

# Armored Loose Tube Fiber

Single Armor · Single Jacket · OSP Rated · Direct Burial — 12 to 144 Strand

DIRECT BURIAL

OSP RATED

GEL-FREE DRY BLOCK

OS2 / OM4

CST / IAC

Armor Type

≥2,200 N/cm

Crush Rating

-40°C to 70°C

Temp Range

12-144F

Strand Range

## PRODUCT OVERVIEW

Mirabel Energy USA Armored Loose Tube fiber optic cable is designed for OSP installation in demanding environments requiring mechanical protection. Single interlocked aluminum (IAC) or corrugated steel tape (CST) armor provides crush resistance and rodent protection for direct burial, underground conduit, and exposed industrial raceway. Gel-free dry-block water-blocking eliminates gel cleanup at splice points. Available in OS2 single-mode and OM4 multimode with fiber counts from 12 to 144 strands.

## APPLICATIONS

- Direct burial inter-building campus runs
- Underground utility substation fiber
- Renewable energy site fiber infrastructure
- Industrial cable tray and raceway runs
- Mining facility communications fiber
- Data center OSP entry and campus backbone
- Exposed runs requiring rodent protection

## CONSTRUCTION DESCRIPTION

- Fiber Element:** 250µm coated OS2 or OM4, gel-free buffer tube
- Buffer Tube:** Loose tube, 6 or 12 fibers per tube
- Water Block:** Dry-block tape / super-absorbent yarn — no gel
- Strength Members:** Central FRP rod, aramid yarn
- Armor:** Interlocked Al (IAC) or corrugated steel tape (CST)
- Inner Jacket:** Polyethylene (PE) — black, UV-stable
- Outer Jacket:** HDPE — NEC/NESC direct burial rated
- Color Code:** TIA-598-C 12-color, sequential per tube

## TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION — OS2	SPECIFICATION — OM4
Fiber Type	OS2 9/125µm ITU-T G.652.D	OM4 50/125µm IEC 60793-2-10
Attenuation @ 1310nm	≤0.40 dB/km	—
Attenuation @ 1550nm	≤0.40 dB/km	—
Attenuation @ 850nm	—	≤3.0 dB/km
Crush Resistance (IAC)	≥2,200 N/cm	≥2,200 N/cm
Crush Resistance (CST)	≥3,000 N/cm	≥3,000 N/cm
Min. Bend Radius	20x cable OD (installation)	20x cable OD (installation)
Tensile Strength	2,700 N short-term	2,700 N short-term
Operating Temperature	-40°C to +70°C	-40°C to +70°C
Jacket Material	HDPE black, UV-stable	HDPE black, UV-stable
Burial Rating	Direct burial — no conduit req.	Direct burial — no conduit req.
Standards	Telcordia GR-20, IEC 60794-3	Telcordia GR-20, IEC 60794-3

## STRAND COUNT — ORDERING INFORMATION

FIBER COUNT	AVAILABILITY	OD (mm)	WEIGHT (kg/km)	MBR (mm)	ORDER CODE
12 Strand	IN STOCK — Reno/Houston	0.5	08	100	MB-ALT-012