# FIBERLIGN® Dielectric Support for ADSS

## APPLICATION

The FIBERLIGN Dielectric Support (FDS) system is designed to gently, but firmly, support All-Dielectric Self-Supporting (ADSS) cable. It is intended for tangent support installations (see "LINE ANGLES") on lines that feature relatively low voltages, short spans and modest mechanical loads. For higher voltages (where "track resistant" ADSS cables are required), longer spans and/or higher loads, use either the FIBERLIGN Aluminum Suspension with Rods or the FIBERLIGN Dielectric Suspension — both products appear later in this section.

### Maximum Span Lengths:

The maximum recommended span length for the FDS is dependent upon the specific cable OD, initial cable tension, ice and wind loading district (NESC), and other factors. It is intended for application on relatively short spans where vertical cable loading does not exceed approximately 1,000# (worst case). In general, the approximate recommended maximum span lengths for the FDS are:

- 600' for < 1.00" OD cable (NESC – heavy).
- 300' for ≥ 1.00" OD cable (NESC – heavy).

When in doubt, consult PLP for specific span limitations.

### Material:

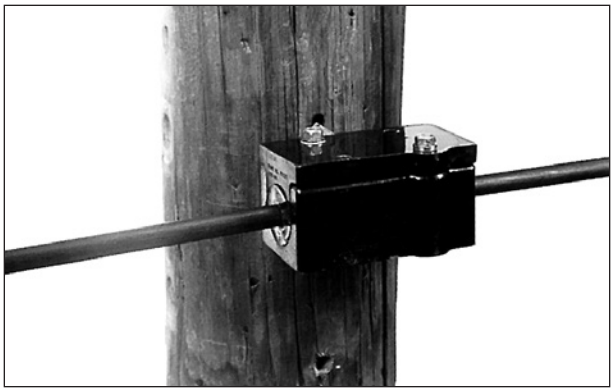
The body and top are made from a high-strength, engineered dielectric material. The cushioned inserts are made from a soft, pliable dielectric material that gently grips the ADSS cable. Two captured zinc plated bolts with washers secure the top to the body.

### Mounting:

The body threads onto standard 5/8" 11-UNC hot dipped galvanized thru-bolt and may be mounted either horizontally or vertically. For horizontal mounting to a wood pole (or other structures with thru-holes) a double arming bolt (completely threaded–no head) is suggested instead of a fixed length machine bolt. This allows approximately 1-5/8" of bolt length to thread into the body regardless of pole diameter.

For mounting to concrete or steel structures without thru-holes, use a 5/8" threaded stud of appropriate length or banding system with a mounting bracket. See accessories in this section for details about the Limited Tension Banding Bracket.

**FIBERLIGN Dielectric Support installed**



### Line Angles:

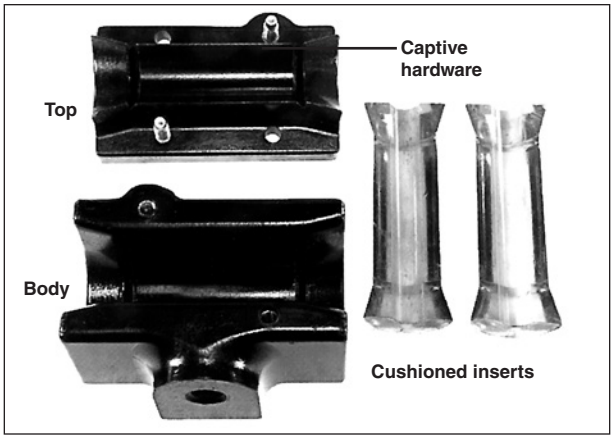
For most applications, the maximum line angle recommended is 20°; consult PLP® for exceptions that allow 30° angles. When angles exceed 20° (or 30°) a double dead-end arrangement is usually preferred. A special double FDS unit can be designed for certain applications; consult PLP for details.

### Slip Loads:

The cushioned inserts are designed to gently grip the cable while providing significant slip strength without causing cable jacket damage. Specific performance will depend upon the specific cable O.D. and design.

