

# Fan-Out Riser Cables, 2-24 Fibers

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## features and benefits |

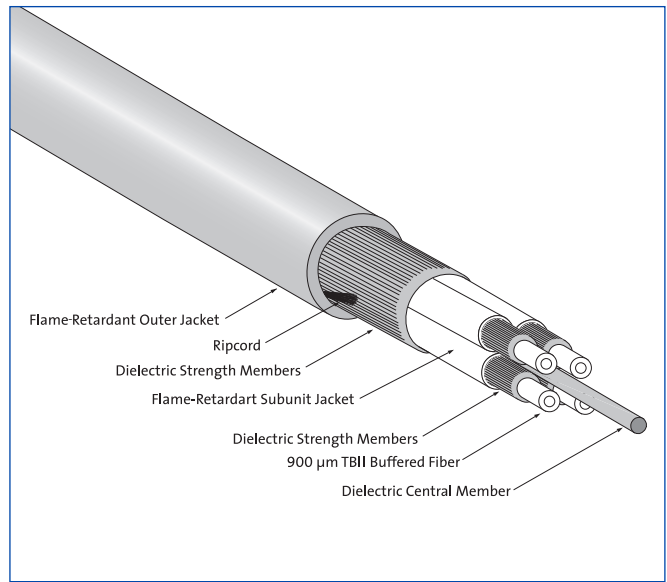
|  |                                  |
|--|----------------------------------|
| <b>900 µm TBII® Buffered Fibers</b>      | Easy, consistent stripping       |
| <b>Flame-retardant jacket</b>            | Rugged and durable               |
| <b>All-dielectric cable construction</b> | Requires no grounding or bonding |

Corning Cable Systems Fan-Out Riser Cables are designed for use in riser spaces within buildings, for building backbone and horizontal cabling. These multi-fiber OFNR cables use individually jacketed 900 µm TBII Buffered Fibers enabling easy, consistent stripping and facilitating termination.

The fibers are stranded around a dielectric central member with a flame-retardant outer jacket, making this cable particularly useful for applications requiring direct connection to terminal equipment or requiring extra rugged cables. Offered with 1.6 mm, 2.0 mm and 2.9 mm subunits, this design is also available in 50 µm, 62.5 µm, single-mode and hybrid versions. Also offered in OFNP and FT-6 versions.



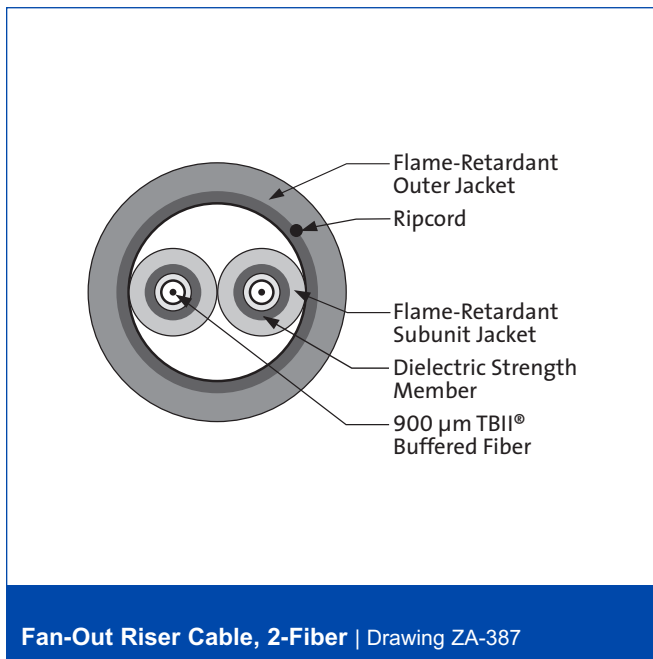
Fan-Out Riser Cable | Photo CTB01



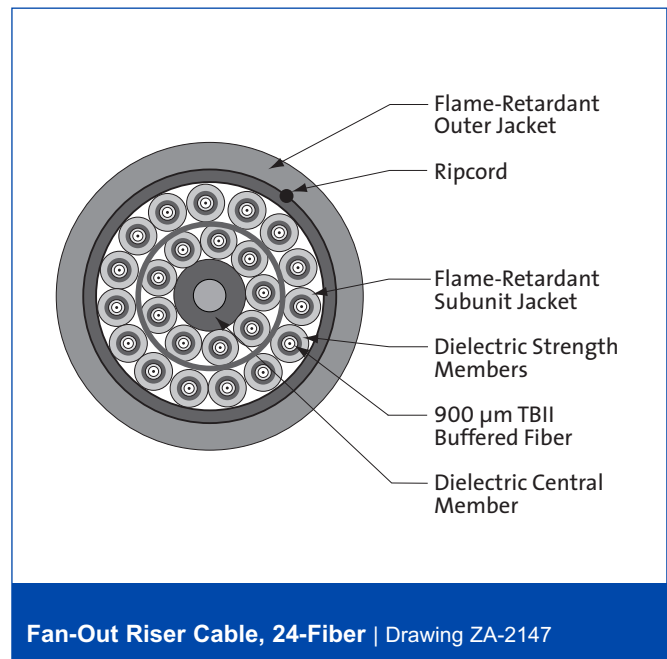
Fan-Out Riser Cable, 4-Fiber | Drawing ZA-1676

