

Midco® Speeds Fiber-Fed Deployments with FieldShield® Pushable Fiber and Microduct and FieldSmart® Fiber Panel from Clearfield®

Background

Founded in 1931, Midco is the leading provider of internet and networking, voice, data center, cable TV, home security and advertising services in the Midwest. Midco's service area includes North Dakota—a state experiencing unprecedented growth.

Challenge

The challenge Midco faced is similar to what many established cities and towns experience. The Midco team needed to put fiber in an old, downtown Fargo building (built in 1902) that over time had grown to include both residential housing and commercial businesses. This involved several deployment options common to legacy buildings, such as maneuvering fiber through a home garage and underground to get into a difficult-to-reach business computer room.



"Usually a fiber install involves one location, not several of them. This installation required us to pull fiber through multiple buildings to reach our business customer," says Jeremy Billings, Regional Engineering Manager at Midco. "And with most fiber installs, you'll have a splice when transitioning fiber types, but we had nowhere to physically put a splice."

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Solution

The Clearfield microduct, pushable fiber and fiber panels solved Midco's fiber challenge. "If it weren't for Clearfield's microduct, this installation would have taken more time and cost much more," says Billings.

The building did have an outside plant fiber run that passed through the back alley of the property. So, Midco started there, attaching fiber aerially from a splice case on the strand and then extending the fiber 100 feet into the building through a protected microduct pathway. Two different microducts were used. The first type was a FieldShield aerial self-supporting version installed from the splice case on the strand to the side of the building. The microduct was secured to the building using standard attachment hardware.



Next, the team entered a garage on the ground floor and transitioned to FieldShield Riser Rated Microduct using a coupler. This smaller 10/6 duct was specifically designed for indoor applications requiring small pathways in confined spaces. From the garage, Midco placed the indoor microduct into a crawl space.

Then, microduct made its way through a basement, up into a congested conduit pipe, and next to the final destination—a small computer room. With the 10/6 Riser Rated Microduct coupled to the aerial microduct, the Midco team pushed a 12-fiber cable through the protected pathway from the splice case outside all the way through to the computer room, creating one continuous fiber run. The small size (10mm OD) of the microduct allowed the fiber and duct to be placed in these difficult-to-reach areas.



Results

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In addition to this project, Midco and Clearfield have worked together on many others, creating end-to-end solutions to solve problems. For example, key to the success of fiber-fed deployments is the performance and precision of the optical components—such as splitters and Wave Division Multiplexers (WDM)—used in both inside and outside plant environments. Clearfield was selected because of its unique ability to provide the technology Midco needed. Clearfield’s optical component technologies were custom built to Midco’s unique split ratios, light requirements and interoperability needs.

“When I have out-of-the-box ideas, Clearfield is always willing to work with me on solutions and new products. After I meet with them, they deliver custom options and make sure we deploy successfully. Clearfield has been outstanding to work with,” says Billings.

About Midco

Founded in 1931, Midco is the leading provider of internet and networking, voice, data center, cable TV, phone, home security and advertising services in the Midwest. More than 385,000 residential and business customers count on Midco services in 342 communities in Kansas, Minnesota, North Dakota, South Dakota and Wisconsin. Visit Midco.com to learn more about Midco and how the company gives back to the communities it serves.

About Clearfield, Inc.

Clearfield, Inc. (NASDAQ: CLFD) designs, manufactures and distributes fiber optic management, protection and delivery products for communications networks. Our “fiber to anywhere” platform serves the unique requirements of leading incumbent local exchange carriers (traditional carriers), competitive local exchange carriers (alternative carriers), and MSO/cable TV companies, while also catering to the broadband needs of the utility/municipality, enterprise, data center and military markets. Headquartered in Minneapolis, MN, Clearfield deploys more than a million fiber ports each year. For more information, visit www.SeeClearfield.com or @ClearfieldFiber.