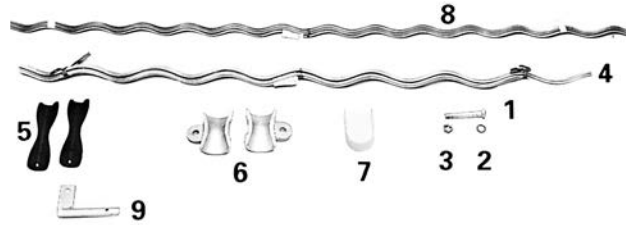


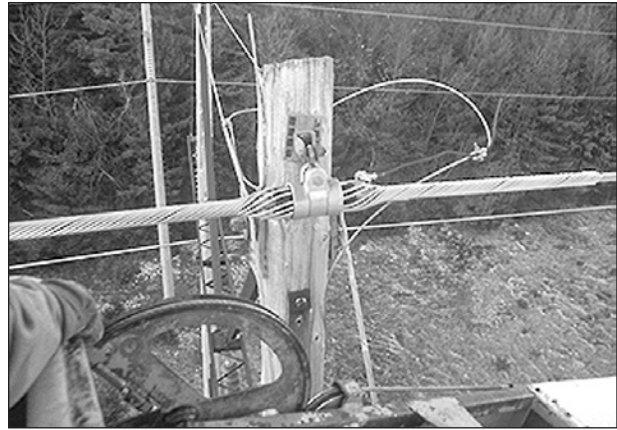


# FIBERLIGN® Suspension for OPGW

## NOMENCLATURE



- 1. Bolt
- 2. Lock washer
- 3. Lock nut
- 4. Outer Rods
- 5. Insert
- 6. Housing
- 7. Strap
- 8. Structural Reinforcing Rods
- 9. Current Transfer Tab (for OPGW only)



Single FIBERLIGN Suspension for Optical Ground Wire (OPGW)

**Bolt, Washer, Lock Nut:** Galvanized Steel.

**Strap:** High-strength Aluminum Alloy.

**Insert:** An elastomer specifically formulated for resistance to ozone attack, weathering, extreme high and low temperature variations, and compression set. An Aluminum Alloy reinforcement is molded into the elastomer.

**Housing:** High-strength aluminum alloy casting

**Structural reinforcing rods and outer rods:** High-strength Aluminum Alloy.

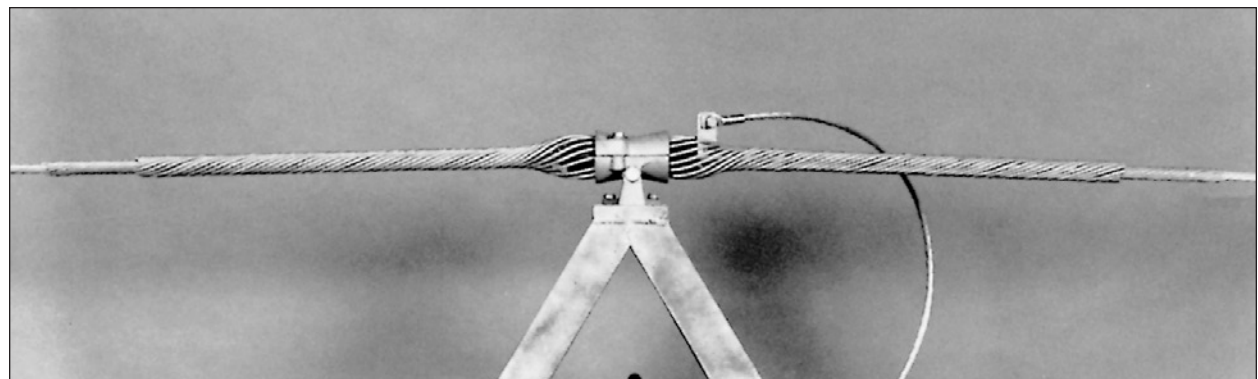
**Current Transfer Tab:** (Supplied for OPGW Applications only) High Strength Aluminum Alloy.

## APPLICATION

The FIBERLIGN Suspension provides superior cable and fiber protection at the support point. The combination of Structural Reinforcing Rods, Outer Rods, boltless housing and resilient inserts reduces compression, clamping, and bending stresses on cable. Negative weather related cable motion, such as aeolian vibration, galloping, and wind sway are also minimized.

