

PIPE WRAP SYSTEM

For Use With Wet/Dry 700, CorroCoat FC 2100 and Quick Fix Epoxies

The procedures described below will allow the installation of an impermeable, tightly adherent glass fiber reinforced laminate over pipes.

Supplies Required

1. Gloves, long sleeved, rubber. Fairly thin rubber gloves such as single use examination gloves or "Platex™" brand household gloves are preferable to thick industrial types.
2. Paint spreaders. Plastic or metal straight-edged spreaders are required for the application of the epoxy material.
3. Paint mixing. Wooden paint store type mixers are required for preparation of the epoxy mixes.
4. Paint mixing surface. Cardboard, fiberboard, plywood etc. Should be disposable.
5. Scissors. Sharp scissors for cutting the fiberglass tape.

Introduction

The epoxy material specified for use with fiberglass tape is a 100% solids, wet surface tolerant, Kevlar™ reinforced epoxy material suitable for exposure to a wide range of industrial chemicals.

Procedures using epoxy

1. Surface preparation
 - A. For insulated pipes with corrosion-under-insulation present
 1. Remove insulation from 8" (20 cm) full diameter around the damaged area.
 2. Abrasive blast pipe surfaces to minimum "Commercial" standard (SA2.0; SSPC-SP-6).
 3. Wash down with fresh water to remove all residual dirt.
 - B. For painted non insulated pipes
 1. Wire brush or disc clean to remove chalking or dust.
 2. Wipe with a solvent rag (M.E.K., Xylene, or Lacquer thinner) to remove residual dust.
2. Application method
 - A. Mix epoxy in specified mix ratios according to label directions.
 - B. Quickly, before flash rusting occurs, apply to all surfaces for encapsulation using appropriate tools such as spreaders or stiff brushes.
 - C. Apply to approximately 6" full diameter on the surface of the pipe.

- D. Unroll (do not cut tape) approximately three feet (.9 meters) of 3" fiberglass tape and impregnate with just sufficient epoxy to wet the fibers without a significant excess. (Note: Excessive amounts of epoxy will make the installation difficult and sloppy).
- E. Tightly wrap tape around the pipe. Starting at one end of the cleaned area, spiral wrap the pipe as tightly as possible with coated tape. The tape should overlap about 1/2" (1.2 cm). Pull as tightly as possible, if done correctly the epoxy coating will ooze out - this action squeezes out any air pockets and creates a better bond.
- F. Continue unrolling 3-4 ft (.9-1.2 meters) of tape, coating it and wrapping the pipe until you have reached the end of the repair site.
- G. Without cutting the tape, begin process of wrapping the pipe in the reverse direction. At the end of this procedure you will have two layers of pipe wrap. Without cutting tape, reverse direction and continue process to provide a third layer of wrap. Smooth any excess epoxy over the edges, seams and ends.
- H. Option - clamp the ends of the wrap with standard hose or pipe clamps to provide highest possible pressure protection.
- I. After curing, repair area can be topcoated with any paint to achieve desired color.

Clean up

Use lacquer thinner or M.E.K. before the epoxy has cured and hardened.

Procedures using Quick Fix 2300

- 1. For leak repair
 - A. Mix ratio is 1/1 (1 part curing agent to 1 part epoxy base). Mix for thoroughly. Total mix and application time is 45 minutes.
 - B. Clean surface around the leak - refer to step 1 in the epoxy instructions.
 - C. Wet down a length of fiberglass tape with Quick Fix and wrap tightly around leak. Ensure 3 wraps minimum.
- 2. For pressure leaks
 - A. Mix a small quantity of Quick Fix. Have some paper and plastic handy. Size the paper so that when balled it fits snugly into the hole in the pipe. Cover the paper with Quick Fix. Put a small amount of Quick Fix on the leak and then cover with the balled paper. Cover with plastic and hold in place tightly to stop the leak for 45 minutes.
 - B. Peel off the plastic and complete the repair using Quick Fix by wrapping in fiberglass tape as outlined in this document.