

Installation Guide

CROSSARM

Fiberglass Crossarm Installation Guide

General Handling & Safety



- Always wear appropriate PPE when handling or drilling fiberglass (gloves, eye protection, respiratory protection as required).
- Use proper lifting techniques or equipment to avoid damage or injury.
- Store crossarms on a flat surface to prevent warping or uneven loading prior to installation.
- Avoid impact damage to edges and surfaces during transport and handling.

Drilling Guidelines



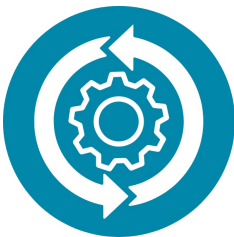
- Use **hole saws** designed for fiberglass/composites.
- Drill at moderate speeds with steady pressure to prevent fraying or delamination.
- Ensure proper **hole alignment and hardware positioning** before drilling.
- After drilling, apply a **UV-resistant sealant or protective coating** to exposed fiberglass surfaces to maintain long-term durability.

Hardware Recommendations



- Use minimum 4" x 4" square washers ($\frac{1}{4}$ " thick) on both sides of the crossarm for load distribution for horizontal loading.
- Insulator pins under severe transverse or longitudinal loads, 4" x 4" washers ($\frac{1}{4}$ " thick), are recommended.
- Do not use hardware designed to bite into wood (e.g., cleated fittings).
- Ensure all hardware surfaces are smooth and free of burrs to prevent damage to the composite surface.

Torque Requirements



- Do **not exceed 25 ft-lbs of torque** when attaching hardware.
- Fiberglass does not compress like wood—over-torquing can damage the structure rather than improve fit.
- Lock washers may be used where appropriate, but **double spring lock washers are not recommended**.

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Mounting to Pole



- Use the **center mounting point/keyhole slot** (if applicable) to assist with safe and efficient installation.
- Ensure crossarm is level and properly aligned before fully securing hardware.
- Verify all attachment points are evenly loaded and tightened to specification.

Load Considerations



- Follow all published **load ratings and engineering specifications** for the crossarm.
- **Ultimate Load:** Maximum allowable load per phase/side—do not exceed.
- **Deflection:** Expected movement under load (measured in inches per 1,000 lbs).

Exceeding design limits may result in structural damage or failure.

Field Best Practices



- Inspect crossarm prior to installation for any visible damage.
- Confirm correct hardware configuration before applying load.
- Avoid point loading: always distribute forces evenly across the surface.
- Re-check torque after initial installation if required by field standards.



CONTACT US

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For more information on Atropos composite crossarms and other atropos infrastructure products, please contact us.

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