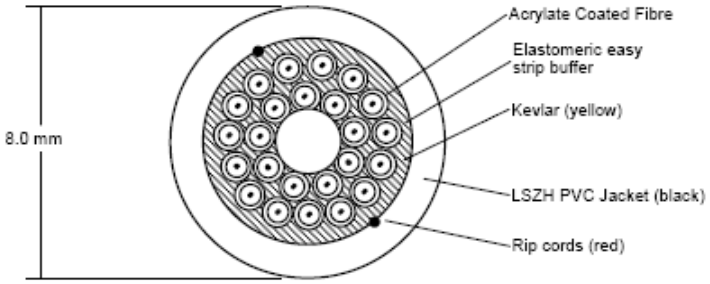
Chorus Tie Cable Specification

Intended Audience	Chorus Customers
Purpose of Document	The purpose of this document is to provide details on Tie Cable specifications.

Copper Cable	Application
Category 3 Suitable for indoor backbone LAN cabling	• Voice • T1 • 4Mbps Token Ring (IEEE 802.5) • 10 Base-T (IEEE 802.3) • 52 Mbps ATM • 100 Base VG-AnyLAN
Compliances	• AS/NZS 3080 2003 (Cat3) • UL Listed Type CMR • ANSI/TIA/EIA 568-B.2 (Cat3) 2001 • ISO/IEC 11801 Ed.2 (Cat3)
Conductor	Plain Annealed Copper Wire (24 AWG)
Insulation	Flame Retardant PVC
Colour Code	Band marked to ANSI / ICEA S-80-576. 50, 100 and 200 pair cables are constructed with 25 pair subunits and coloured whipping.
Sheath	Flame Retardant PVC qualified to be used as a riser cable

Fibre Cable Single Mode	Application
Distribution Series (D Series)	Multi-fibre D-Series cable is suitable for use as Internal building cable & outside plant applications including; • aerial • direct burial • duct installation Typically suitable for use as customer lead-in cable, cable well sheath change situations, building risers, tie cables and pre-connectorised Pig Cables. The cable is UL listed riser rated OFNR in accordance with National Electrical Code Article 770-51(b) and 770-53(b).

Fibre Cable Single Mode	Application
Example cable make up	
Optical Fibre Specification	• Single mode conforming to ITU-T G.657 series • Numerical aperture : 0.13
Core, Cladding & Jacket	• Core/Cladding diameter : 8.3/125 micron • Primary coating diameter : 245 micron • Secondary buffer diameter : 900 micron
Colour Code	• The outer jacket shall be Black. • The 900µm buffers shall be in accordance with the Standard Colour Code System, blue, orange, green, etc
Outer Jacket	• Flexible Low Smoke Zero Halogen (LSZH) flame retardant material tightly coupled to aramid strength members. • The jacket material, i.e. LSZH polymer, shall comply with o 0.76-US Navy, MIL-C-24643 (acid gas test), o NEC-713 (toxicity index), o NEC 711 (smoke index), o BS7211 (smoke emission), and o BS6425 Part 1 (acid gas emission). • Flame retardancy to UL listed type OFNR (1666).
Cable Sheath labelling	• The cord jacket shall be marked clearly and indelibly in white lettering every 1m with the cable owner name
Strength Member	• Non metallic Aramid yarns (Kevlar)
Expected Cable Performance	Max. Tensile Load : • 3400N short term (for fibre strain ≤50% of the proof test strain), 1150N long term. Min. Bend Radius : • 160mm short term, 80mm long term unloaded. Crush Resistance : • 300N/cm (IEC 794-1-E3) Impact Resistance : • 25 impacts (IEC 794-1-E4)

Fibre Cord Single Mode	Application
Single Mode 2mm construction	• For use as an optical jumper between OFDF drawers at the Main OFDF • For use in pigtails and patchcord used in Chorus/Telecom environments providing final connection to optical equipment • Can be simplex or duplex construction.
Optical Fibre Specification	• Single mode conforming to ITU-T G.657.A
Core, Cladding & Jacket	• Core/Cladding diameter : 8.3/125 micron • Primary coating diameter : 245 micron • Secondary buffer diameter : 900 micron • Jacket at 2mm outer diameter.
Colour Code	• The outer jacket colour shall be yellow.
Outer Jacket	• Flexible Low Smoke Zero Halogen (LSZH) flame retardant material coupled to aramid strength members.
Cord labelling	• The cord jacket shall be marked clearly and indelibly in black lettering at regular intervals with the cable owner name (if provided) and the fibre specification type. • If the owner name is not supplied the connector end will be labelled with this information and the OFDF end (if used) will note the owner. • Where the cord is supplied by Chorus, Chorus labelling applies.

Fibre Cord Multimode	Application
Multi Mode 2mm construction	• For use as an optical jumper between OFDF drawers at the Main OFDF • For use in pigtails and patchcord used in Chorus environments providing final connection to optical equipment • Can be simplex or duplex construction.
Optical Fibre Specification	• Core/Cladding diameter : 50/125 micron laser optimised • NA 0.20 • Refractive Index @850/1.483. @1300/1.479
Bandwidth Range	• @ 850nm 2000 Mhz.km (IEC 60793-1-49) • @1300nm 500 Mhz.km (IEC 60793-1-49)
Core, Cladding & Jacket	• Primary coating diameter : 245 micron • Secondary buffer diameter : 900 micron • Jacket at 2mm outer diameter or 3mm outer diameter.
Colour Code	• The outer jacket colour shall be aqua.
Outer Jacket	• Flexible Low Smoke Zero Halogen (LSZH) flame retardant material coupled to aramid strength members.
Cord labelling	• The cord jacket shall be marked clearly and indelibly in black lettering at regular intervals with the cable owner name (if provided) and the fibre specification type. • If the owner name is not supplied the connector end will be labelled with this information and the OFDF end (if used) will note the owner. • Where the cord is supplied by Chorus, Chorus labelling applies.