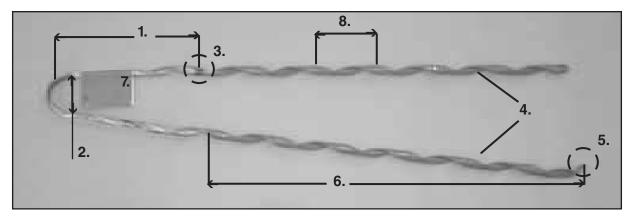


# FIBERLIGN® Lite Tension Dead-end

For use on All Dielectric Self-Supporting (ADSS) Fiber Optic Cable

Be sure to read and completely understand this procedure before applying product. Be sure to select the proper PREFORMED product before application.



FIBERLIGN® Lite Tension Dead-end Nomenclature

# **NOMENCLATURE**

- 1. Loop Length—minimum 8" (203 mm)
- 2. Loop Diameter
- 3. Color Code and Crossover Mark
- 4. Dead-end Legs
- 5. Flared Rod Ends

- 6. Latex Coating (length of coverage shown)
- 7. ID Tag
- 8. Pitch Length

# **DESCRIPTION**

The FIBERLIGN® Lite Tension Dead-end (FLTDE) is designed to terminate short span, low tension ADSS fiber optic cables in low voltage environments. Consult PLP for suitability of the FLTDE unit for each application to determine whether it meets system load requirements. NOTE: If loads are too high, PLP will make an alternative hardware recommendation.

The FLTDE has a pliable latex coating and flared rod end treatment that helps prevent possible damage to the cable jacket during and after installation.

The loop diameter of the FLTDE will fit over a minimum diameter of 1-1/2" (38.1mm) and a maximum diameter of 2-1/4" (57.2 mm). The FLTDE is designed to accept common guy wire deadend pole fittings like thimble eyes and guy hooks. The extended loop length reduces the need for an extension link, however, PLP can provide other FIBERLIGN® fittings including extension links (with thimble clevis) if desired.

#### **INSTALLATION ISSUES**

FIBERLIGN® Dielectric Dead-ends are designed and manufactured for optimum performance. Removing wires, shortening the length, or deforming the product will affect product performance. WARNING: Do not alter the product in any way.

STRINGING-IN Tension: For initial stringing tension that can represent the long-term load condition, the FLTDE is rated for 585 (2.6 kN) pounds. Higher loads approaching 600 pounds (2.7 kN) may be achieved depending on the brand and construction of cable. Contact PLP® for further information.

LOADED TENSION: For NESC heavy loaded tension that represent the short term load in a cold temperature environment, the FLTDE is rated for 800 pounds (3.5 kN). Performance may vary depending on brand and construction. Contact PLP® for further information.

CAUTION: For warm temperature climates designated as NESC light or medium districts, cable manufacturers may expand the cable rating to higher stringing-in loads that approach the loaded tension levels in heavy districts. At high temperatures the cable jacket can soften and consequently prohibit higher holding strength for the FLTDE. Do not exceed the load levels referenced above without contacting PLP for more information.

To attach the dead-end to the structure, an appropriate fitting with proper groove dimensions must support the loop of the dead-end. The photo below shows acceptable fittings that may be used as long as the groove seat diameter falls in the range 1-1/2" through 2-1/4" (38.1 mm to 57.2 mm). Preformed Line Products offers the TC-5A Thimble Clevis, and the TE-5 Thimble Eye – both having proper groove seat dimensions.



Appropriate Fittings

Re-application: The FLTDE may be used only once as a pulling-in grip, removed then reapplied only once more for permanent installation, for a total of two applications. DO NOT reuse after initial, permanent installation is completed.

CAUTION: Most fiber failures occur during deadending. It is imperative to understand the above installation issues and the following application procedure before proceeding.

## **APPLICATION**

Step #1 The FIBERLIGN® Lite Tension Dead-end (FLTDE) begins contact with the fiber optic cable at the dead-end crossover mark.

Mount or connect the appropriate attachment fitting (thimble clevis, guy hook, etc.) to the structure and insert the dead-end loop into the groove of the fitting. Position

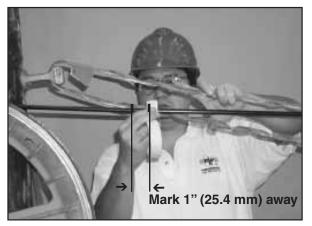
a reference mark on the cable.

to mark the cable.

With the cable near its final position (considering sag and tension if required), place a reference mark on the cable approximately one inch beyond the FLTDE crossover mark (away from the structure) Use a thin layer of tape or soft tip marker

the assembly parallel to the cable to place

Carefully tension the cable enough to bring the reference mark on the cable in line with the color mark (crossover mark) of the FLTDE.



Place Mark on Cable to Locate Dead-end Application.

Step #2 Begin application by wrapping the deadend legs over the cable starting at the crossover marks as shown in the photo. It may be possible to wrap one leg at a time although even pressure on the cable is maintained by wrapping both legs simultaneously.



Begin wrapping at dead-end color mark.

Step #3 Continue the installation by wrapping the leg(s) around the cable as shown in the photo. Whether you wrap one leg at a time or both simultaneously, make sure the gap between both legs is evenly spaced.



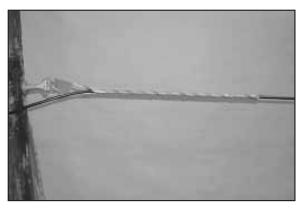
Continue to wrap both dead-end legs.

Step #4 To ease final installation, the last two leg pitches of the dead-end can be split as shown in photo below



Split legs of last few pitch lengths.

Splitting the legs reduces the effort to overcome the stiffness of a full leg as it is wrapped over the cable. Wrap the legs completely onto the cable making sure that no rods are crossed and that all rod ends are snapped into place (See photo below).



Completed Installation and alternate tension removed.

### SAFETY CONSIDERATIONS

This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. **FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN PERSONAL INJURY OR DEATH.** 

This product may be removed and reinstalled during the intitial installation if it is in good condition. After extended service life, it is recommended the product not be reused once removed from service.

Do not modify this product under any circumstances.

This product is intended for use by trained technicians only. This product should not be used by anyone who is not familiar with, and not trained to use it.

When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

For proper performance and personal safety, be sure to select the proper size PREFORMED product before application.

PREFORMED products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.



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