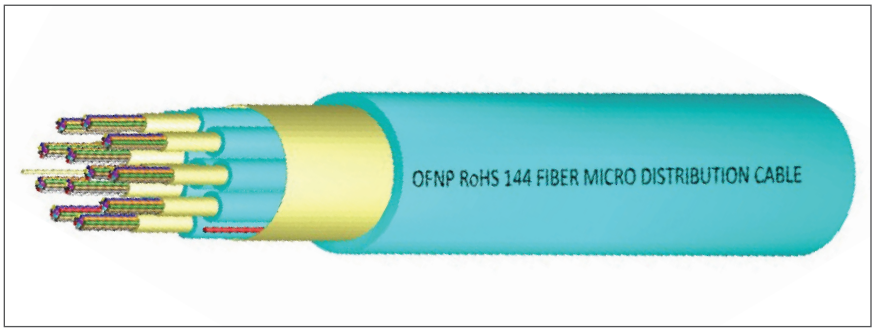
THE LIGHT CONNECTION INC™
Fiber Optic Cable

Connections

CONNECTING THE NEXT GENERATION

Keeping You In The Loop - **February 2021**

Move Away From Cable Trays With TLC's Jetted Cable Pathway Solutions!



The appropriate scaling or "future proofing" of networks in the design stage using **pathway solutions** saves time, money and overall hassles when it comes to system expansions and upgrades. TLC's Micro-Distribution is the perfect solution for "Jetted Cable" (air blown fiber) applications and comes highly recommended by leading companies in the pathway solutions field.

During the global pandemic, TLC is taking all appropriate precautions to keep our employees safe and fully support our customers' needs. Being a manufacturer of critical telecommunication products; TLC has been deemed an "essential" business and remains open, 100% operational, and ready to support all your requirements.

Ask Engineering

I notice different acceptable attenuation values when it comes to bare fiber vs. fiber optic cable. Why is that?

The reason for these differences is that when fiber is used in the manufacturing process to make cable, it is subjected to many "stresses" that increase the attenuation of the bare fiber. Some of the stresses include:

- *"Helically Stranding" or twisting of fiber applies torsional stress*
- *Added tension on the manufacturing line*
- *Spooling as cable vs. bare fiber*
- *Any and all inherent stresses added during the manufacturing process*

Current values/standards listed below:

Maximum Attenuation Standards for Optical Fiber:

ITU-T G.652.D and/or IEC-60793-2-50 B1.3, Single Mode @1550nm is 0.3 dB/km

ITU-T G.651.1 and/or IEC-60793-2-10, Multimode 50um @ 850nm is 2.5 dB/km

Maximum Attenuation Standards for Cables:

ANSI/TIA-568.3-D,
Single Mode @ 1550nm is 0.4dB/km,
Multimode 50um @850nm is 3.0 dB/km