The FIBERLIGN Suspension is specially designed for supporting all installations of Optical Ground Wire (OPGW). Due to different performance requirements and cable characteristics OPGW and ADSS cables require different design FIBERLIGN Suspension Units.

For trunnion or bracket mounting, a FIBERLIGN Trunnion Support for OPGW is available. This unit has a housing designed to fit a trunnion cap or bracket with dimensions consistent with those specified in ANSI C29.7-1986, Class 57. Consult PLP® for specific information.



Trunnion mount FIBERLIGN Support for OPGW

# FIBERLIGN® Suspension for OPGW

## Double FIBERLIGN Suspension for Optical Ground Wire (OPGW)

The Current Transfer Tab provides direct electrical bonding between OPGW and a ground lead. The current transfer tab eliminates current transfer through components of the suspension unit. The standard current transfer tab accommodates left-hand lay OPGW. Right-hand lay and larger units for special applications are also available. Consult PLP for specifics.

The current transfer tab is not required or supplied for ADSS applications.

### Grounding Wire Assembly Options:

A 4' ground wire with compression terminal can be provided. This assembly can be connected from the FIBERLIGN Suspension to the ground lead in your system. Two types of ground wire materials are offered (copper or aluminum). To include the preferred ground wire assembly in the same carton with the current transfer tab, add the appropriate suffix code to the suspension catalog number (see table on next page).

### Ultimate Vertical Strength & Housing & Fitting Dimensions:

Refer to dimensional table in this section.

### Lay Direction:

Left-hand lay is standard although FIBERLIGN Suspension or Support units for OPGW may be used on right-hand lay OPGW at reduced slip loads, or custom ordered right-hand lay units are available.

### Slip Load:

When initially installed, the FIBERLIGN Suspension has a slip load of approximately 10-20% of a standard OPGW rated strength, but significantly higher loads can be expected after the unit has been in service for a period of time.



### Line Angles:

The maximum recommended line angle for a single FIBERLIGN Suspension is 30°. For OPGW line angles between 30° and 60°, the FIBERLIGN Suspension: Double is recommended, although double dead-ending is another option. Double units for ADSS cable are available on custom order although double dead-ends are also an option.

### Fittings:

An appropriate fitting such as a Y-clevis or clevis eye may be required to attach the Suspension unit to the structure or other hardware. These fittings must match the dimensions of the suspension housing. (See dimensional tables on next page)

### Fitting Suffix Codes:

To include the Y-clevis and clevis eye fittings in the same carton with the suspensions, add the appropriate suffix code to the suspension catalog number (see table on next page).

### Component Reuse:

Once installed, do not reuse the rod components. The hardware components may be reused as desired as long as they are in good condition. Do not modify any components.



# FIBERLIGN® Suspension for OPGW

## Single and Double FIBERLIGN Suspensions for OPGW

### Ordering Instructions:

Select the appropriate FIBERLIGN Suspension for OPGW from the following table. Consult PLP® for trunnion or bracket type mounting OPGW applications and for the availability of all sizes and designs.

### Accessories and Fittings:

Ground wire assemblies and fittings may be included in the same container with the suspension by adding the appropriate SUFFIX CODE from the adjacent table. **Note:** the suffix sequence is grounding wire first and fittings second. Example—4300100GYC includes a 4300100 single suspension with copper ground wire assembly (G) and Y-clevis eye (YC).

Suffix Code	Description
<b>G</b>	4' (1.2 m) long #4 (7W) Copper with terminal on one end. Catalog #710010015
<b>GA</b>	4' (1.2 m) long 4/0 (7W) Aluminum conductor with terminal on one end. Catalog #710010293
<b>GA2</b>	5' (1.5 m) long 95 mm <sup>2</sup> (19w) Aluminum Ground wire with terminals at both ends

**CAUTION:** Determine appropriate material and size wire necessary to provide adequate grounding for your system before ordering the ground wire assemblies. For proper performance and personal safety be sure to select the proper ground wire before application.

<b>S2</b>	Anchor Shackle (Catalog no 72905002), 25,000#
<b>YC</b>	One (1) Y-clevis to fit selected suspension. Single suspension applications.
<b>CE</b>	One (1) clevis eye to fit selected suspension. Single suspension applications.
<b>CEYP</b>	Two (2) clevis eyes with yoke plate to fit selected suspension. Double suspension applications.