# Fan-Out Riser Cables, 2-24 Fibers

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Fan-Out Riser Cable, 2-Fiber | Drawing ZA-387



Fan-Out Riser Cable, 24-Fiber | Drawing ZA-2147

## specifications |

### Temperatures

Storage: -40° to +70°C (-40° to +158°F)  
Installation: -10° to +60°C (+14° to +140°F)  
Operation: -20° to +70°C (-4° to +158°F)

### Approvals and Listings

National Electrical Code® (NEC®) OFNR, CSA FT-4, ICEA S-83-596

### Flame Resistance

UL-1666 (for riser and general building applications)

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## specifications | (continued)

| Fiber Count                           | Nominal Outside Diameter mm (in) | Nominal Cable Weight kg/km (lb/1000 ft) | Central Member | Maximum Tensile Loads<br>Short-Term N (lbf) Long-Term N (lbf) |          | Minimum Bend Radius<br>Loaded cm (in) Installed cm (in) |            |
|---------------------------------------|----------------------------------|---|----------------|---|----------|---|------------|
| <b>1.65 mm Subunits, Single-Layer</b> |                                  |   |                |   |          |   |            |
| 2                                     | 5.2 (0.2)                        | 23 (16)                                 | Y              | 660 (150)   | 200 (45) | 7.8 (3.1)   | 5.2 (2.1)  |
| 4                                     | 6.0 (0.2)                        | 31 (21)                                 | Y              | 660 (150)   | 200 (45) | 9.0 (3.6)   | 6.0 (2.4)  |
| 6                                     | 7.1 (0.3)                        | 45 (30)                                 | G              | 660 (150)   | 200 (45) | 10.7 (4.2)  | 7.1 (2.8)  |
| 8                                     | 8.1 (0.3)                        | 58 (39)                                 | JG             | 660 (150)   | 200 (45) | 12.2 (4.8)  | 8.1 (3.1)  |
| <b>1.65 mm Subunits, Dual-Layer</b>   |                                  |   |                |   |          |   |            |
| 12 (9/3)                              | 8.4 (0.3)                        | 61 (41)                                 | Y              | 660 (150)   | 200 (45) | 12.6 (5.0)  | 8.4 (3.3)  |
| 16 (11/5)                             | 10.3 (0.4)                       | 81 (54)                                 | G              | 1320 (300)  | 400 (90) | 15.5 (6.1)  | 10.3 (4.1) |
| 24 (15/9)                             | 11.6 (0.5)                       | 117 (79)                                | JG             | 1320 (300)  | 400 (90) | 12.4 (6.9)  | 11.6 (4.6) |
| <b>2.0 mm Subunits, Single-Layer</b>  |                                  |   |                |   |          |   |            |
| 2                                     | 5.9 (0.2)                        | 28 (19)                                 | Y              | 660 (150)   | 200 (45) | 8.9 (3.5)   | 5.9 (2.3)  |
| 4                                     | 6.8 (0.3)                        | 39 (27)                                 | G              | 660 (150)   | 200 (45) | 10.2 (4.0)  | 6.8 (2.7)  |
| 6                                     | 8.3 (0.3)                        | 60 (41)                                 | G              | 660 (150)   | 200 (45) | 12.5 (4.9)  | 8.3 (3.1)  |
| 8                                     | 9.4 (0.4)                        | 76 (51)                                 | JG             | 660 (150)   | 200 (45) | 13.5 (5.3)  | 9.4 (3.7)  |
| <b>2.0 mm Subunits, Dual-Layer</b>    |                                  |   |                |   |          |   |            |
| 12 (9/3)                              | 10.5 (0.4)                       | 80 (54)                                 | G              | 660 (150)   | 200 (45) | 15.8 (6.2)  | 10.5 (4.1) |
| 16 (11/5)                             | 11.3 (0.4)                       | 103 (69)                                | G              | 1320 (300)  | 400 (90) | 17.0 (6.7)  | 11.3 (4.4) |
| 24 (15/9)                             | 13.9 (0.6)                       | 161 (108)                               | JG             | 1320 (300)  | 400 (90) | 20.9 (8.2)  | 13.9 (5.5) |
| <b>2.9 mm Subunits, Single-Layer</b>  |                                  |   |                |   |          |   |            |
| 2                                     | 7.7 (0.3)                        | 40 (27)                                 | Y              | 660 (150)   | 200 (45) | 11.6 (4.5)  | 7.7 (3.0)  |
| 4                                     | 8.6 (0.3)                        | 59 (40)                                 | G              | 660 (150)   | 200 (45) | 12.9 (5.1)  | 8.6 (3.4)  |
| 6                                     | 10.4 (0.4)                       | 88 (59)                                 | J              | 660 (150)   | 200 (45) | 15.6 (6.2)  | 10.4 (4.1) |
| 8                                     | 12.3 (0.5)                       | 122 (82)                                | JG             | 660 (150)   | 200 (45) | 18.5 (7.3)  | 12.3 (4.8) |
| <b>2.9 mm Subunits, Dual-Layer</b>    |                                  |   |                |   |          |   |            |
| 12 (9/3)                              | 13.5 (0.5)                       | 128 (86)                                | G              | 1320 (300)  | 400 (90) | 20.3 (8.0)  | 13.5 (5.3) |
| 16 (11/5)                             | 15.5 (0.6)                       | 186 (125)                               | G              | 1320 (300)  | 400 (90) | 23.3 (9.2)  | 15.5 (6.1) |
| 24 (15/9)                             | 19.3 (0.8)                       | 288 (193)                               | JG             | 1320 (300)  | 400 (90) | 29.0 (11.4)   | 19.3 (7.6) |

