



AIR LOGISTICS CORPORATION

Field-Applied Composite Systems Group

925 North Todd Avenue.
Azusa, CA 91702 USA
Phone: 626-633-0294
Fax: 626-633-0791

INSTALLATION PROCEDURE FOR PIPING

Aquawrap[®], Aquapreg[®] – Standard, WR, or Bear[™] types

READ AND UNDERSTAND ALL MSDS's FOR THESE PRODUCTS PRIOR TO HANDLING OR INSTALLING THEM. CHEMICAL GLOVES AND SAFETY GLASSES ARE MANDATORY.

- A. Clean as appropriate. See Surface Preparation Procedure instructions (separate document.)
- B. All sharp corners, dents, leak repairing patches and wall/diameter offsets greater than 1/8th-inch (3mm) (1/16th-inch for fluid-tight installations) should be smoothed with Air Log Filleting Compound or similar high compressive and flexural strength filleting and filling compound. Most circumferential piping welds and the like require no special filleting or smoothing.
- C. Apply primer. Selection of proper Air Log primer grade is important. Contact tech support at 626-633-0294 if there are any questions.
- D. Tear open the foil pouch that the Aquawrap[®] is shipped in and remove any inner wrapper.
- E. Press the end of the roll down onto the pipe surface to be wrapped. An assistant will have to hold this starting point in tight contact with the pipe.
- F. Proceed to pull significant tension on the roll and wind it around and around the pipe until the requisite number of layers is applied, thoroughly spraying with water, **EVERY** layer, as it is being wrapped. For coverage that is more than a single width of the Aquawrap[®], it is often found that a bias wrapping method works best, with no overlap of the adjacent wraps; and then biasing back on the opposite angle as each succeeding layer is installed. Keep tension at all times.
Exceptions: a). When passing around or over obstructions, relax the tension while pressing downwards into the repair surface. Continue on around and do not start pulling tension again until you are certain that you are not pulling the Aquawrap[®] off of the obstruction. Apply extra layers in these regions. b). When transitioning from a large diameter down to a smaller diameter (for example, a concentric reducer) do not pull tension in the area of the transition, or the Aquawrap[®] will slip off of the larger diameter.
- G. As a roll is used up and a new one is begun, lap the new starting point back over the previous roll's end by a distance equal to at least the width of the Aquawrap[®] product being applied.
- H. While wrapping, tiny droplets of water should be visible squeezing through the weave of the Aquawrap[®] fabric. If at any time there is a lack of such droplets visible, more activating water should be misted over the Aquawrap[®] surfaces with any appropriate atomizing sprayer.
- I. If wrapping is interrupted, and the applied material cures to the "dry to touch" stage, Primer #3 or AG22 Resin should be lightly brushed or rolled onto the dry surfaces before continuing with wrapping.
- J. Tack the termination of the final layer of the final roll to the composite structure with Stricture Banding[™] or Air Log Tiger Tabs[™]. All high performance repairs should be over-wrapped with Stricture Banding[™]. Apply the first wrap of Stricture Banding[™] smoothly and loosely; subsequent layers should be tightly stretched while wrapping.
For areas of diameter transition (see Exceptions, above) the Stricture Banding[™] should be applied first, tightly, only to the large diameter. A very light tension must be used in the actual transition area; followed by a full tension application in the smaller diameter area. Special techniques are available to overcome this situation where warranted. Contact Air Log Technical Support for details.
- K. Perforate the surfaces of Stricture Banding[™] using any suitable pointed object, such as the Perforator Tool, available from Air Logistics.
- L. When cured to the touch, remove all Stricture Banding[™]. After the installation is fully dry (about 6 hours at 50% RH), paint all Aquawrap[®] surfaces or provide other coating protection from the elements. Air Log can furnish a high quality paint for this over-coating. Special UV-protected resin matrix is available on special order. For water-submerged applications, a special primer and over-coating is required.