

1.0 SCOPE

This document establishes the specification requirements for an indoor/outdoor distribution fiberoptic cable. This cable construction consists of multimode OM4 fibers in a distribution tight-buffered design with a riser rated PVC jacket.

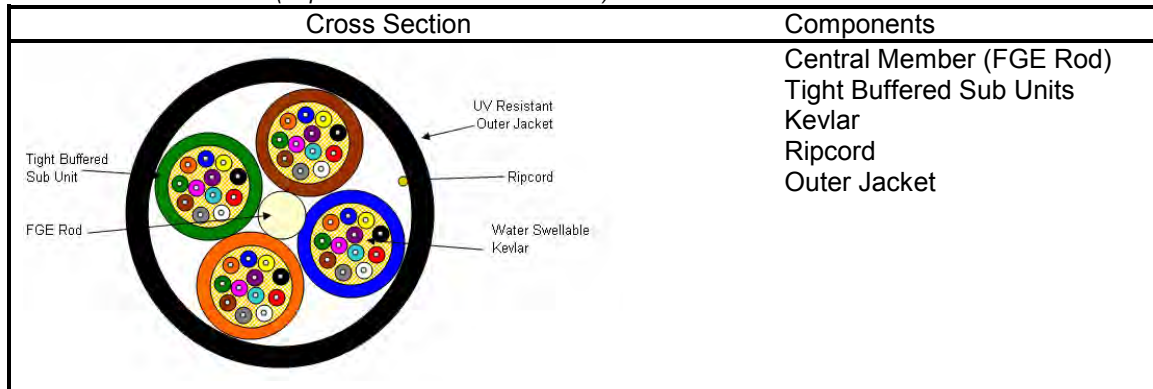
2.0 APPLICABLE DOCUMENTS

Reference Documents: TIA/EIA FOTP Standards 455
Color Coding of Fiber Optic Cables TIA/EIA-598
UL 1666
GR-409-CORE

3.0 REQUIREMENTS

This document contains test values for all-important mechanical, optical, and environmental parameters and as such, is the basis for all-incoming inspection and acceptance.

4.0 CABLE CROSS SECTION *(Representation of a 48 fiber cable)*



5.0 OVERALL CABLE CONSTRUCTION

5.1 Tight Buffered Fiber

Dimension: 900µm, nominal.

Tight buffered fiber color code: 1-blue, 2-orange, 3-green, 4-brown, 5-slate, 6-white, 7-red, 8-black, 9-yellow, 10-violet, 11-rose, and 12-aqua.

5.2 Sub-unit consists of water swellable aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket. The subunits are colored per TIA/EIA-598 or orange and are numbered for identification.

5.3 Cable strength Member

Fiberglass Epoxy Rod (dielectric)

An up coat of PVC (if necessary per construction for symmetry).

5.4 Cable Core

Sub-units and fillers (if needed) are stranded around the CSM, using reverse oscillation.

Binder yarns are applied over the cable core.

5.5 Outer Sheath

UV Resistant Black riser rated PVC jacket (or color per customer request)

5.6 Cable Markings

REMFO 11 SERIES, FIBER OPTIC CABLE, XX (denotes number of fibers)-50/125, 10GIG OM4, REMEE PRODUCTS CORP., MM/YY (month & year of manufacture), OFNR C(ETL)US, Sequentially marked. Special print as required by customer.

5.7 Nominal Cable Dimensions & Weights

Remee Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
11-018-12H-GBSFXF	18	13.7	0.540	142	96
11-024-12H-GBSFXF	24	13.7	0.540	142	96
11-036-12H-GBSFXF	36	16.8	0.660	221	148
11-048-12H-GBSLXF	48	16.0	0.628	198	133
11-060-12H-GBSLXF	60	17.7	0.696	233	157
11-072-12H-GBSLXF	72	19.3	0.760	302	203
11-096-12H-GBSLXF	96	23.4	0.920	447	300
11-144-12H-GBSLXF	144	27.9	1.098	586	394

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters (nominal)

Fiber Type	Multimode*
Maximum Attenuation @ 850/1300nm**	3.0 / 1.0 dB/km
LED Performance (Overfilled Launch Bandwidth)	3500/500MHz-km@850/1300
Laser EMB Performance	4700/500MHz-km@850/1300
Core Diameter, nominal	50 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<1%
Core-Clad Concentricity	≤1.5 µm
Zero Dispersion Wavelength	1295-1320nm
Maximum Zero Dispersion Slope	0.11 ps/nm ² -km
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.483/1.478
Proof Test	100 kpsi

*Guaranteed Gigabit Ethernet Distance of 550mtr at 850nm for 10 Gb/s per IEEE802.3ae and 1000mtr at 850nm for 1 Gb/s per IEEE802.3z.

**Measured attenuations on shipping reels will not exceed the nominal values by .75dB/km.

7.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2700N / 607lbf

Long Term: 890N / 200lbf

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Crush Resistance: 220N/cm

Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.)

Temperature Rating:

Operation, -40°C to +85°C

Installation, 0°C to +75°C

Storage, -55°C to +85°C

8.0 PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available.



1751 State Rte. 17A Florida, New York 10921
800 431-3864