next stage and provides a single pass cable management system which eliminates the need to winch in sub duct.



# Emtelle DUCT SOLUTIONS

## SECTION 1.1

### Main Duct (PVC)

These are normally supplied in cut lengths of 6m. Ducts with socket ends can be connected together.

Three such lengths, total 18m, can be bent around approx. 180°. For tighter radii, short “bends” are supplied with angles of 90°, 45° and 22.5°.

PVC MAIN DUCTS			
OD	IDnominal	Wall	SDR
33	30	1.5	22
42	36.7e	2.8e	15
50	42.6e	3.7e	13.5
53.9	48.6	2.5/2.75	20.5
53.9	50.6	1.5/1.75	33
88.9	83.4	2.6/2.9	32
96.5	90	3.05/3.45	30
110	103.4	3.22/3.4	33
114	107	3.4/3.65	32
125	117.1	3.8/4.1	31.6
160	153.8	3.0/3.2	52
168	163	2.4/2.6	77

Emtelle's PVC Main Ducts have taper sockets to allow for tight joints at 1/3 and 2/3 spigot penetration. They are extruded in virgin polymer to close tolerances ISO9000 and are resistant to chemicals, corrosion and sharp stone impingement.

A variety of colours are available.



# Emtelle DUCT SOLUTIONS

## SECTION 1.2

### Multi Duct

Emtelle's cable management system is offered at two levels, namely Quadcom and Opticom. Multi Duct applications are found in City to City trunk routes, major structures and bridge crossings, areas of shallow depth burial, customer lead-ins, Fibre to the mast/MDX stations and Multi-operator/customer duct leasing set ups to name but a few.

### Section 1.2.1

#### Quadcom

Quadcom is a sturdy and rugged trunk route cable management system, ideal for congested urban and inner city areas and routes with shallow depth burial.

4 number 42/36mm U.P.V.C. ducts with formed sockets are clipped together in bundles of four with clips at 800mm centres. It can also be laid in a flat configuration or as singles or un-clipped at intervals to allow the run to pass either side of an obstruction. The system is usually laid dry-jointed, but can be solvent welded for long rope blowing or cable blowing runs.

#### System Features

- ⊗ Ease of break-in and branch out access from boxes.
- ⊗ System available in different U.P.V.C. colours.
- ⊗ A complete range of bends, couplings, slip couplings, repair kits and rope-blowing guns.
- ⊗ Capable of being cable-pulled to full drum lengths.

#### System Benefits

- ⊗ A highly durable one-pass duct laying system.
- ⊗ Compression capability above 1,500N
- ⊗ Lower inner-duct friction giving longer box centres.
- ⊗ Capable of being mole ploughed when solvent welded.



# Emtelle DUCT SOLUTIONS

## SECTION 1.2.2

### Opticom

This is a ducted single pass cable management system eliminating the need to winch in sub-duct. The system is socket coupled with the outer seal ring acting against the mating pipe. The sub-duct sockets ring seal onto the sub ducts. The parts are pre-lubricated and the extruded close tolerance parts give easy on site push fit jointing.

#### System Features

- ⊗ Underground and Overhead versions available.
- ⊗ The system is available in U.P.V.C, Galvanised, Mild or Plastic coated steel Glass-fibre reinforced polyester.
- ⊗ A “one pass” duct laying system eliminating secondary sub-duct installation.
- ⊗ Straighter inner-ducts giving lower inner-duct friction and longer cable installation lengths.
- ⊗ A complete range of box terminators, bends, repair coupling, cabled-repair kits, adaptors to other materials, expansion joints and rope-blowing guns.



Three-way version is also available.



# Emtelle DUCT SOLUTIONS

## SECTION 1.3

### Sub Duct (High Density Polyethylene ~HDPE)

Emtelle's Sub Duct system is a pre-roped or cable blowable solution for network construction.

These are normally supplied on drums; length varies according to drum size. Cable pulling rope or draw cords are preinstalled into a range of High Density Polyethylene (HDPE) ducts with co-extruded low friction lining.

SUB DUCT					
OD / ID	SDR	Min Bend Radius (mm)		Safe Working Load (kN)	Crush Resistance at 15% (kPa)
		over 5degC	under 5degC		
25 / 20	10	625	875	2.5	2500
32 / 26	10.7	800	1120	3	2400
37 / 29	9.25	750	1100	6	3400
40 / 32	10	1000	1400	5	2600
50 / 40.8	10	1250	1750	6.5	2200

SDR ~ Standard Dimensional Ratio (Outer Diameter / Wall Thickness)

#### System Features

- ⊗ Bespoke requirements can be accommodated.
- ⊗ Cable installation utilising the preinstalled pulling Rope.
- ⊗ Available in coil and drum format up to 5km.
- ⊗ 50m/100m/150m coils for use as a subscriber drop duct.
- ⊗ Pull rope Draw cord to customer specification 5kN, 8kN and 11kN.
- ⊗ Installation into existing duct networks or direct burial options available.
- ⊗ Cable Blowable.



# Emtelle DUCT SOLUTIONS

## SECTION 1.3.1

### SUB Duct Connectors



A range of connectors is available both of the compression and screw type and are suitable for use on all sub duct.

For connectors not listed, please contact us for further details.

Description	Product Code	Unit of Issue
25mm Compression	3414	Each
28mm Compression	4533	Each
31mm Compression	3719	Each
32mm Compression	3917	Each
32mm Compression~Plasson	3917P	Each
35mm Grab Compression	4390	Each
37mm Compression	3942	Each
40mm Compression	7204	Each
50mm Compression	4065	Each
25mm Aluminium	4424	Each
28mm Aluminium	4489	Each
31mm Aluminium	3771	Each
32mm Aluminium ~Metcom	3650M	Each
32mm Aluminium	3650	Each
34mm Aluminium	3900	Each
35mm Aluminium	4232	Each
37mm Aluminium	4067	Each
38mm Aluminium	3974	Each
40mm Aluminium	4424	Each
40mm Push in	3979	Each

### PLASSON TELECOMS



A new range of compression connectors from Plasson for telecoms sub duct applications. The body is clear thus making it obvious at what point a fibre cable has been installed. Special end fittings have been made to allow pressure testing of a system.

Contact us for further details.