



WIND ENERGY MARKET

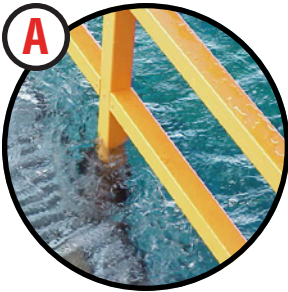
FIBERGLASS STRUCTURES & SYSTEMS

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

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.



APPLICATIONS FOR STRONGWELL FRP



SAFRAIL™ HANDRAIL

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



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™ GUARDRAIL

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



SAFRAIL™ LADDERS

- Inside Tower Access
- Side of Tower
- Ballast Area



WARNING/WORK LIGHT SUPPORT POLES (EXTREN®)

- Top of Nacelle
- Installation Vessel Deck
- Substation Platform
- Control Station Supports



HOP-UPS

- Installation Vessel Deck
- Substation Platform



ACCESSORY STRUCTURES (EXTREN®)

- Tower Platform
- Substation Platform
- Signage
- Penetration Plates
- Ramps
- Free-Standing Kickplate
- Storage Boxes
- Control Station Supports



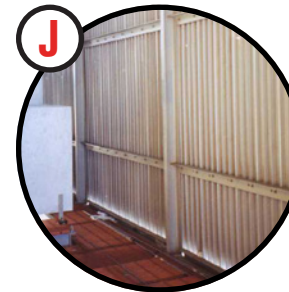
CUSTOM LOUVERS

- Nacelle Vents



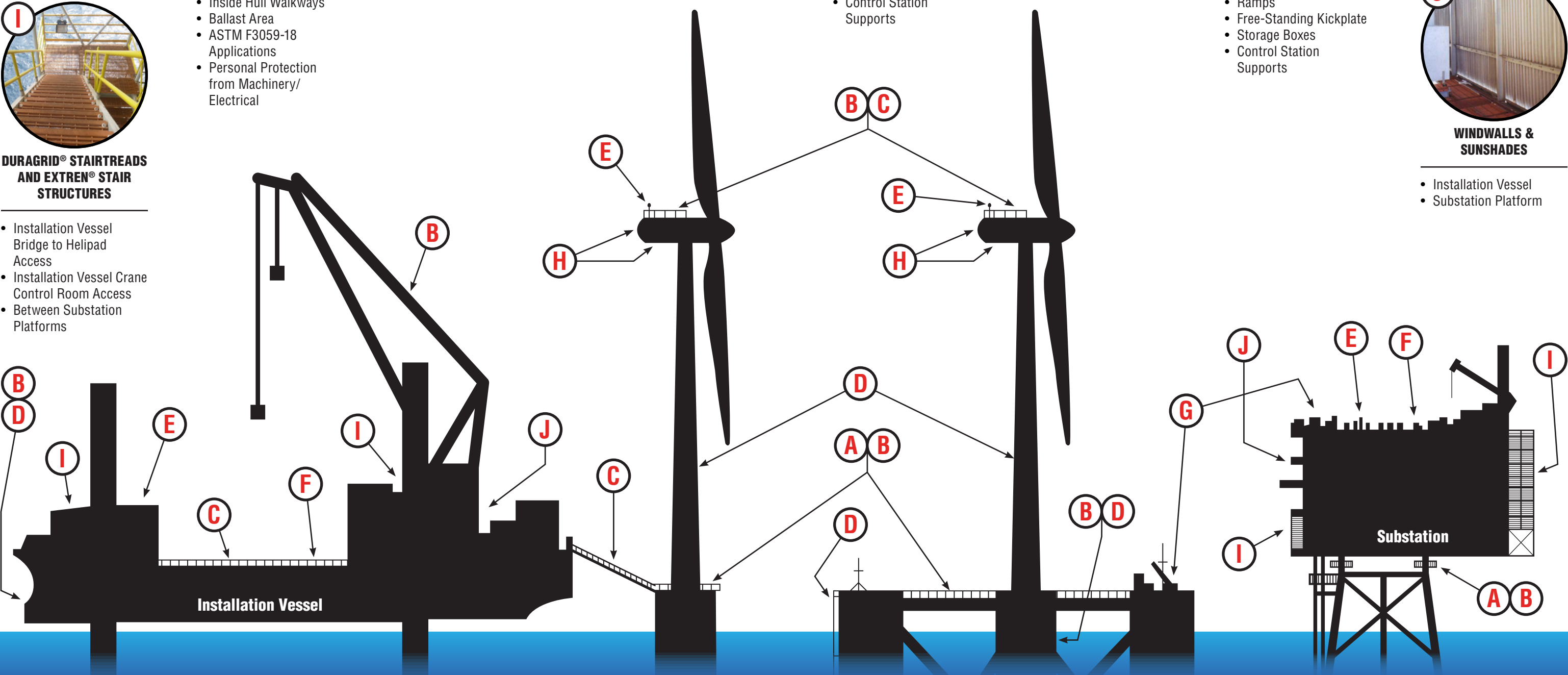
DURAGRID® STAIRTREADS AND EXTREN® STAIR STRUCTURES

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



WINDWALLS & SUNSHADES

- Installation Vessel
- Substation Platform



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.



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.



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.



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.



Low Conductivity

Low electrical and thermal conductivity properties and high dielectric capability.

For Classification Society Approvals, contact Strongwell for more information.

ASTM
F3059-18



ABS
TYPE APPROVED PRODUCT



LR
Lloyd's Register

DNV-GL



KR
KOREAN REGISTER



Products are available at one of our US factories (Bristol, VA, or Chatfield, MN), as well as several ports worldwide, including:

- Pusan, Korea
- Pasir Gudang, Malaysia
- Dammam, Saudi Arabia
- Plymouth, UK
- Hamburg, Germany
- Stavanger (Solås), Norway

To request a quote, visit www.strongwell.com and click Contact Us.



STRONGWELL.

ISO 9001 Quality Certified Manufacturing Plants



BRISTOL LOCATION
400 Commonwealth Ave.
Bristol, VA 24201 USA
(276) 645-8000

www.strongwell.com

CHATFIELD LOCATION
1610 Highway 52 South
Chatfield, MN 55923 USA
(507) 867-3479