



"From hands-on professionals...For hands-on preservationists"

P.O. Box 454 Northford, CT 06472 phone (203) 484-4123 fax (203) 484-2398 www.conservepoxy.com

SPECIFICATIONS

FLEXIBLE EPOXY CONSOLIDANT **100** & **W100**

SECTION 06610 WOOD EPOXY CONSOLIDATION

PART 1 GENERAL

1-1 Description:

The work in this section consists of epoxy consolidation of deteriorated wood.

1-2 Quality Assurance:

1-3 Submittals:

- A. Submit manufacturer's product literature and product specifications.
- B. Submit small sample of epoxy consolidated decayed wood and a small cast disk of epoxy to the Project Manager for approval prior to application.
- C. Submit manufacturer's Material Safety Data Sheet (M.S.D.S.)

1-4 Product Storage & Handling:

- A. Deliver epoxies in manufacturer's original, unopened containers and store inside at room temperature or as recommended by manufacturer.
- B. Do not use epoxies which have exceeded manufacturer's shelf life.
- C. Epoxies which have frozen since manufacture are not to be used.
- D. Follow safety precautions of epoxy as defined by manufacturer or product associations or OSHA. Observe good housekeeping practices when working with epoxies.
- E. Flammable solvents may not be stored in or brought within 20 feet of an historic structure.

1-5 Project Conditions:

- A. Epoxy applications are to be performed in favorable weather conditions.
- B. Wood to be consolidated must be dry and have a moisture content below 20% by weight. Protect area from moisture until epoxy has completely cured.
- C. Epoxy consolidant must be within a temperature range of 50° to 90° F at the time of application. Wood within 3 inches of the consolidation area must be within the temperature range of 45°-90° F at the time of application. Area consolidated must not be subjected to freezing temperatures within 24 hours of application. Use of a heat tent around area is acceptable. Shade mixing and application areas from direct sunlight. Provide shade to application area for a minimum of 8 hours following consolidation of the affected area.
- D. Area is to be secured from public use during epoxy application. Do not spray epoxy within 30 feet of public access. Secure areas as necessary to prevent intrusion of unqualified personnel.

(continued on reverse side)

1-6 Cleanup:

- A. Following application leave all areas free and clean of epoxy. Discard unused epoxy, containers, tools and towels in accordance with local, state and federal Environmental Protection Agency regulations.

PART 2 PRODUCTS

2-1 Materials:

- A. Epoxy consolidant: Epoxy should be of a type which has regular and proven use for consolidation applications in decayed wood. Epoxy must have low viscosity and be slow curing to allow for maximum penetration and successive applications. When fully cured epoxy must be more flexible than wood at 50°-100° F temperature range.

2-2 Available Products:

Subject to compliance with requirements, products which may be incorporated in the work may include but are not limited to:

ConServ Flexible Epoxy Consolidant 100
ConServ Epoxy LLC, P.O. Box 454 Northford, CT 06472

or equivalent

2-3 Mixes: Follow manufacturer's instructions.

PART 3 EXECUTION

3-1 Inspection:

In most cases deteriorated wood must be removed before the affected area can be accurately defined. Actual parameters for epoxy consolidation may vary for each situation. Verify conditions and proposed treatment with Project Manager.

3-2 Preparation:

- A. All loose and soft wood decay must be removed prior to application of epoxy consolidant. Attempt to remove decay down to solid wood. Verify standard for performance with Project Manager. If not visible, 1/8" dia. holes may be drilled into the affected area approximately 1½" apart for better epoxy penetration. Remove all loose wood fragments and blow out dust.
- B. Protect decayed area from moisture until consolidant has been applied and has completely set. Wood to be consolidated must be dry and have a moisture content of less than 20% to within 3 inches of the area to be repaired.
- C. Protect vegetation and horizontal surfaces from epoxy damage, spills or drips.

3-3 Installation/Application:

- A. Epoxy consolidant may be applied by pouring, brushing or by spraying. Power spraying is preferred to maximize penetration and coverage of hard to reach areas. Read all manufacturer's instructions and cautions.
- B. Apply liberally to prepared decay area. Do not allow consolidant to touch adjacent areas, materials or building components. Repeat application 4 to 6 times or until surfaces will accept no more epoxy. Allow approximately one hour between applications to minimize run-off and wasting of product.
- C. Keep epoxy consolidant out of direct sunlight and at temperatures above 60° F. until fully cured.

3-4 Cleanup:

Following application leave all areas free and clean of epoxy. Discard unused epoxy, containers, tools and towels in accordance with local, state and federal EPA regulations.