**Note:**

Central Member Types: Y = Yarn, G = Glass Reinforced Plastic (GRP), JG = Jacketed GRP.

Fiber arrangement in dual-layer designs is shown in parentheses.

Example: (9/3) = 9 outside fibers around 3 inner fibers.

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## transmission performance |

|   | LANscape®<br>62.5<br>Solutions | LANscape<br>Pretium® 150<br>Solutions | LANscape<br>Pretium 300<br>Solutions | LANscape<br>Pretium 550<br>Solutions | LANscape<br>Pretium 600<br>Solutions | Single-Mode     |
|---|--------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------|
| Fiber Code  | K                              | T                                     | T                                    | T                                    | T                                    | E               |
| Performance<br>Option Code                                      | 30                             | 31                                    | 80                                   | 90                                   | 91                                   | 31              |
| Optical Fiber<br>Type (µm)                                      | 62.5<br>Multimode              | 50<br>Multimode                       | 50<br>Multimode                      | 50<br>Multimode                      | 50<br>Multimode                      | Single-mode**** |
| ISO/IEC<br>11801<br>Nomenclature                                | OM1                            | OM2                                   | OM3***                               | OM4***                               | OM4***                               | OS2             |
| Wavelength<br>(nm)  | 850/1300                       | 850/1300                              | 850/1300                             | 850/1300                             | 850/1300                             | 1310/1383/1550  |
| Maximum<br>Attenuation<br>(dB/km)                               | 3.4/1.0                        | 2.8/1.0                               | 2.8/1.0                              | 2.8/1.0                              | 2.8/1.0                              | 0.65/0.65/0.50  |
| Minimum<br>Over Filled<br>Launch (OFL)<br>Bandwidth<br>(MHz•km) | 200/500                        | 700/500                               | 1500/500                             | 3500/500                             | 3500/500                             | - / - / -       |
| Minimum<br>Effective<br>Modal<br>Bandwidth<br>(EMB)<br>(MHz•km) | 220/ -                         | 950/ -                                | 2000/ -                              | 4700/ -                              | 5350/ -                              | - / - / -       |
| Serial 1<br>Gigabit<br>Ethernet<br>Distance (m)                 | 300/550                        | 750/600                               | 1000/600                             | 1100/600                             | 1100/600                             | 5000 / - / -    |
| Serial 10<br>Gigabit<br>Ethernet<br>Distance (m)                | 33/ -                          | 150/ -                                | 300/ -                               | 550*/ -                              | 600**/ -                             | 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™ Systems solutions.

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

### Notes:

- 1) Improved attenuation and bandwidth options available.
- 2) Bend-insensitive single-mode fibers available on request.
- 3) Contact a Corning Cable Systems Customer Service Representative for additional information.
- 4) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

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[ordering information](#) | Contact Customer Service at 800-743-2671 for other options.

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

## |1-3

Select fiber count.  
Standard offerings:  
002 006 012 024  
004 008 016

## |4

Select fiber code  
(see Transmission  
Performance table).

## |5 / 12

Defines cable type.  
6 / - = Standard for  
fan-out cable

## |6

Defines outer jacket.  
1 = Standard for riser

## |7

Defines fiber placement.  
3 = Standard

## |8

Defines length markings.  
1 = Markings in feet  
(standard)

## |9

Select tensile strength.  
1 = 2.9 mm subunits  
3 = 2.0 mm subunits  
4 = 1.65 mm subunits

## |10-11

Select performance  
option code (see  
Transmission  
Performance table).

## |13-14

Defines special  
requirements.  
24 = No special requirements

# Fan-Out Riser Cables, 2-24 Fibers

notes |

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notes |

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PRETERMINATED SYSTEMS | CABLES | CONNECTORS | CABLE ASSEMBLIES | HARDWARE | SPLICE CLOSURES | TEST EQUIPMENT | SPLICE EQUIPMENT | TRAINING |

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notes |

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