Catalog Number		Diameter Range				Structural Reinforcement Rods					Outer Rods				
Single	Double	Min. (in)	Max. (in)	Min. (mm)	Max. (mm)	Single Length (in)	Double Length (in)	Rod Dia. (in)	Rods per set	Color Code	Single Length (in)	Double Length (in)	Rod Dia. (in)	Rods per set	Color Code
4300100	4300200	.354	.381	8.9	9.6	66	84	.146	9	Blue	42	60	.204	11	Blue
4300101	4300201	.382	.398	9.7	10.1	66	84	.146	9	Green	42	60	.204	11	Green
4300102	4300202	.399	.418	10.2	10.6	66	84	.146	10	Yellow	42	60	.204	11	Yellow
4300103	4300203	.419	.439	10.7	11.1	67	84	.146	10	Black	42	60	.204	11	Black
4300104	4300204	.440	.458	11.2	11.6	68	84	.146	11	White	43	61	.204	11	White
4300105	4300205	.459	.461	11.7	11.7	72	90	.167	10	Purple	46	64	.250	10	Orange
4300106	4300206	.462	.476	11.8	12.0	72	90	.167	10	Purple	46	64	.250	10	Purple
4300107	4300207	.477	.503	12.1	12.7	73	90	.146	11	Orange	46	64	.250	10	Orange
4300108	4300208	.504	.511	12.8	12.9	76	90	.146	12	Red	46	64	.250	10	Purple
4300109	4300209	.512	.536	13.0	13.6	76	94	.167	11	Blue	49	67	.250	11	Blue
4300110	4300210	.537	.559	13.7	14.1	77	94	.167	11	Green	49	67	.250	11	Green
4300111	4300211	.560	.565	14.2	14.3	77	94	.167	11	Green	49	67	.250	11	Green
4300112	4300212	.566	.573	14.4	14.5	79	102	.182	11	Black	54	76	.250	12	Black
4300113	4300213	.574	.598	14.6	15.1	79	102	.182	11	Black	54	76	.250	12	White
4300114	4300214	.599	.625	15.2	15.8	81	102	.182	11	Brown	54	76	.250	12	Brown
4300116	4300216	.626	.632	15.9	16.0	94	120	.204	11	Red	63	89	.310	11	Red
4300117	4300217	.633	.666	16.1	16.9	94	120	.204	11	Red	63	89	.310	11	Blue
4300118	4300218	.667	.682	17.0	17.3	94	120	.204	11	Yellow	63	89	.310	11	Green
4300119	4300219	.683	.710	17.4	18.0	94	120	.204	11	Yellow	63	89	.310	11	Yellow
4300120	4300220	.711	.728	18.1	18.4	94	120	.204	12	White	63	89	.310	12	Black
4300121	4300221	.729	.744	18.5	18.8	94	120	.204	12	White	63	89	.310	12	White
4300122	4300222	.745	.750	18.9	18.9	94	120	.204	12	White	63	89	.310	12	White
4300123	4300223	.751	.786	19.0	19.9	94	120	.204	12	Brown	63	89	.310	12	Brown
4300124	4300224	.787	.814	20.0	20.6	100	129	.250	11	Green	72	101	.365	11	Green
4300125	4300225	.815	.845	20.7	21.4	100	129	.250	11	Yellow	72	101	.365	11	Yellow
4300126	4300226	.846	.855	21.5	21.6	100	129	.250	11	Blue	72	101	.365	12	Blue
4300127	4300227	.856	.894	21.7	22.6	100	132	.250	12	Black	80	112	.365	12	Black
4300128	4300228	.895	.907	22.7	22.9	100	132	.250	12	White	80	112	.365	12	White
4300129	4300229	.908	.916	23.0	23.2	100	132	.250	12	Purple	80	112	.365	12	Purple
4300153	4300253	.917	.929	23.3	23.5	100	132	.250	12	Brown	80	112	.365	12	Brown
4300154	4300254	.930	.942	23.6	23.9	100	132	.250	12	Red	80	112	.365	12	Red
4300155	4300255	.943	.977	24.0	24.7	100	132	.250	13	Orange	80	112	.365	13	Orange

Left-hand lay standard