

# FREEDM<sup>®</sup> One Riser Cables

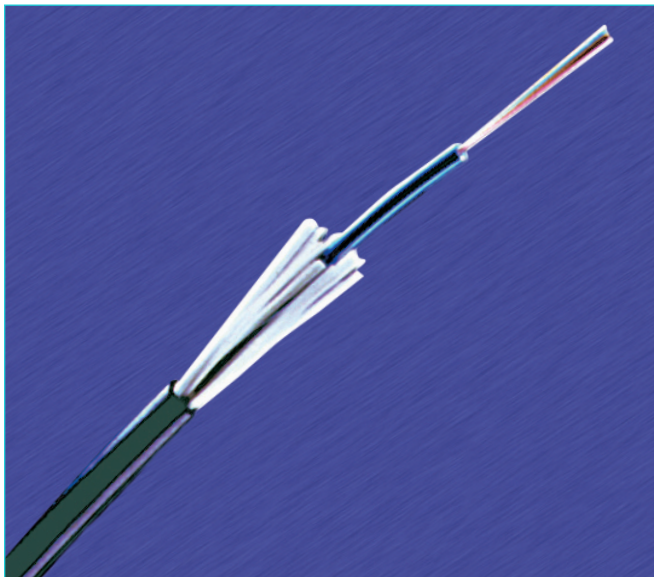
A LANscape<sup>®</sup> Pretium<sup>™</sup> Solutions Product

## features and benefits |

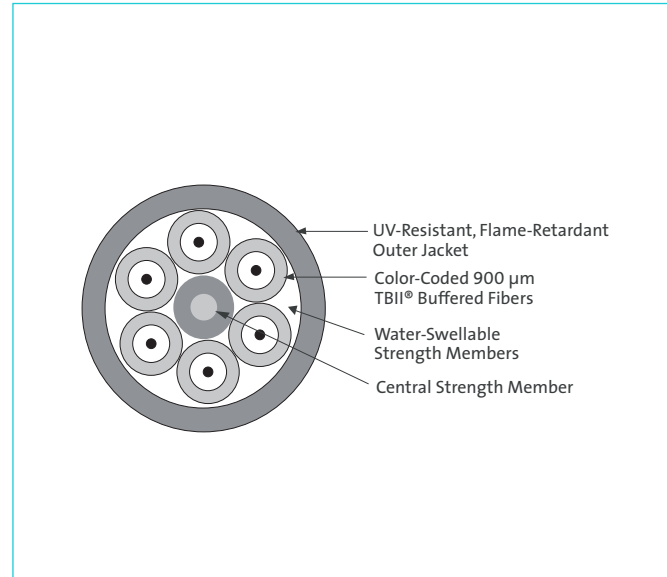
<b>Waterblocking technology</b>	OSP applications
<b>Small diameter and bend radius</b>	Easy installation in space-constrained areas
<b>Color-coded fibers</b>	Easy identification and consistent stripping
<b>All-dielectric cable construction</b>	Requires no grounding or bonding
<b>UV-resistant, flame-retardant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

Corning Cable Systems FREEDM<sup>®</sup> 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<sup>®</sup> 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. The all-dielectric cable construction requires no grounding or bonding and the UV-resistant,

(continued)



**FREEDM One Riser Cable**  
| Photo CLT13



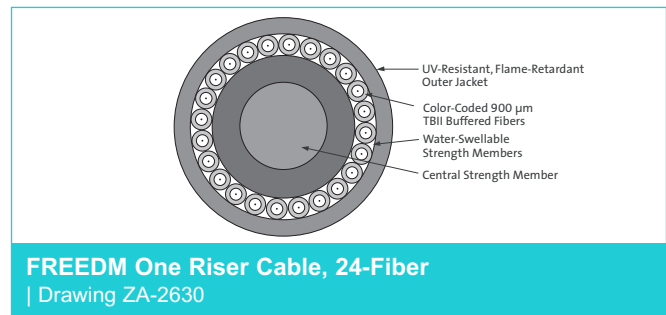
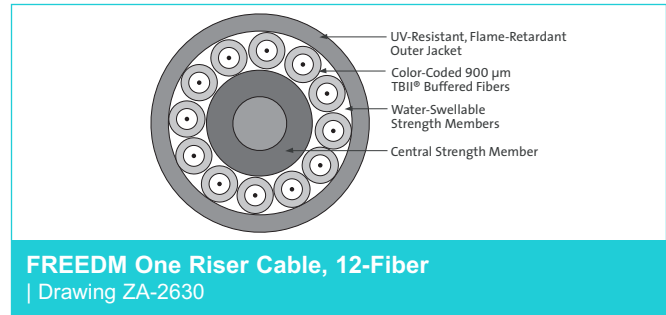
**FREEDM One Riser Cable, 6-Fiber**  
| Drawing ZA-2630



