



FIBERLIGN® Aluminum Support for ADSS



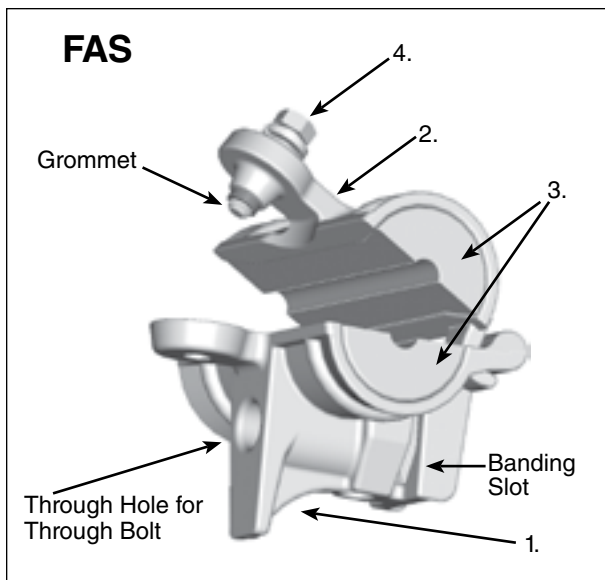
Through-Bolt Mounted



Band Mounted



Multi-Cable Stacking



PATENT PENDING

NOMENCLATURE

1. Base
2. Keeper
3. Cushion Inserts
4. Captured Bolt, Lock Washer & Flat Washer (Captured with grommet)

Base and Keeper: The aluminum alloy base and keeper have an **interlocking hinge** allowing easy access for pulling-in rope and ADSS cable. Closing the keeper captures the cable during stringing and subsequently secures the cable and cushion inserts for permanent installation. The base is designed to accept a 1-1/4" wide x .040" thick (32 mm x 1 mm) band or a 5/8" through bolt (M16) for mounting to the structure. **In multi-cable installations**, modular base surfaces at the mounting bolt and band entry areas provide stable engagement and stacking.

Captured Bolt and Bevel Washer: Galvanized steel bolt, lock washer and washer captured with an elastomer grommet.

Cushion Inserts: A soft pliable dielectric material that gently grips the ADSS cable. FAS is the acronym for FIBERLIGN Aluminum Support.

APPLICATION

The FIBERLIGN Aluminum Support (FAS) is designed to gently, but firmly support All-Dielectric Self-Supporting (ADSS) cable. The FAS features the following: Integrated bolt or band mount design, Hinged keeper and base, Single-bolt clamping, and Stackability for multi-cable installations. For higher voltages (where track resistant ADSS cables are required), longer spans and/or higher loads, use either the FIBERLIGN Aluminum Suspension w/rods or the FIBERLIGN Dielectric Suspension – both products appear later in this section.

Maximum Span Lengths:

The FAS was designed for short span applications where vertical loading does not exceed 1000# (4.4 kN). The maximum vertical load typically factors-in span length, cable OD, initial cable tension, ice and wind loading district (NESC), multi-cable stacking, etc. As a general idea, the following recommendations are approximate maximum span lengths for the FAS under NESC Heavy conditions:

- 600' (183 m) for < 1.00" (25 mm) OD cable (NESC Heavy)
- 300' (91 m) for > 1.00" (25 mm) OD cable (NESC Heavy)

Mounting:

The FAS can be bolted or banded to a structure. For mounting to wood poles (or other structures with through holes) a 5/8"-11 (M16) through-bolt or double-arming bolt may be used to capture the FAS against the structure. The width of the FAS accounts for about 3.2" (81 mm) of bolt length.

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For mounting to concrete or steel structures without through holes, the FAS may be banded via the band slot cast in the base of the FAS. The band slot is designed to accept a 1-1/4" wide x 0.040" thick (32 mm x 1 mm) high strength band. Banding materials with 45,000 psi (310 MPa) yield strength and 95,000 psi (655 MPa) ultimate strength are recommended to achieve rated vertical load.

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°) the FIBERLIGN Aluminum Suspension (found later in this section) as a single or double attachment may be considered as an alternative.

Longitudinal Holding Capability:

The cushioned inserts are designed to gently grip the cable – providing modest longitudinal holding strength without causing cable damage. Specific performance will depend upon the cable brand, internal construction, and outer diameter.

Stringing Operations:

The cable cavity of the FAS is contoured and smooth to allow the product to be used as a stringing traveler during stringing and sagging operations. The line angles during stringing may go up to 10° (20° in certain cases – consult PLP).

For stringing, the inserts are removed and the keeper should be fully closed with the bolt fully engaged.



STRINGING

Torque Level:

The keeper is fastened to the base with the 3/8"- 16 captured bolt and should be tightened until the lock washer is flat for proper torque level. This will require 10 foot pounds (120 inch-pounds or 13.5 Newton-meters) of force. DO NOT OVER-TORQUE.

Stacking – Multi Cable Installation:

Multi-cable installations with the FAS save pole space as the first unit mounts against the pole and added units extend horizontally – captured with a common 5/8" (M16) bolt. The length of the bolt must accommodate the stacked FAS units – each width approximately 3.2" (81 mm). For installations of more than two cables, a brace should be used to help support the cantilever load on the through-bolt or band.

The FAS units stack in such a way that keep adjacent cables in staggered formation, thus reducing the possibility of cable collision due to wind induced cable sway.

ORDERING INSTRUCTIONS

Refer to the catalog table and select the appropriate FAS for the ADSS cable's outside diameter.

FIBERLIGN® Aluminum Support					
Catalog Number		ADSS Cable Range			
Complete Assembly	Inserts Only (2 Required)	Min. (in)	Max. (in)	Min. (mm)	Max. (mm)
4450095	00070241	0.226	0.275	5.7	6.9
4450096	00070236	0.276	0.325	7	8.2
4450097	00070237	0.326	0.375	8.3	9.4
4450098	00070238	0.376	0.425	9.5	10.7
4450099	00070239	0.426	0.475	10.8	12
4450100	00070125	0.476	0.525	12.1	13.3
4450101	00070126	0.526	0.575	13.4	14.6
4450102	00070127	0.576	0.625	14.7	15.9
4450103	00070128	0.626	0.675	16	17.1
4450104	00070129	0.676	0.75	17.2	19.1
4450105	00070130	0.751	0.825	19.2	21
4450106	00070131	0.826	0.9	21.1	22.9
4450107	00070132	0.901	0.975	23	24.8
4450108	00070133	0.976	1.05	24.9	26.7
4450109	00070134	1.051	1.25	26.8	28.6
4450110	00070135	1.126	1.2	28.7	30.5
4450111	00070136	1.201	1.275	30.6	32.4
4450112	00070137	1.276	1.35	32.5	34.3
4450113	00070138	1.351	1.425	34.4	36.2

Quantity 2 Inserts Required per Support
For Housing Only - Order #4450000