

Solving the Problem of Excess Drop Cable

FTTP Tight Buffered Indoor/Outdoor Drop (Series W7) Applications

The final step of connectorizing a new customer for Fiber-To-The-Home (FTTH) service typically involves the installation of a fiber drop cable and an outdoor Optical Network Terminal (ONT) to the side of the home. Whether the fiber drop is pre-connectorized or spliced on-site to a pigtail, the excess fiber drop is usually coiled outside and adjacent to the ONT enclosure.

This common practice is not only unsightly for the homeowner, it leaves the FTTP drop cable more vulnerable to damage and can be inviting for someone to pull.

A less common practice for storing the excess fiber drop cable is to secure the strength rods inside of the ONT and coil several feet of buffer tube within the ONT. This approach can be used if on-site splicing is employed and if the ONT is large enough to hold coiled buffer tube without kinking.

This practice avoids the problem of an unsightly coil against the house, and requires use of a larger enclosure to house the ONT and coiled buffer tube.

The Superior Essex FTTP Tight Buffered Indoor/Outdoor Drop Series W7 cable provides a solution to the above problems. This innovative drop cable design fully complies with OSP requirements for a drop fiber cable and contains a GR-409 compliant, OFNR-rated simplex tight buffer drop cable instead of the typical loose buffer tube.

The simplex tight buffer inner cable utilizes bend insensitive single mode fiber and can be tightly coiled without attenuation loss. This functionality allows all excess fiber to be neatly and safely stored within the smallest of conventional ONT enclosures.



ONT closed with FTTP drop cable loop adjacent



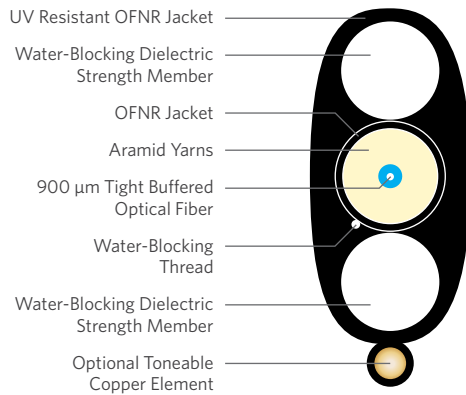
ONT closed with FTTP drop cable inside



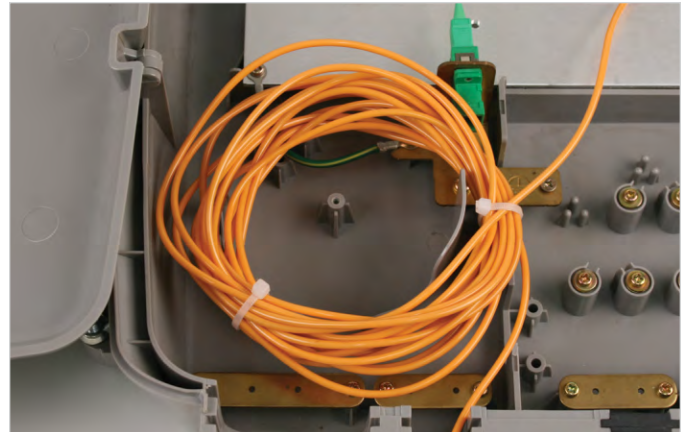
Superior Essex FTTP Tight Buffered Indoor/Outdoor Drop (Series W7)

This design also allows the connector to be permanently attached to the strength yarns of the inner simplex cable. This means that a pre-connectorized assembly made with the Superior Essex FTTP tight buffered cable can have excess length stored within the ONT enclosure as tightly coiled simplex cable.

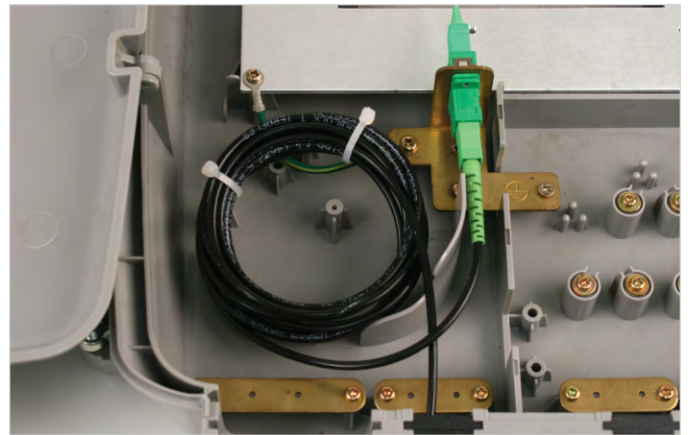
If indoor ONTs are ever used, the Superior Essex FTTP tight buffered drop cable enables lower installation costs because it can transition from outdoors to indoors without any intermediate termination, and the simplex inner cable is optimal for tight bends that often occur within the customer's premises.



FTTP tight buffer drop cable is an indoor/outdoor cable rated at -40°C to $+65^{\circ}\text{C}$. It is available with or without a toneable element. It is available with a MDPE jacket or an OFNR-rated PVC jacket. The cable meets GR-20, PE-90 and is listed on the RUS/RDUP website.



ONT open with drop cable secured and several feet of buffer tube coiled inside



ONT open with W7 cable installed and tight coil of tight buffer drop shown.