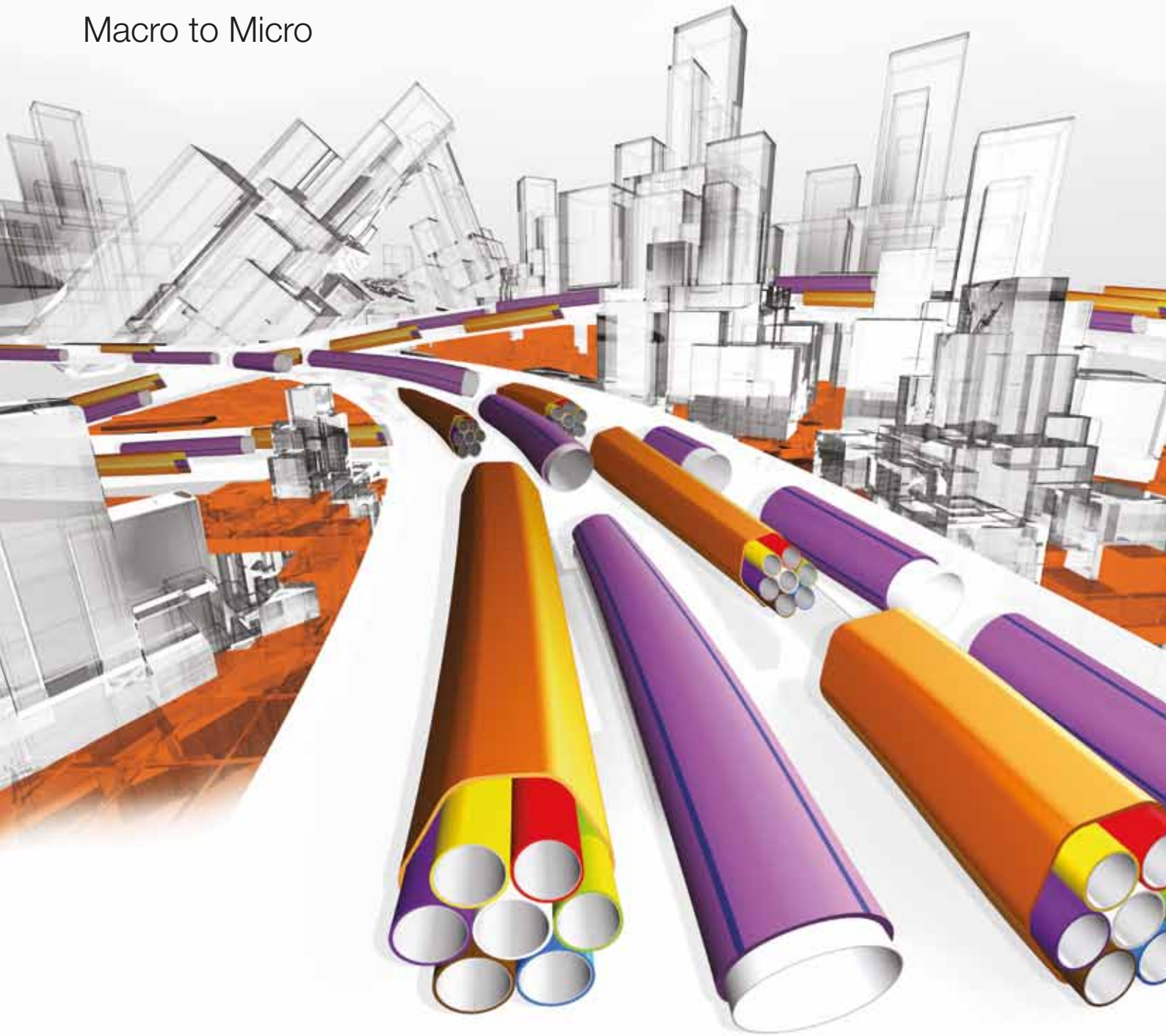
CBi electric
aberdare atc telecom cables (Pty) Ltd

