

Advanced Composite Technology for Piping Repair



- Corrosion Repair**
- Structural Reinforcement**
- Secondary Leak Containment**
- Abrasion Protection**
- Carbon Fabrics are available**





Field Applied High-Strength Composite Reinforcement for Pipeline and Piping Repair

Engineered to Perform

PowerSleeve® is an engineered composite system that consists of fiberglass fabric and high performance epoxy resulting in a powerful piping reinforcement product.

Our industry leading kit format provides all the necessary tools for a professional installation. During production the fabric is cut to length and the epoxy components are factory pre-measured and sealed. This eliminates the need for measuring and weighing in the field, which can be cumbersome and inaccurate.

PowerSleeve® is available with your choice of up to five different epoxy systems for almost any application. Whether it is a cold climate, high-heat, or harsh chemical, there is a system to suit your need. All resin systems have no VOS's and are 100% solids.

PowerSleeve® has been used worldwide to repair damaged and corroded piping. Whether it's the deserts of Egypt or the cold mist of the North Sea, PowerSleeve® has been there to provide a composite solution to the oil, gas, refining, and power generation industries.

Installation without Frustration

Simply lay out the fabric on a prepared table or other flat surface, combine the resin components, mix, and wet-out the fabric. The composite is ready for installation, with just the right amount of resin/fiber fraction to provide a field constructed, high-strength repair.

This kit format has helped technicians install PowerSleeve® effectively for over 15 years. We were the first to introduce this concept, and it continues to be a valuable tool to provide high-strength composite reinforcement in the field.



The quantity of materials provided with each kit is engineered to provide you with plenty of reinforcing power - but not a pile of waste!

- Versatile
- High Strength
- Convenient
- Corrosion Resistant
- Excellent Cost-to-Strength Ratio
- Conformable



Conforms to ASME PCC-2 Article 4.1 Nonmetallic Composite Repair Systems for Piping and Pipework: High Risk Applications

Installer Qualification Training available at your location or our production facility.





Use on Straight Pipe, Elbows, Tees, and Large Diameter Tanks & Vessels

Standard Matrix

A two-component, ambient temperature matrix is suitable for use with all our PowerSleeve® fabrics. This ambient temperature cure matrix wets out easily and is relatively fast setting, approximately 30 minutes @77° F and is used where a maximum service temperature of 265° F is desired. This product ships DOT non-hazardous.

439 Matrix

A two-component, medium temperature matrix is suitable for use with all of our PowerSleeve® fabrics. This ambient temperature cure matrix wets out and has very good chemical resistance. It is relatively fast setting, approximately 60 minutes @77° F and is used where a maximum service temperature of 325° F is desired. This matrix system should be post cured in order to achieve the best chemical resistance. This product ships DOT hazardous (corrosive).

70079 Matrix

Type 70079 Matrix is a premium quality, two-component, novolac-epoxy hybrid system with excellent exposure resistance to most military and civilian fuels and a vast array of chemicals. It is suitable for use with all of our fabric systems. This product is used as a composite matrix where its fuel and chemical performances are required. It is very resistant to moisture and humidity effects. It will cure in high humidity conditions. This product ships DOT non-hazardous.

X-TEMP-2

A two-component, heat resistant matrix for use with all of our PowerSleeve® composite reinforcement fabrics. This system allows for higher application temperatures. This matrix system is suitable for use in ambient temperatures up to 450° F. It is relatively fast setting, approximately 80 minutes @150° F. This matrix system should be post cured in order to achieve the best chemical resistance. This product ships DOT hazardous (corrosive).

X-100 UW Matrix

A two-component, low temperature matrix designed for wet installations. The matrix cures well under water and bonds well to wet steel surfaces. The fabric is wetted out in dry conditions but can then be applied to wet or submerged substrates. This matrix works well with all of our fabric types. This product ships DOT non-hazardous.

Reinforcement Fabrics

W-11

This fabric is a hybrid alloy employing aerospace grade E-glass and DuPont's Kevlar® yarns, arranged in a multi-axis layout that maximizes the ultimate composite strengths. It is constructed using a unique non-crimped method that reduces stress on the individual fibers and increases strength over generic woven fabrics by as much as 30%. This fabric allows for much better resin wet-out and its multi-axis format provides strength in the 90°, +45°, and -45° axis. Width is 12" nominal (wider widths available.)

G-03

This tape fabric is used for quick and easy installation on smaller diameters. It may be spiraled axially along piping and elbows or wrapped circumferentially around the pipe. Widths are available from 2" through 6".

BEAR

A highly conformable knitted fabric for use in tight areas such as tees, couplings and other complex geometries. Widths available are 2", 4" and 6".

C-2

This carbon fabric is designed to provide maximum strength and high modulus repairs to larger diameter piping systems. This fabric is available in 12" width.

C-3

This is a light weight carbon fabric designed smaller pipes or tight installations. It is available in 2" 4" and 6" widths.

These fabrics are custom woven and designed to our specifications.

Refer to individual technical data sheets for detailed information on performance characteristics.



Industries Served

- Refining
- Power Generation
- Chemical Plants
- Mining
- Industrial
- Pulp and Paper
- Liquid and Gas Transportation
- Production Facilities
- Water and Wastewater Treatment

Design Calculations and Installation Assistance

Design recommendations and calculations pursuant to ASME PCC-2 standard are available.

Assistance in the planning of installations in order to achieve the best installation at minimum labor cost is also available

For especially difficult installations factory personnel are available to staff the field work at minimal expense.

For technical support or questions regarding an application, installation, or product capability, please contact us at 626-633-0294.

Distribution and Installation Services

Distributors are located throughout the United States, Asia, and Europe.

Professional installation services provided by qualified personnel are available through our business partners. Call us for information on a service provider in your area.

AIR LOGISTICS CORPORATION

Field-Applied Composite Systems™ Group

AN ISO 9001 APPROVED SUPPLIER

Strengthening Your Future... Layer by Layer

AIR LOGISTICS CORPORATION

Field-Applied Composite Systems™ Group

925 North Todd Avenue

Azusa, CA 91702 USA

Phone: 626-633-0294 Fax: 626-633-0791

www.airlog.com

