



# **WIND ENERGY MARKET** FIBERGLASS STRUCTURES & SYSTEMS

Strongwell offers a broad range of pultruded fiber reinforced polymer (FRP) composite products to serve the Wind Energy market. With offshore experience since 1979 and products that are approved by most major Classification Societies, Strongwell is an ideal choice to solve weight, corrosion, maintenance, and durability problems common with traditional materials.







- » Corrosion Resistant
- » High Strengthto-Weight Ratio
- » Low Conductivity
- » Low Carbon Footprint
- Easy Installation

# **APPLICATIONS FOR STRONGWELL FRP**



#### SAFRAIL<sup>™</sup> HANDRAIL

- Wave Zone
- Tower Platform •
- Under Substation on Support Structure



#### **DURAGRID® STAIRTREADS AND EXTREN® STAIR STRUCTURES**

- Installation Vessel Bridge to Helipad Access
- Installation Vessel Crane **Control Room Access**
- Between Substation Platforms



GRATING

- Wave Zone •
- **Tower Platform** • Under Substation on
- Support Structure • Crane Boom
- Inside Hull Walkways
- Ballast Area
- ASTM F3059-18 Applications
- Personal Protection from Machinery/ Electrical



SAFRAIL<sup>™</sup> GUARDRAIL

- Nacelle Access Platform
- Installation Vessel Deck
- Installation Vessel Gangway



**SAFRAIL<sup>™</sup> LADDERS** 

- Inside Tower Access
- Side of Tower
- Ballast Area





## **BENEFITS OF STRONGWELL FRP FOR WIND ENERGY INSTALLATIONS**



#### **Corrosion Resistant**

Superior resistance to a broad range of chemicals. Unaffected by moisture or immersion in water when sealed. Will not rust like metal and will not rot like wood.



#### **High Strength-to-Weight Ratio**

Pound-for-pound, stronger than steel in lengthwise direction. Weighs up to 75% less than steel and 30% less than aluminum - ideal when maximum performance is required but every pound counts.

## Low Conductivity

Low electrical and thermal conductivity properties and high dielectric capability.



#### **Low Carbon Footprint**

Pigmented resin, surfacing veil, and UV-inhibitors prevent moisture absorption, warping, fiber bloom, and delays fading. This, along with corrosion resistance, eliminates the need for constant stripping/blasting, repainting with chemical-rich coatings, and upkeep. This results in long-term, cost effective solutions with lower life cycle costs.



#### **Easy Installation**

Can be field fabricated using simple carpenter tools, without costly specialized labor, and easily lifted into place during installation without the need for heavy lifting machinery.

#### For Classification Society Approvals, contact Strongwell for more information.



Products are available at one of our US factories (Bristol, VA, or Chatfield, MN), as well as several ports worldwide. To request a quote, visit www.strongwell.com and click Contact Us.



ISO 9001 Quality Certified Manufacturing Plants



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