FREEDM® One Riser Cables

A LANscape® Solutions Product

features and benefits |

Waterblocking technology	OSP applications
Small diameter and bend radius	Easy installation in space-constrained areas
Color-coded fibers	Easy identification and consistent stripping
All-dielectric cable construction	Requires no grounding or bonding
UV-resistant, flame-retardant jacket	Rugged, durable and easy to strip

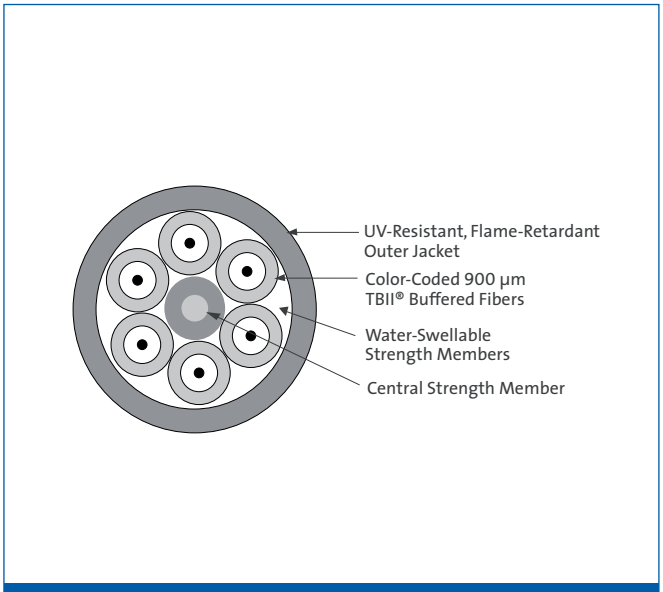
Corning Cable Systems FREEDM® One Riser Cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial, duct and direct-buried applications with no need for a transition splice when entering the building. Available in fiber counts of six, 12, 18 and 24 fibers, the tight-buffered construction facilitates easier termination for low-fiber-count applications in the local area network (LAN) and eliminates need for fan-out kits.

The design features TIA-598 color-coded 900 µm TBII® Buffered Fibers for easy identification, consistent stripping and direct termination. Available in 50 µm, 62.5 µm, single-mode and hybrid versions, the cable design meets ICEA S-104-696 test criteria and is also OFNR and FT-4 listed for riser and general purpose use. The small diameter and bend radius of the cable allow for easy installation in space-constrained areas while the innovative waterblocking technology is ideal for OSP applications.

(continued)

RoHS COMPLIANT

FREEDM One Riser Cable
| Photo LAN380



FREEDM One Riser Cable, 6-Fiber
| Drawing ZA-2630

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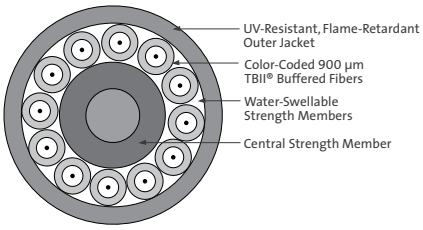
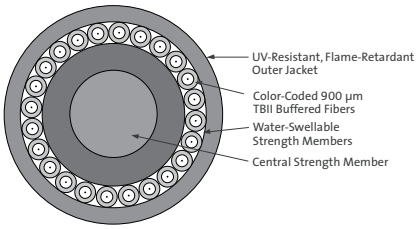
The all-dielectric cable construction requires no grounding or bonding and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip. This cable is also available with interlocking armor for special applications requiring additional mechanical durability.



FREEDM One Riser Cable, 12-Fiber
| Drawing ZA-2630



FREEDM One Riser Cable, 24-Fiber
| Drawing ZA-2630

specifications |

Temperatures	Storage:	-40° to +70°C (-40° to +158°F)
	Installation:	-10° to +60°C (+14° to +140°F)
	Operation:	-40° to +70°C (-40° to +158°F)
Approvals and Listings	National Electrical Code® (NEC®) OFNR, SA, FT-4, ICEA S-104-696	
Flame Resistance	UL 1666 (for riser and general purpose building applications)	

Fiber Count	Nominal Cable Weight kg/km (lb/1000 ft)	Nominal Outside Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)
2	22 (15)	5.2 (.20)	7.8 (3.1)	5.2 (2.0)
4	25 (17)	5.5 (.22)	8.3 (3.2)	5.5 (2.2)
6	27 (18)	5.5 (.22)	8.3 (3.2)	5.5 (2.2)
12	37 (25)	6.5 (.26)	9.8 (3.8)	6.5 (2.6)
18	52 (35)	7.4 (.29)	11.1 (4.4)	7.4 (2.9)
24	61 (41)	8.0 (.31)	12.0 (4.7)	8.0 (3.1)

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transmission performance |

	LANscape® 62.5 Solutions	LANscape Pretium® 150 Solutions	LANscape Pretium 300 Solutions	LANscape Pretium 550 Solutions	LANscape Pretium 600 Solutions	Single-Mode	Bend-Improved Single-Mode
Fiber Code	K	T	T	T	T	E	H
Performance Option Code	30	31	80	90	91	31	31
Optical Fiber Type (µm)	62.5 Multimode	50 Multimode	50 Multimode	50 Multimode	50 Multimode	Single-mode*	Bend-Improved Single-mode†
ISO/IEC 11801 Nomenclature	OM1	OM2	OM3‡	OM3‡	OM3‡	OS2	OS2
Wavelength (nm)	850/1300	850/1300	850/1300	850/1300	850/1300	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0	0.65/0.65/0.5	0.65/0.65/0.5
Minimum Over Filled Launch (OFL) Bandwidth (MHz•km)	200/500	700/500	1500/500	1500/500	1500/500	– / – / –	– / – / –
Minimum Effective Modal Bandwidth (EMB) (MHz•km)	220/ –	950/ –	2000/ –	4700/ –	5350/ –	– / – / –	– / – / –
Serial 1 Gigabit Ethernet Distance (m)	300/550	750/600	1000/600	1000/600	1000/600	5000 / – / –	5000 / – / –
Serial 10 Gigabit Ethernet Distance (m)	33/ –	150/ –	300/ –	550§/ –	600**/ –	10000/ – /40000	10000/ – /40000

** ITU 652.D compliant.*
† ITU 652.D compliant, ITU 657.A compliant.
‡ Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™ Systems solutions.
§ Assumes 1.0 dB maximum total connector/splice loss.
*** Assumes 0.7 dB maximum total connector/splice loss.*

Notes:
1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) Contact Corning Cable Systems Customer Service Representative for additional information.

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FREEDM® One Riser Cables

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ordering information | Contact Customer Service at 800-743-2671 for other options.

☐	☐	☐	☐	8	F	-	3	1	1	☐	☐	-	2	9
1	2	3	4	5	6		7	8	9	10	11	12	13	14

1-3

Select fiber count.
Standard offerings:
002 004 006 012
018 024
See Note 1.

4

Select fiber code (see Transmission Performance table).

5 / 12

Defines cable type.
8 / - = FREEDM® One Cable

6

Defines outer jacket.
F = Indoor/outdoor riser

7

Defines fiber placement.
3 = Standard for FREEDM One Riser Cable

8

Defines length markings.
1 = Markings in feet (standard) for single-layer design

9

Defines tensile strength (see Specifications).

10-11

Select performance option code (see Transmission Performance table).

13-14

Defines special requirements.
29 = No special requirements

Note:
1) Call Customer Service for special requirements.

Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/cablesystems

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