

## 1.0 SCOPE

This document establishes the specification requirements for a distribution fiberoptic cable. This cable construction consists of singlemode fibers in a distribution tight-buffered design with a riser rated PVC jacket.

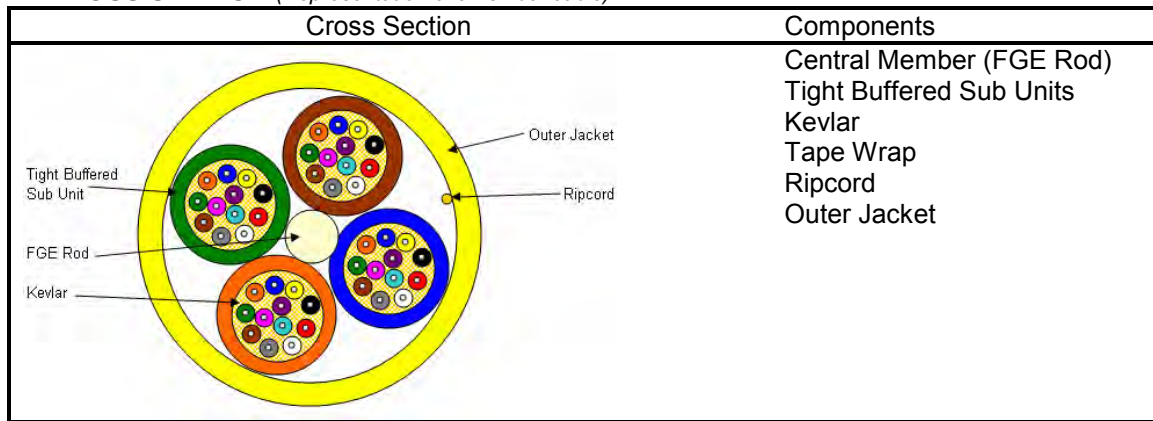
## 2.0 APPLICABLE DOCUMENTS

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 aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket.

### 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.

A non-wicking and non-hygroscopic tape is applied longitudinally with a nominal 25% overlap.

Binder yarns are applied over the core tape.

### 5.5 Outer Sheath

Yellow riser rated PVC jacket (or color per customer request)

### 5.6 Cable Markings

REMFO 11 SERIES, FIBER OPTIC CABLE, XX (denotes number of fibers)-SM, 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**

Remeo Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
11-018-76M-AYSXNF	18	13.9	0.546	155	104
11-024-76M-AYSXNF	24	13.9	0.546	151	101
11-036-76M-AYSXNF	36	16.9	0.666	230	155
11-048-76M-AYSXNF	48	16.1	0.634	201	135
11-060-76M-AYSXNF	60	17.7	0.696	246	165
11-072-76M-AYSXNF	72	19.2	0.756	304	204
11-096-76M-AYSXNF	96	23.5	0.926	471	316
11-144-76M-AYSXNF	144	27.4	1.078	580	390

**6.0 FIBER CHARACTERISTICS**

6.1 Physical Parameters (nominal)

Fiber Type	Singlemode*
Attenuation @ 1310/1550nm**	≤.40/.30 dB/km
Core Diameter, nominal	8.3 μm
Cladding Diameter	125.0 ± 1.0 μm
Primary Coating Diameter	245 ± 10 μm
Dispersion Slope	≤0.092 ps/nm <sup>2</sup> -km
Fiber Cutoff Wavelength	1150-1350nm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter @ 1310nm	9.2 ± 0.4μm
Mode Field Diameter @ 1550nm	10.5 ± 1.0μm
Cladding Non-circularity	<1%
Core/Clad Offset	<.80 μm
Zero Dispersion Wavelength	1300-1322nm
Numerical Aperture	0.13
Group Refractive Index @ 1310/1550nm	1.467/1.4675
Proof Test	100 kpsi

\*ITU G.652b

\*\*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