H-SERIES DEADEND CROSSARM
MODEL - HDB144G12242

Strong, Durable Composite Deadend Crossarm Assembly

Engineered for robust performance, Shakespeare fiberglass composite deadend crossarm assemblies serve as the anchoring points along transmission and distribution lines. Shakespeare crossarms are a great choice for use on composite, concrete, steel, aluminum or wood utility poles. Often, composite crossarms are twice the strength and half the weight of their wood counterparts.

- 3-1/2” x 4-1/2” x 12’ Deadend Assembly
- Lightweight - Easy to Install
- Environmentally Safe
- No Preservatives
- Triple UV Protection
- Grey in Color
- Optimal Deflection Mitigation Design
- Will Not Rot, Splinter or Corrode
- Impervious to Insects, Woodpeckers
- Excellent Dielectric Properties
- Excellent Toughness and Impact Strength
- Standard Installation - No Special Tools Needed

<table>
<thead>
<tr>
<th>2 WIRE RATINGS</th>
<th>ULTIMATE LOAD PER WIRE (lbs)</th>
<th>DEFLECTION PER 1000 (in)</th>
<th>WEIGHT (lbs)</th>
<th>GUY WIRE RATING EACH (lbs)</th>
<th>MOMENT OF INERTIA ABOUT THE NEUTRAL AXIS (in²)</th>
<th>SECTION MODULUS ABOUT THE NEUTRAL AXIS (in³)</th>
<th>BENDING STRESS (psi)</th>
<th>MOMENT FAILURE (in/lbs)</th>
<th>FLEXURAL MODULUS (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,439</td>
<td>1.15”</td>
<td>78</td>
<td>30,000</td>
<td>14.37</td>
<td>6.39</td>
<td>80,560</td>
<td>514,779</td>
<td>5.75E + 06</td>
<td></td>
</tr>
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TESTING PER ASTM D8019-15
**REFERENCE STANDARDS**
ASTM A153 (Zinc Coating); ASTM D635 (Burning of Self Supporting Plastics); ASTM G154 (Operating light and water exposure apparatus for non-metallic materials); ASTM D8019-15 (Determining the full section flexural modulus and bending strength of fiber reinforced polymer crossarms assembled with center brackets).

**WEATHER AND UV PROTECTION**
UV inhibitors shall be added to the resin system and the outside surface of the crossarm shall be covered with a polyester surface veil to prevent fiber bloom. Also, the arm shall be coated with a minimum of 1.5 mils of UV resistant coating. Crossarms shall be tested for a minimum of 15,000 hrs on the veil surface and 15,000 hrs on the coated surface or a combined test of 30,000 hrs with QUV-A per ASTM G154 with 4-hour light cycle and 4-hour humidity cycle.

**FOAM FILLING**
Crossarms shall be foam filled with a closed cell high density foam to prevent water ingress and must completely fill the crossarm and adhere to the inside walls.

**MOUNTING BRACKET OR HARDWARE**
Mounting brackets shall be manufactured from hot dipped galvanized steel using 50,000 psi steel. All bolts, nuts and other hardware to be hot dipped galvanized.

**END CAPS**
Crossarm shall be sealed with non-removable flush mounted inserts. External caps are not acceptable.

**MECHANICAL STRENGTHS**
The ultimate strengths should be listed per ASTM D8019-15. Compressive strength in both the vertical and horizontal directions shall be a minimum of 500 psi without permanent deformation or damage to the fiber/resin matrix.

**ELECTRICAL CHARACTERISTICS**
Fiberglass crossarms shall have an average 60 Hz BIL of no less than 15 kV/inch and an average wet 60 Hz BIL of no less than 12 kV/inch.

**IDENTIFICATION**
Each fiberglass crossarm shall be permanently marked with the manufacturer’s name or logo and the date of manufacture.

**PACKAGING**
Fiberglass crossarm shall be shipped fully assembled.