Global Connections

Macro to Micro



ISO 9001 SABS

INFRADUCT

CBI Micro cable and Micro duct system

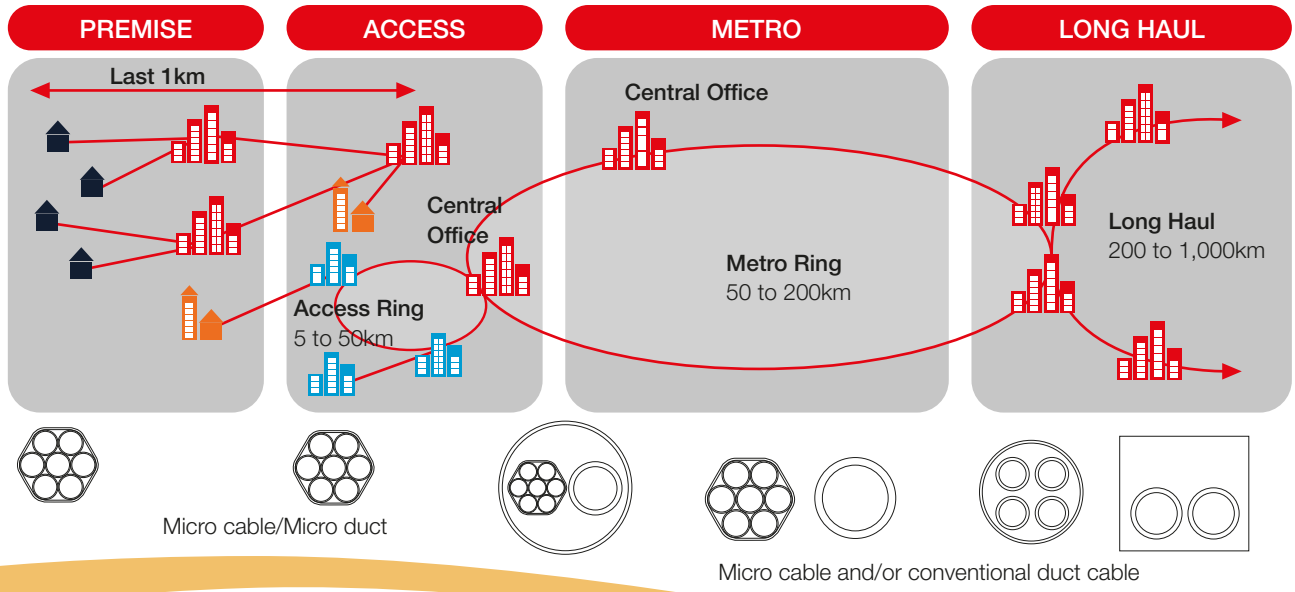
Broadband services, especially those to subscribers, are rapidly expanding. Due to this quick growth, the amount of available space in existing networks (which use conventional ducts) is becoming a problem.

CBI is using the tools at its disposal to make the most of the precious empty space still available in sub ducts. These tools include a comprehensive range of optical fibre cables which have been designed and are being implemented to form a micro duct cabling system. This increases the amount of space currently available, and allows companies to expand their bandwidth as they gain more customers.

By installing micro duct systems in a company's network, the organisation is given the power to use their duct system efficiently and to the fullest, as well as the added benefit of easily expanding as required. The process is fast and easy and saves on future construction costs. The micro duct and micro cable system allow for maximum cost effectiveness and return on investment.

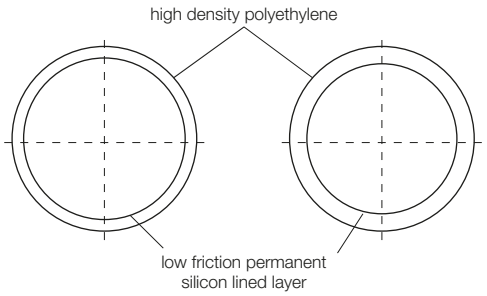
The installed micro ducts are made for a changing environment, and because the technology is constantly shifting, companies need to install the micro fibre cables they need today, to capitalise on the latest fibre technology as and when they need it, without performing any civil construction work on the network.

Duct and Cable Applications



INFRADUCT

Duct Types



SUB DUCTS

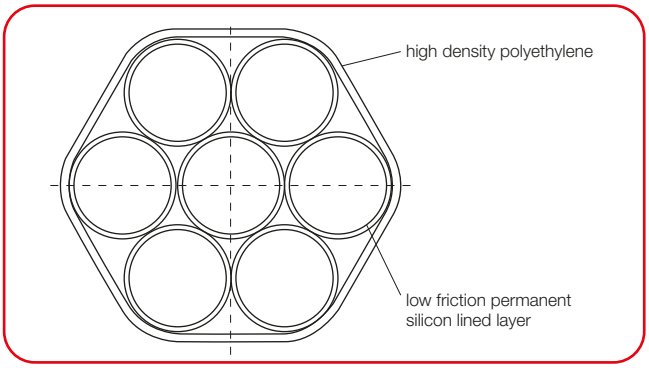
Size	Location
32/28mm	In main ducts
32/26mm	Direct buried
40/36mm	In main ducts
40/34mm	Direct buried
50/42mm	Direct buried

