The AIRO Composites line of water-activated fiberglass reinforcements are designed to serve in industrial and manufacturing applications where additional abrasion and impact resistance is necessary, reinforcement of piping and structural supports experiencing wall-loss due to corrosion, and as a mechanical backing for leak repair situations necessitating increased pressure retention capabilities.

Technical Data and Information

General Characteristics

Resin Type	MCU
Color	Gray
Fabric Type	Woven
Fabric Material	Fiberglass
Shelf Life	> 2 Years

Fabric Properties

Tensile Strength	47,000 PSI
Lap Shear	420 PSI
Shear Strength	2,800 PSI

Physical Properties

Hardness (Shore D)	80+
Application	
Minimum Temperature*	32 ºF / 0 ºC
Maximum Temperature*	180 ºF / 82 ºC
Service Temperature	250 ºF / 120 ºC
Working Time (70 ºF)	5 Minutes
Functional Cure	30 Minutes

***** Slow Cure Resin Available at Request*****

Surface Preparation

Maximum adhesion is achieved via a firm, clean, and abraded surface.

For best results, abrasive blasting is recommended. When blasting is not suitable, roughen surface as application allows.

Ensure surface is free of all grease, oils, waxes and debris.

Features

Can be applied in fresh water or salt water.
Can be applied in splash zones and in submersible situations to a depth of 50 ft.
Easy to use, no mixing
Excellent resistance to high impacts and heavy abrasion
Excellent return to service time
Woven fabrics provide high tensile strengths and increased impact resistance
UV Stable

Product Applications and Sizing

Abrasion Resistance
Backfill Protection
External Corrosion
Impact Resistance
Leak Repair
Surface to Air Transitions

Available Sizes

Width		Length
4 Inches	x	**15 Feet**
6 Inches	x	**30 Feet**

*****Custom Sizes Available*****

Product Storage & Handling

Temperature Range 55 ºF- 80 ºF
Avoid temperatures below freezing
Avoid excessively hot conditions
Exercise caution when storing to not puncture packaging

The procedure to install AIRO Composites in a **NON-ACTIVE** application is as follows:

1. Locate the through-wall position.
2. Via most suitable method, roughen the surface to provide a profile on the entire circumference of the pipe area to be wrapped.
3. Prepare surface via removal of any and all dust, debris, and residues. Utilize a solvent wipe is necessary.
4. Open, knead together, and apply epoxy stick as per provided directions.
5. Apply epoxy stick to through-wall location and use light to moderate pressure to ensure 100% wet-out.
6. Remove wrap from pouch and place in water to begin resin curing process. Keep in water for up to 20 seconds.
7. Remove the wrap from water and place the loose tail on the pipe 180 degrees from epoxy stick location.
8. Begin wrapping straight circumferentially and pulling with medium to high tension.
9. Be sure to wrap material without buckles and/or kinks as this will diminish the performance of the material.
10. Upon finishing the roll, continue to add water to the system to aid in the curing process until the resin is no longer tacky.

The procedure to install AIRO Composites in an **ACTIVE** application is as follows:

1. Locate the through-wall position.
2. Via most suitable method, roughen the surface to provide a profile on the entire circumference of the pipe area to be wrapped.
3. Prepare surface via removal of any and all dust, debris, and residues. Utilize a solvent wipe is necessary.
4. Open, knead together, and set aside epoxy stick.
5. Remove wrap from pouch and place in water to begin resin curing process. Keep in water for up to 20 seconds.
6. Remove the wrap from water and place the loose tail on the pipe (1) fabric width from through-wall location.
7. Begin wrapping straight circumferentially and pulling with medium to high tension.
8. Move wrap with 50% overlap towards the through wall, as the fabric comes into contact with the leak area, place the epoxy putty in the fabric and utilize the fabric as a tensioning strap with which to pull into the leak.
9. Continue to wrap straight circumferentially over the through-wall location, pulling with medium to high tension.
10. Be sure to wrap material without buckles and/or kinks as this will diminish the performance of the material.
11. Upon finishing the roll, continue to add water to the system to aid in the curing process until the resin is no longer tacky.