## NOMENCLATURE

## FDS




Patented

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## Stringing Operations:

The dielectric material of the body provides a highly abrasive-resistant surface that allows the FDS body to be used as a stringing traveler at the structure on up to 10° line angles (20° in certain cases–consult PLP®). This ability saves installation time and costs by eliminating the use of conventional stringing travelers.

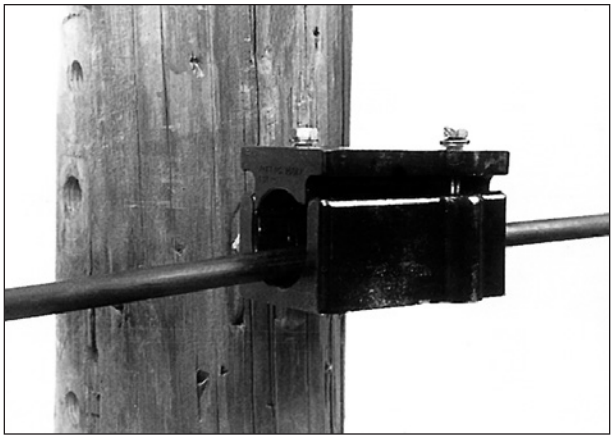
For stringing operations, thread the FDS onto the appropriate bolt, remove the inserts and elevate the top as far away from the bottom as the bolts will allow, to provide as large an opening as possible. Then thread pulling-in cable through the opening.

## Component Reuse:

All components of FDS may be reused as desired if in good condition. Do not modify any component.

## Ordering Instructions:

For concentric ADSS cable, refer to the catalog table and select the proper FDS for the cable's outside diameter. For non-concentric profiles, such as Figure 8 or other cable sizes and profiles, consult PLP for custom designs. To include accessories with the FIBERLIGN Dielectric Support, add code number to catalog number (example: 44002144B1).



## ACCESSORIES

The FIBERLIGN Dielectric Support may be banded to concrete or steel structures using the appropriate Limited Tension Banding Bracket Kit (Cat. #710010577, code B1). The kit includes a 5/8"-11 x 2-1/2" long bolt, lockwasher, hex nut and banding bracket. The bracket is rated for 1,200# vertical load and should be used with a high strength 1-1/4" steel band (band purchased separately).

| FIBERLIGN® Dielectric Support for ADSS | | | | | |
|---|---|---|---|---|---|
| Catalog Number | | ADSS Cable Range | | | |
| Complete Assembly | Inserts Only (2 Required) | Min. (in) | Max. (in) | Min. (mm) | Max. (mm) |
| 44002144 | 00070061 | 0.275 | 0.325 | 7.0 | 8.3 |
| 44000691 | 00070052 | 0.326 | 0.375 | 8.4 | 9.5 |
| 44009998 | 00070056 | 0.376 | 0.425 | 9.6 | 10.8 |
| 44009949 | 00070059 | 0.426 | 0.475 | 10.9 | 12.1 |
| 44009952 | 00070107 | 0.476 | 0.525 | 12.2 | 13.3 |
| 44009823 | 00070088 | 0.526 | 0.575 | 13.4 | 14.6 |
| 44009798 | 00070108 | 0.576 | 0.625 | 14.7 | 15.9 |
| 44009776 | 00070109 | 0.626 | 0.675 | 16.0 | 17.1 |
| 44009799 | 00070110 | 0.676 | 0.750 | 17.2 | 19.1 |
| 44009878 | 00070111 | 0.751 | 0.825 | 19.2 | 21.0 |
| 44009963 | 00070112 | 0.826 | 0.900 | 21.1 | 22.9 |
| 44002213 | 00070113 | 0.901 | 0.950 | 23.0 | 24.1 |
| 44003915 | 00070147 | 0.951 | 1.000 | 24.2 | 25.4 |
| 440010296 | 00070154 | 1.0001 | 1.050 | 25.5 | 26.6 |

Quantity 2 Inserts Required per Support
For Housing Only – Order #440000000