

# FieldShield

## StrongFiber



### Application

Designed to simplify the placement of fiber, FieldShield StrongFiber reduces the cost of any fiber deployment, while providing industry leading protection when combined with FieldShield Microducts. StrongFiber is pulled through microduct at turn-up maximizing installation efficiency. In the event of a duct or fiber being damaged or for future upgrades, the fiber is easily pulled from microduct, duct repaired and a new FieldShield StrongFiber is then pulled through the microduct for fast and cost-effective restoration or upgrade.

StrongFiber may be used in place of a traditional patch cord for reduced cable pileup within the route path of new or traditionally oversubscribed frames within a central office, head-end, data center or remote hut. With the more than 85% reduction from 3mm patch cords and 69% reduction from a 1.2mm patch cord, StrongFiber greatly reduces chances of micro-bends with reduced weight maximizing the cable radius and bend limiting equipment on any fiber management element.

### Description

FieldShield StrongFiber is a durable high tensile strength fiber when compared to other fibers of its size. It is suitable for both indoor and outdoor environments. Manufactured with premium bend-insensitive fiber, FieldShield StrongFiber offers high tensile strength to resist damage to the fiber during installation in the FieldShield Microducts. When terminated with a FieldShield Pullable Connector, the FieldShield StrongFiber can be quickly deployed, and in turn, reduces installation time drastically.

### Technical Specifications

Characteristics	Specification
Fiber	OFS All Wave Flex + Fiber
Water Peak	ZWP (Zero Water Peak)
Bend Insensitive	Meets G.657 A2
Color	Black (Other Colors Special Order)
Length	50 ft. Increments up to 300 ft. Assembly
Fiber Count	Single Fiber
Pullable Connectors	FieldShield SC/UPC, SC/APC
Standard Connectors	SC/UPC, SC/APC, LC/UPC, LC/APC
Mode	Singlemode
Outside Diameter	900 um
Material	Thermoplastic Blend, Low Smoke/Fume, Non-Halogen Flame Retardant
Rating	UV Stable, OSP Temperature Rated
Bend Radius	10mm Minimum
Operating Temperature	-40°F to 176°F (-40°C to 80°C)
Installation Temperature	-14°F to 158°F (-26°C to 70°C)
Installation Tension	18 lbs.

### Physical Glass Characteristics

Characteristics	Description
Fiber Size	250um
Clad Diameter	125.0 ± 0.7 μm
Clad Non-circularity	≤ 1 %
Core/Clad Concentricity Error (Offset)	≤ 0.5 μm max., < 0.2 μm typically
Coating Diameter (Uncolored)	235 - 245 μm
Coating-Clad Concentricity Error	(Offset) ≤ 12 μm
Tensile Proof Test	100 kpsi (0.69 GPa)
Coating Strip Force Range	≥ 0.3 lbf < 2.0 lbf (≥ 1.3 N < 8.9 N)

Note: Preliminary Specifications

### Performance Specifications

Minimum Performance Specifications for Terminated Singlemode Connectors					
Connector Type	Ferrule Material	Polish Type	Ins. Loss Typical (dB)	Max. Ins. Loss (dB)	Min. Ret. Loss (dB)
SC	Ceramic	UPC	0.15	0.20	55.00
LC	Ceramic	UPC	0.15	0.20	55.00
SC	Ceramic	APC	0.18	0.20	65.00
LC	Ceramic	APC	0.18	0.20	65.00

### Configured Part Number

FS - A S 1 - 0 0 1 -    Z Z -    Z Z XXXXF or XXXXM

1

2

**1 Select connector #1**

- B = Pullable SC/UPC
- D = Pullable SC/APC
- A = SC/UPC
- C = SC/APC
- E = LC/UPC
- G = LC/APC

**2 Select connector #2**

- B = Pullable SC/UPC
- D = Pullable SC/APC
- A = SC/UPC
- C = SC/APC
- E = LC/UPC
- G = LC/APC
- Z = Pigtail

**XXXXM or XXXXF**

XXXXF = Length in feet  
XXXXM = Length in meters