# FREEDM<sup>®</sup> One Riser Cables

A LANscape<sup>®</sup> Pretium<sup>™</sup> Solutions Product

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.



## specifications |

<b>Temperatures</b>	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<sup>®</sup> (NEC<sup>®</sup>) OFNR, FT-4

**Design and Test Criteria** ICEA S-104-696

Fiber Count	Nominal Weight kg/km (lb/1000 ft)	Nominal Outside Diameter mm (in)	Minimum Bend Radius		Maximum Tensile Loads	
			Loaded cm (in)	Installed cm (in)	Short-Term N (lbf)	Long-Term N (lbf)
6	36 (24)	6.4 (0.25)	9.6 (3.8)	6.4 (2.5)	1335 (300)	400 (90)
12	56 (38)	7.6 (0.30)	11.4 (4.5)	7.6 (3.0)	1335 (300)	400 (90)
18	89 (60)	9.7 (0.38)	14.6 (5.7)	9.7 (3.8)	2670 (600)	800 (180)
24	121 (81)	11.0 (0.43)	16.5 (6.5)	11.0 (4.3)	2670 (600)	800 (180)



# FREEDM<sup>®</sup> One Riser Cables

A LANscape<sup>®</sup> Pretium<sup>™</sup> Solutions Product

## transmission performance |

	LANscape <sup>®</sup> 62.5 Solutions	Pretium <sup>™</sup> 150 Solutions	Pretium 300 Solutions	Pretium 550 Solutions	Pretium 600 Solutions	Single-Mode	Bend-Improved Single-Mode
Fiber Code	K	C	S	S	S	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 Gig Distance (m)	300/550	750/600	1000/600	1000/600	1000/600	5000 / - / -	5000 / - / -
Serial 10 Gig Distance (m)	33/ -	150/ -	300/ -	550*/ -	600**/ -	10000/ - /40000	10000/ - /40000

\* Assumes 1.0 dB maximum total connector/splice loss.

\*\* Assumes 0.7 dB maximum total connector/splice loss.

\*\*\* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play<sup>™</sup> solutions.

\*\*\*\* ITU 652.D compliant.

\*\*\*\*\* ITU 652.D compliant, ITU 657.A compliant.

### 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.



# FREEDM<sup>®</sup> One Riser Cables

A LANscape<sup>®</sup> Pretium<sup>™</sup> Solutions Product

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>8</b>	<b>F</b>	-	<b>3</b>	<b>1</b>	<b>1</b>	<input type="checkbox"/>	<input type="checkbox"/>	-	<b>2</b>	<b>9</b>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	

## |1-3

Select fiber count.  
006 012 018 024

## |4

Select fiber code  
(see Transmission Performance table).

## |5 / 12

Defines cable type.  
8/- = FREEDM<sup>®</sup> 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

Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA  
800-743-2675 • FAX: 828-901-5973 • International: +1-828-901-5000 • [www.corning.com/cablesystems](http://www.corning.com/cablesystems)

Corning Cable Systems reserves the right to improve, enhance and modify the features and specifications of Corning Cable Systems products without prior notification. FREEDM, LANscape and TBII are registered trademarks of Corning Cable Systems Brands, Inc. Plug & Play and Pretium are trademarks of Corning Cable Systems Brands, Inc. All other trademarks are the properties of their respective owners. Corning Cable Systems is ISO 9001 certified. © 2007, 2008 Corning Cable Systems. All rights reserved. Published in the USA.  
LAN-520-EN / October 2008

