

Extend the service life of electrical transmission and distribution products with Glasforms<sup>™</sup> composite technologies.

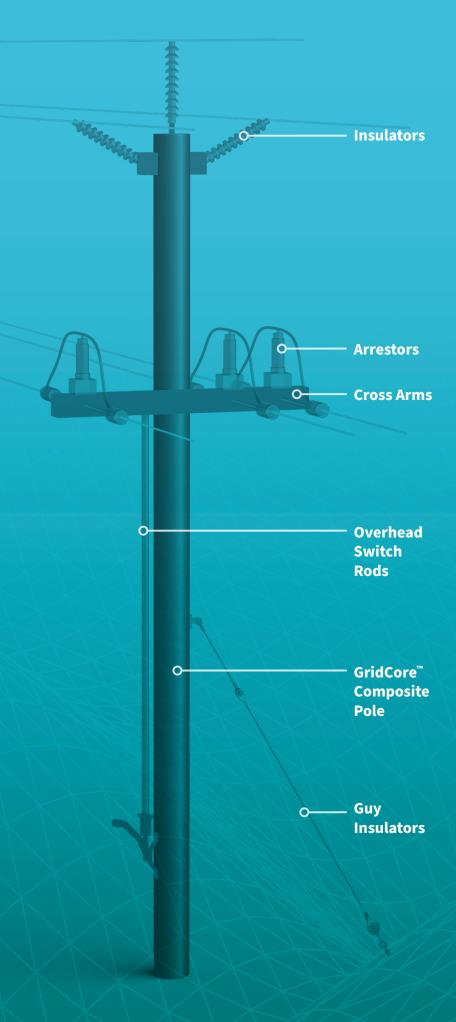
The formula: extensive electrical industry experience combined with pioneering composite technology expertise. The result: a diverse portfolio of purpose-engineered electrical components that meet the specific and rigorous demands of the electrical utility industry, and have been trusted by major utility product manufacturers for over 40 years.

## KEY CHARACTERISTICS

Glasforms' automated pultrusion process creates constant cross-section profiles with consistent, uniform quality and exceptional dielectric and mechanical performance. Proprietary composite formulations and technologies prevent voids and produce high-quality insulator core rods that withstand stringent electrical testing and end-use manufacturing stresses such as thermal overmolding and mechanical crimping.

## **Performance advantages:**

- High dielectric strength: composite material is custom formulated to optimize electrical properties resulting in exceptional insulation
- Lightweight: insulators are up to 80% lighter than porcelain and utility poles are more than 50% lighter than wood equivalents
- High strength: high tensile, compressive, flexural and inter-laminar shear strength to support various design configurations and line loads
- Resilient: deflect and return to original shape for structural damping to minimize damages and outages
- Durable: insulators are durable and shatter resistant vs. ceramic and glass; composite utility poles are UV corrosion resistant for a long service life



## **Electrical Transmission & Distribution Applications**

COMPONENT	DESCRIPTION	SIZES
Insulators for transmission and distribution		
Suspension insulators	Epoxy/glass fiber rods	0.625" to 1.25" diameter
Line post and station post insulators	Epoxy/glass fiber rods	1.50" to 4.74" diameter
Arresters		
Cage type	Polyester or vinyl ester/glass fiber rods	0.125" to 0.50" diameter
Custom tubular	Polyester, vinyl ester or epoxy/ glass fiber custom shapes	2.0" to 6.0" envelope size
Pole line construction		
Conductor standoff and equipment support arms	Polyester/glass fiber rods	1.50" to 2.00" diameter
Guy strain insulators	Polyester/glass fiber rods	0.50" to 0.812" diameter
Cross arms		
Tangent and deadend, support braces	Polyester/glass fiber rectangular tubes	3.62" x 4.62" and 4.0" x 6.0" rectangular
Utility poles		
GridCore <sup>™</sup> Composite Utility Poles	Polyester/glass fiber hollow custom tubes	12" to 14" diameter, typical lengths from 35' to 75'

Pole line construction, cross arms, rods, and utility poles feature an integral fabric surfacing veil for long-term weather resistance and retention of properties. Mechanical properties and specifications are available—please contact Avient.

To learn more about GridCore Composite Utility Poles go to avient.com/gridcore







To learn more about our solutions, contact us at +1.844.4AVIENT

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