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KENNEDY BROADBAND

Communications Broadband Deployment: Duralite® vs. Polymer Concrete

Kennedy Broadband, LLC is a full service outside plant construction contractor that specializes in fiber optic outside plant deployments throughout the southern and midwestern U.S. Their expertise encompasses consulting, project management, engineering and design, splicing, and FTTx.

This comparison study demonstrates the relative performance and benefits of Duralite and polymer concrete enclosures Kennedy Broadband, LLC experienced during a recent installation.

CHALLENGE

Kennedy Broadband, LLC installed a Duralite and a polymer concrete enclosure as part of a communications broadband deployment project along Highway 17 outside of Richmond Hill, GA. This installation was part of their regular operation and each portion (Duralite and polymer concrete) included additional communications components, including an above-ground pedestal for polymer concrete and plastic conduits for fiber distribution for Duralite.

"Duralite is light, it's strong, and it's tier rated. We've proven how strong it is."

James Kennedy

SOLUTION

Kennedy Broadband encountered distinct advantages of Duralite over polymer concrete from weight reductions and increased safety to time and cost savings.

"We found the Duralite enclosure to be a lot easier to handle. It took less people to do it. And if you don't have an excavator, you don't need one to set the Duralite," said Bjorn Skogen from Kennedy Broadband.

Duralite enclosures were safer and easier to handle. "It gives us peace of mind as managers to be able to send two guys out without having to worry about back injuries or having polymer concrete vaults rolling off of a trailer and severely hurting them," said Kennedy Broadband Operations Manager James Kennedy.

Maneuverability was another clear advantage of Duralite. It came as a pleasant surprise, according to James Kennedy. "I could easily move and set a 48-inch vault by myself. Anyone involved in underground communications construction knows this is a game-changer."

This Kennedy Broadband deployment project proved Duralite to be a formidable and versatile enclosure product when compared to polymer concrete.

BENEFITS

TIER RATING

Duralite enclosures have the same tier 15 and tier 22-rated strength as polymer concrete, along with the same protection for underground communication and utility infrastructure—but with significantly less weight and easier maneuverability.

LIGHTER WEIGHT

Duralite enclosures are up to 75% lighter than polymer concrete, making them easier to transport and install. It doesn't require heavy machinery, such as an excavator to lower and position underground.

Even if an excavator is used to dig the hole, that machine can be free after digging to excavate subsequent holes, so machinery and time are maximized.

SAFETY

Duralite can be carried by hand and doesn't require a heavy machine to lower underground. Polymer concrete presents safety risks, for example, if there's loss of balance when guiding the product into the ground or stacking up enclosures for transport.

COST SAVINGS/EFFICIENCY

Faster and safer installations save time and costs. Duralite installations take an average of 30% less time than polymer concrete installations. Additionally, not having to rent or use heavy machinery saves on fuel costs.

MODIFIABILITY

Unlike polymer concrete, Duralite is engineered to allow contractors to make modifications at the installation site with common tools.

SUSTAINABILITY

Duralite is more sustainable than polymer concrete from manufacturing through installation. Manufacturing is highly automated and uses up to 65% recycled materials. During installation, Duralite has a lower carbon footprint than polymer concrete, with fewer trips from the factory to the distribution stocking yard, and from the yard to the project site.

Plus, because it's up to 75% lighter than polymer concrete, you can use more fuel-efficient trucks to transport it, and you won't need heavy machinery to lift, lower, and position it underground.

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