

## Introduction

Leading fiber-based service provider in the mid-Atlantic region, is accelerating its fiber-optic network build-out across the Carolinas and Virginia, setting their sights on connecting over 1 million locations. They're a proven provider, currently offering high-speed internet, Wi-Fi, voice, and streaming services to more than 250,000 homes and businesses. To meet their ambitious expansion goals and reach both urban and rural areas, the customer is seeking innovative solutions to streamline Fiber-to-the-Home (FTTH) network installation. This large-scale project promises to significantly improve connectivity throughout the region.



## The Challenge

The customer was facing three major hurdles in their FTTH deployments:

### Slow roll-out of Fiber-to-the-Home (FTTH) networks

Field termination of fiber optic cables required highly skilled technicians, leading to bottlenecks and increased costs which hinders the overall network rollout.

### Cable Damage During Installation

Traditional pulling grips, while effective, does not provide optimised performance while cable deployment by pulling. This damage can lead to delayed network rollout time, service disruptions for customers, and costly repairs, ultimately delaying deployment goals.

### Inefficient Packaging with Cardboard Spools

Bulky cardboard spools used for transporting fiber optic cables were prone to damage and degradation at the installation site. This resulted in potential risk of cable integrity being compromised before deployment even began.

## STL solution and differentiators

Understanding the customer's specific requirements, STL has provided its OptoBolt - pre-connectorized drop cable solution, designed to substantially streamline installation processes by simplifying field installation and introducing modularity into network design. Featuring a single-buffer, easy-access design, it facilitates straightforward deployment ideal for underground and multipurpose installations. Its central inner subunit (Simplex) configuration houses a single optical fiber within a thermoplastic sheath, fortified by embedded strength members that prevent buckling. The addition of a toneable version includes a 24 AWG conductor for underground location tracing, enhancing post-installation maintenance efficiency. Built to withstand external pressures, the cable is both tensile and crush-resistant, ensuring durability in challenging environments. Furthermore, UV protection shields the cable from sunlight exposure, preserving its longevity and operational integrity.



## STL solution and differentiators

These pre connectorized cables addresses the key pain points encountered during traditional installation processes while offering a myriad of advantages that significantly enhance efficiency, reliability, and cost-effectiveness. The field-hardened connectors featured in STL's cables ensure superior durability and consistent connectivity. This addresses concerns about the reliability of connectors, thereby reducing the need for maintenance and repair, ultimately leading to enhanced operational efficiency and cost savings.



## The Strategic Advantages of Collaborating with STL

**Faster deployment:** By recommending the adoption of STL's OptoBolt pre connectorized cables, we anticipate reduced installation time.

**Cost savings** - Stemming from reduced labor requirements and minimized downtime- STL optical connectivity portfolio products enable de-skilling field labour, saving cost and time.

**Customized solutions:** STL team helped address challenges of congested conduits during installation with a customised enhancement for improved cable handling. This enhancement contributed to smoother cable passage, resulting in notable reductions in installation time and complexity.

**Better handling and packaging:** We also saw opportunity to improve upon usage of cardboard spools for cable packaging and proposed a transition to alternative packaging that is lighter and more compact, resulting in less wear and tear as compared to bulky cardboard spools. It's also easier to handle and transport reducing the risk of damage during installation periods.

"In building out our large scale 100% fiber optic network, reliable partners with the latest fiber technology, local presence, and fast delivery are paramount. I believe STL will be a great partner to help us deliver world-class, seamless fiber connectivity to our customers." - Customer

For additional information please contact your sales representative.

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