



EDITOR'S CHOICE

Sumitomo's FutureFLEX Air-Blown Fiber System

Everyone knows fiber is cool. But installing it is typically slow and expensive. You need to set conduit, pull fiber bundles, handle radiuses and corners, seal joints, repeat. Pulling forces can damage fiber, limiting the length that can be pulled without splicing. To avoid being caught short in future, you commonly end up installing more fiber than you presently need.

Enter **Sumitomo Electric Lightwave's FutureFLEX** division (Research Triangle Park, NC - 877-356-FLEX, www.futureflex.com), with a better solution. The FutureFLEX system starts with special conduit: from one to 19 flexible 6mm tubes, sealed inside a tough, element-proof cover. It's designed not to crimp when bent within specifications, and available in a variety of sizes and jacket compositions for plenum, riser, general purpose and outdoor applications. Outdoor variations include steel-jacketed types for trench installation.

You install the conduit empty, in long, continuous lengths - no fiber inside to break when you pull. At junction points, you join the conduits with what Sumitomo calls Tube Distribution Units - wherein small "patch tubes" let you conjoin tube segments. They also come in a range of sizes and styles for indoor and outdoor applications.

Once the conduit is installed point-to-point, you grab a FutureFLEX fiber bundle, a specially-jacketed standard fiber that meets TIA/EIA 598 and ICEA 596 mechanical

and optical requirements, as well as UL 1666 Riser, and UL 910 Plenum standards. The FutureFLEX fiber jacket is aerodynamically micro-textured for maximum drag, making it easy to blow through tubes up to 3,000 feet or more in length. A special blower head and canned compressed gas serve to blow the fiber bundle through your conduit, to the far end. Thereafter, splicing and termination is carried out conventionally.

Speed is one obvious advantage. Two men can install a one-mile run of FutureFlex in less than an hour - a full day's work for a small group, using conventional materials and techniques. The air-blown install imposes no pulling force on the fiber, so stresses and resultant bad runs are largely eliminated. You get huge capacity: a 19-tube conduit, filled with 18-fiber bundles gives you 342 fibers. Two such 19-tube FutureFLEX conduits can fit into the same space as a conventional 4" fiber conduit offering only three bundle pathways.

Because it's so fast and easy to install FutureFLEX, and because the typical conduit arrangement offers so many spare paths, there's no need to install redundant fiber today against anticipated future need. Instead, when you need more fiber, you can install the latest and greatest stuff; on demand. FutureFLEX even lets you blow out unused fiber and re-use it elsewhere.

Finally, there's the question of access. Because the FutureFLEX system creates a closed, end-to-end path serviced only from its ends, it doesn't matter what that path traverses - clean rooms, secure areas, danger zones, etc. Work-crews will never need to access the conduit directly. Very cool.

For more information, please visit www.futureflex.com, call 877-356-FLEX (3539) or email; fflex@sumitomoelectric.com.