Features

- Made of high density polyethylene (HDPE) in a co-extrusion process with a low friction permanent silicon lined layer inside.
- Silicon lined layer is bonded to the substrate during the extrusion process to ensure no delaminating occurs during the lifetime of the product.
- Ducts have low coil set to ensure that when duct is uncoiled it lies straight, that is, doesn't follow a spiral path.

Installation Methods

- Ploughing of direct buried sub ducts
- Open/continues trenches of direct buried sub ducts
- Pull or blowing of sub ducts in main ducts (110mm)



MICRO DUCTS

Size	Description
12/10mm	Up to 96 fibre micro cable
16/13mm	144 fibre micro cable
Bundled micro ducts 1, 2, 3, 4 and 7 way	Other duct configurations can be designed on request

Applications

- Inside sub ducts (existing or new)
- Direct buried

Features

- Made of high density polyethylene (HDPE) in a co-extrusion process with a low friction permanent silicon-lined layer inside.
- Low friction silicon lined layer is bonded to the substrate during the extrusion process to ensure no delaminating occurs during the lifetime of the product.
- Bundled ducts are protected by a high polyethylene sheath.
- Ducts have low coil set to ensure that when they are uncoiled, they lie straight, that is, not following a spiral path.

Installation Methods

- Open/continuous trenches of direct buried sub ducts
- Pull or blowing of micro ducts in sub ducts 32, 40 or 50mm

Accessories

Duct couplers

Duct pipe slitter

Cups and plugs

Typical Properties

7 x 10/12mm BUNDLED MICRO DUCT

Bundled micro duct, 7 x 10/12mm micro duct, low friction, silicon lined, HDPE outer sheath, UV stabilised.

Nominal O.D.	39.2mm
Minimum bend radius	784mm
Nominal weight	457kg/km
Maximum installation tension	1200N
Drum length	1000m

7 x 13/16mm LONG HAUL BUNDLED MICRO DUCT

Bundled micro duct, 7 x 13/16mm micro duct, low friction, silicon lined, HDPE outer sheath, UV stabilised.

Nominal O.D.	51.6mm
Minimum bend radius	1032mm
Nominal weight	741kg/km
Maximum installation tension	1200N
Drum length	1000m

1, 2, 4 & 7 x 10/12mm BUNDLED MICRO DUCT FOR DIRECT BURIED APPLICATIONS

Low friction, silicon lined, HDPE outer sheath, UV stabilised.

Typical properties: **Micro Duct Type** Application	**1 Way** Direct Buried	**2 Way** Direct Buried	**4 Way** Direct Buried	**7 Way** Direct Buried
Nominal O.D. (mm)	15mm	15.2 x 26.8mm	27.2mm	39.2mm
Minimum bend radius (20 x O.D.)	300mm	310mm	544mm	784mm
Nominal weight (kg/km)	76kg/km	160kg/km	288kg/km	457kg/km
Maximum installation tension (N)	400N	600N	900N	1200N
Drum length (m) ** Other lengths available on request*	1000m	1000m	1000m	1000m

32, 40 and 50mm DUCTS

Low friction, silicon lined, HDPE outer sheath, UV stabilised.

Size Usage	32/28mm Main Duct	32/26mm Direct Buried	40/36mm Main Duct	40/34mm Direct Buried	50/42mm Direct Buried
Nominal O.D.	32mm	32mm	40mm	40mm	50mm
Low friction silicon liner (RT)	0.1mm	0.1mm	0.1mm	0.1mm	0.1mm
Outer sheath (RT) HDPE	2.0mm	3.0mm	2.0mm	3.0mm	4.0mm
Minimum bend radius (20 x O.D.)	640mm	640mm	800mm	800mm	1000mm
Nominal weight	190kg/km	275kg/km	240kg/km	350kg/km	571kg/km
Maximum installation tension	1200N	2000N	1200N	2000N	2000N
Drum length	1000m	1000m	1000m	1000m	1000m
Colour	Orange	Orange	Orange	Orange	Orange

** Other colours available on request*

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