

**DESCRIPTION**

Aquawrap<sup>®</sup> is a low cost composite system for use in repair and reinforcement of existing mechanical systems, structures and piping. Furnished factory-impregnated with the proprietary 22-77 resin system, it is odorless and non-flammable. Cured Aquawrap<sup>®</sup> is a very durable, high strength material, impervious to fuels, most chemicals and solvents. It permanently bonds to a wide variety of surfaces such as metals, composites, concrete, plastics and wood. Certified to ANSI/NSF Standard 61.

Aquawrap<sup>®</sup> is ready to apply, right out of the bag and cures by way of a chemical reaction with field-applied water. This offers considerable advantages over conventional cloth-resin systems in that there is no resin measuring, mixing, spreading, solvents, or dripping polymer mess.

Features

- Excellent mechanical properties
- Low Cost
- “Rip & Wrap” (No measuring, mixing, spreading or saturating)
- Works in bad weather, underwater, in splash zone
- No VOC’s and non-haz shipping

Uses

- Pipe, pipeline and tank repair and restoration
- Bridge repair and restoration
- Infrastructural member repair and restoration
- Pier, piling & pole repair and restoration
- Corrosion barrier & substrate for coatings

**GENERAL CHARACTERISTICS**

Tg.	- 288° F
Working Time	- 60 minute package open time, depending on ambient humidity
Cure Time	- 30 minutes nominal, after water application
Chemical Resistance	- Resistant to acetone, mek, toluene, gasoline, ethyl alcohol and many others
Adhesion	- 1,000 psi (lap shear) to abraded carbon steel, using Air Log BP-1 primer - 500 psi to concrete per ASTM D 4541

**MECHANICAL PROPERTIES**

	TYPE G-03	TYPE G-05	TYPE G-06	TYPE C-14
Reinforcement	woven glass bi-axial fabric	woven glass bi-axial fabric	woven glass uni-axial fabric	stitched carbon uni-axial fabric
Dry Fabric Weight, (oz./sq. yd.)	11	24	26	13
Nominal Thickness (mils)	11	27	27	27
Tensile Strength (psi)	65,000	47,500	83,000	123,000
Tensile Modulus (e-6 psi)	3.8	3.2	5.0	11.4
Tensile Load, per ply (pounds)	715	1,280	2,240	3,320
Compressive Strength (psi)	28,500	25,000	27,400	20,000
Interlaminar Shear (psi)	2,900	2,750	3,465	2,800

Aquawrap<sup>®</sup> is readily available in a wide variety of other fabric materials and weaves, as well as many widths and roll lengths. In addition, Air Logistics produces custom product designs and product type integrations for special customer applications. Contact Tech Support for more information.



Certified to  
ANSI/NSF 61

# General Notes

## Handling

Aquawrap® is shipped in a sealed protective bag to protect it from atmospheric moisture. Because it cures with the application of water (and air humidity), care must be taken in handling the sealed bags to prevent puncturing or scuffing, which would cause the product to cure in the bag. Once the bag is opened and the Aquawrap® is exposed to the humidity in the air, it will begin to cure and will gel within about 60 minutes. Therefore, work must be well planned prior to opening the bag. Aquawrap® requires no other special handling or application procedures. This resin is slightly irritating to certain sensitive people; it will give off a small amount of carbon dioxide vapor while curing; and the cured resin is permanent and very difficult to remove, so gloves, safety glasses and other personnel protection equipment appropriate for the task must be used.

## Design and Application Instructions

Design guidelines and application notes for various applications are available from the factory.

## Shelf Life

Aquawrap® has a shelf life of 12 months in its original, undamaged package. Store in a cool, dry place, but do not refrigerate. Do not allow product to freeze.

## Safety Note

This product is for industrial use only. Avoid prolonged breathing of vapors from the material during its use. Use in areas with adequate ventilation. Avoid direct skin and eye contact or ingestion. Gloves and protective eyewear are required and protective clothing is recommended when using this product. In the event of skin contact, wash affected area with soap and water. In the event of ingestion, do not induce vomiting, give the victim one or two glasses of water or milk, and call a physician or poison control center immediately for further instructions. In the event of eye contamination, flush with water for at least 15 minutes and get prompt medical attention. For inhalation problems, move victim to fresh air, provide any required breathing support and get medical attention if problems persist. See MSDS for additional information.

## Warranty

The manufacturer warrants that the goods delivered hereunder shall be free from defects in material and workmanship. The WARRANTY shall extend for a period of one (1) year after date of delivery of such goods to customer. This warranty is void in the event that the protective pouch has been damaged. THE MANUFACTURER MAKES NO WARRANTY EXPRESS, IMPLIED, (INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR INTENDED PURPOSE), OR STATUTORY, OTHER THAN THE FOREGOING EXPRESS WARRANTY. Failure of customer to submit any claim hereunder within the Warranty Period after receipt of such goods shall be an admission by customer and conclusive proof that such articles are in every respect as warranted and shall release the manufacturer from any and all claims for damage or loss sustained by customer. In the event customer submits a claim for defective material within the required Warranty Period, the parties agree that customer's sole and exclusive remedy shall be the replacement of such defective goods or a refund of the price of the defective goods. To the greatest extent practical defective goods shall be returned to the manufacturer for analysis. IN NO EVENT SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR SPECIAL, INDIRECT OR INCIDENTAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, LOSS OF USE OF GOODS OR ANY PART THEREOF, EVEN THOUGH THE MANUFACTURER HAS BEEN NEGLIGENT OR HAS BEEN INFORMED OF CIRCUMSTANCES WHICH MIGHT GIVE RISE TO SUCH DAMAGES.

Data and parameters listed herein and in our data sheets have been obtained by Air Logistics Corporation using materials under carefully controlled conditions. Data of this type should not be used by engineers as design specifications, but rather as indicative of ultimate properties obtainable. Before using, user should determine the suitability of the product for its intended use. In determining whether the material is suited for a particular use, such factors as overall application configuration and design, field conditions and environmental criteria to which it will be subjected should be considered by the user.

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