# **SPiRe<sup>®</sup> Panel**

### Description

SPiRe<sup>®</sup> Panel is a high-strength high-modulus Fiber Reinforced Polymer (FRP) panel constructed with fiberglass fabrics, a structural core and Vinyl Ester resins. The panel is connected at the end overlapping region with the overlapping portions connected and bonded together using QuakeBond<sup>™</sup> 220 Adhesives. The annular space between the SPiRe<sup>®</sup> Panel and the host structure can be filled with an array of QuakeWrap<sup>®</sup> fill materials, including non-shrink grouts, epoxy grouts, and resins.

### Uses

- Corrosion Protection of Seawall, Sheet Piles, and Bulkheads
- Part of system for structural rehabilitation of seawall
- Seawall Barrier
- Stay in Place form
- Protect areas of high corrosion
- Applicable to all materials: concrete, steel and timber

### Advantages

- Non-Corrosive
- Low void content as a result because of infusion manufacturing
- Manufactured with texture inside of laminate suitable for secondary bonding
- Rigid FRP Panel
- High impact resistance
- Compatible with PileMedic<sup>®</sup> Grouts
- Compatible with PileMedic<sup>®</sup> Spacer and Port systems
- Compatible with QuakeWrap<sup>®</sup> Resins and wet lay-up systems

### Packaging

SPiRe<sup>®</sup> panels come in flat sheet 4' wide and up to 19' long manufactured with an overlap portion.

### **Shelf Life & Storage**

SPiRe<sup>®</sup> panels have unlimited shelf life when stored properly. Store in dry place at 30°-120° F (0°-50° C).

### **Shell Data**

Data:	
Color	Translucent, Grey
Resin System	Vinyl Ester
Properties:	
Thickness	0.375 in – 0.5 in
Mass Density	71.2lb/ft <sup>3</sup> (1.14g/cm <sup>3</sup> )
Flexural Strength (ASTM D790)	23,900 psi
Flexural Modulus (ASTM D790)	1.81 x 10 <sup>6</sup> psi
Barcol Hardness (ASTM D2583)	50 min
Water Absorption (ASTM D570)	0.8% max

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### PileMedic: By DuskeWral. Inc.

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### Application

For installation instruction, refer to SPiRe® specification.

Panels can be cut to appropriate length using tile saw products to reduce any dust on site. Angle grinders with metal cut-off wheel can also be used to cut the product. Safety precautions must be taken while cutting the product.

### Limitations

Design calculations must be made and certified by a licensed professional engineer.

### Caution

SPiRe<sup>®</sup> Panels are non-reactive. They do not require a Safety Data Sheet (SDS). However, caution must be used when handling since a fine dust may be present on the surface. Gloves and safety glasses are recommended to protect against skin and eye irritation. Care must also be taken when cutting the laminates to protect against airborne dust generated by the cutting procedure. Use of an appropriate, properly fitted NIOSH approved respirator is recommended.

#### **First Aid**

Appropriate Personal Protective Equipment (PPE) should be worn at all times when handling product.

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