SPECIFICATIONS

FLEXIBLE EPOXY PATCH 200 Series

SECTION 06640 WOOD EPOXY PATCHING

PART 1 GENERAL

1-1 Description:

The work in this section consists of epoxy patching for filling and making repairs to wood.

1-2 Submittals:

A. Submit manufacturer's product instructions and technical data sheet and product specifications.

B. Submit a small sample of epoxy patch 200 series to the Project Manager for approval prior to application.

C. Submit manufacturer's Safety Data Sheet (SDS) for A, B, C & D components.

1-3 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. Epoxy stored below freezing (it won't freeze), should have a small sample mixed to test the cure prior to use.

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'/6m of an historic structure.

1-4 Project Conditions:

A. Epoxy applications are to be performed in favorable weather conditions.

B. Wood that is to receive epoxy must be dry and have moisture content below 20% by weight at the time of application. Extra porous substrates must be previously consolidated with a flexible epoxy consolidant. Refer to Section 06610. Protect area from moisture until epoxy has completely cured.

C. Epoxy patch applied in an optimal temperature range of 50°–90°F/10°–32°C will provide a reasonably quick cure. Use S200 to slow the cure in hot temperatures from 80°F–95°F/26°C–35°C and when large multi-gallon batches need to mixed. Consider using the faster curing W200 or X200 when the temperature is below 50°F/10°C and as low as 15°F/-9°C. Cold or freezing temperatures will slow down the cure. Expect to double the cure time for approximately every 20°F/11°C drop in temperature. Use of a heat tent around area is acceptable in cold weather. In hot weather, shade the mixing station and especially the application area from direct sunlight for a minimum of 8 hours following installation of epoxy patch.

D. Area is to be secured from public use during epoxy application. Secure areas as necessary to prevent intrusion of unqualified personnel.

1-5 Cleanup:

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

PART 2 PRODUCTS

2-1 Materials:

A. Epoxy Patch: Epoxy should be of a type which has regular and proven use for patching and filling applications in decayed wood. Epoxy must be easy to apply. When fully cured epoxy must be more flexible than wood at 50°–100ºF/10°–38°C temperature range. At 72°F/22°C, a cured epoxy disc measuring approximately 1/4”/6mm T x 4”/101mm dia. should be able to have the edges bent enough to touch the other side then flex back flat without breaking/splitting.

2-2 Available Products:

A. Epoxy Patch: ConServ Flexible Epoxy Patch 200 Series
ConServ Epoxy LLC conservepoxy.com

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 may vary for each situation. Verify conditions and proposed treatment with Project Manager.

3-2 Preparation:

A. Refer to Section 06610 for epoxy consolidation.

B. Protect treatment areas from moisture until epoxy patch has been applied and has cured. Wood to be Epoxied 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 surrounding surfaces from epoxy spills or drips.

3-3 Installation/Application:

A. Epoxy patch may be applied using a putty knife, trowel, or similar tool. It may also be loaded into an empty caulk tube and placed into the appropriate size dispenser for discharge. If mixed to a low viscosity, epoxy patch can be cast in place. Read all manufacturer instructions, cautions, and technical data.

B. Apply to prepared decay zones, voids, laminations, etc. In general, do not apply in a thickness greater than 1½"or in any one area exceeding one quart at one time, unless using the slow or standard cure formulas, working in cold weather and monitoring temperature of the exothermic reaction to stay below approx. 120°F/49°C. Allow epoxy to cool down close to the surrounding air temperature or sit overnight before applying additional layers/lifts.

C. Keep epoxy patch out of direct sunlight in hot weather until fully cured.

3-4 Cleanup:

Following the epoxy application, leave all areas free and clean of epoxy. Reusable tools may be wiped clean with dry paper towels ASAP after the epoxy has been applied. Discard unused epoxy, containers, tools and paper towels in accordance with local, state and federal EPA regulations.

“From hands-on professionals…For hands-on preservationists”

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