

Midco Accelerates FTTH Installs with Clearfield's Craft-Friendly Fiber Solutions

Background

With more than 90 years of experience, Midcontinent Communications understands that the telecommunications industry slows down for no one. Midco constantly adapts to evolving technology to provide top-tier fiber broadband across the upper Midwest as fast as possible.

Midco has built robust outside plant infrastructure using fiber optic solutions from Clearfield®, including cassettes, terminals and cabinets. For the final connection, the company strives to streamline fiber-to-the-home (FTTH) deployments with help from Clearfield as a trusted technology partner.

A recent Midco FTTH installation in rural Minnesota showcased the advantages of Clearfield's craft-friendly products, ClearPass® Dust Cap for fiber cleaning and intuitive 3D instructions via the BILT® app.

"Working with Clearfield, we've come up with solutions to fix real challenges in our world. The support we've received from the Clearfield team over the years has been huge."

— Jeremy Billings, Construction & Engineering Planning Manager at Midco

Challenges

More and more, consumers require reliable, super-fast fiber broadband, so Midco has ramped up efforts to turn up FTTH customers at a faster pace. However, the process faces speed bumps that limit how efficiently fiber techs complete each job. These common issues include:

- Difficulty snaking fiber to the test access point (TAP) and optical network termination (ONT)
- Ensuring clean endface connections to guarantee network performance
- Documentation that doesn't match how today's technicians learn, making it difficult to stay current on product guidelines

For Jeremy Billings, Construction & Engineering Planning Manager at Midco, these industry-wide issues largely boil down to lack of consideration for the installers. Another oversight is environmental conditions. For example, rural areas in the upper Midwest face greater challenges due to long cable runs and difficulty trenching cable during the long winters.

"Clearfield's products are more tech-focused, making installations easier for the people who are out in the elements every day," Billings says.



Midco's FTTH networks depend on Clearfield technologies, from the fiber distribution hub (FDH) to the home demarcation point.

Solutions

During the installation in Minnesota, Midco's technician demonstrated how Clearfield technologies helped to fast-track the process. Several weeks before the install, a construction crew had trenched and run a 950-foot Clearfield drop cable runs through hardened conduit from the roadside pedestal to the house. This set up the Midco crew to make a fast final connection.

A [CraftSmart® Deploy Reel TAP](#) offered an ideal demarcation point due to its rugged design and straightforward mounting on the home's exterior. The FLEXdrop Deploy Reel allows technicians to unspool up to 100 feet of FieldShield® FLEXdrop® cable into the home to connect the ONT.



Using Clearfield's CraftSmart® Deploy Reel TAP, techs can quickly unspool fiber as needed with less worry about cable management.

"The Deploy Reel makes it really easy for our techs. They can feed the line into the house on their own without worrying about it getting caught outside. They just pull off the amount of fiber they need, and the Deploy Reel automatically takes care of the slack storage," Billings says.

Midco fiber techs clean each connector with a ClearPass Dust Cap. This one-time cleaning device comes on every Clearfield patch cord and cable with an SC connector and is more than 94% efficient at removing contamination from the fiber endface.

"Clearfield's Dust Cap is a big value add. Techs just peel off the foil, press the cleaner to the fiber and plug in the connector. Rather than hunting down a missing one-click, they have the Dust Cap with them all the time, and it reduces our expense on consumables," Billings explains.



Midco's training team and techs in the field can leverage the BILT® app's interactive 3D instructions for installing Clearfield products.

Using [the BILT app for Clearfield products](#) also streamlines installations. The app offers 3D instructions with video and voice directions for all of Clearfield's most used technologies. It's also available offline when working in remote areas without internet connectivity.

"Our trainers use the BILT app to create onboarding content for field techs," Billings says. "Because the BILT app is available to use on any smartphone, our techs can also look up any product in the field if they need a refresher or if it's a product that was released since their last training."

Results

Using labor-light and craft-friendly technologies from Clearfield, fiber technicians at Midco can turn up a home in an hour or so once the fiber has been trenched. The ClearPass Dust Cap boosts internet performance right away, and it mitigates future issues that can arise as networks scale. And the BILT app prepares Midco's field team for any challenge that comes their way.

Beyond that, the ruggedized Clearfield technologies ensure Midco can meet customer needs despite bad weather conditions, according to Billings. "If it's -20 degrees in Grand Forks in February and a customer calls in for service, we'll still do a same-day install," he says. "Our networks can be temped in thanks to Clearfield's Flat Drop cable and other products, which is helpful when the ground is frozen."

Since Midco started working with Clearfield around 2008, the two companies have collaborated closely to overcome new challenges as they arise. Through Clearfield technology advances, Midco has been able to solve real-world problems and chart future innovation. As a result, Midco has continually accelerated its fiber deployment capabilities throughout the network.

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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.