



# 200, S200 and W200 FLEXIBLE EPOXY PATCH

## INSTRUCTIONS

**DESCRIPTION:** ConServ 200 FLEXIBLE EPOXY PATCH is designed for filling cavities, voids and surface imperfections in wood. There are three speed choices. S200 Slow curing version for hot weather. 200 Standard version for a wide temperature range. W200 Fast formula for cold weather down to 35°F, or for whenever a faster cure time is needed. The **ConServ 200 series** is flexible to withstand some of the ongoing expansion and contraction of wood, yet firm enough to replace damaged portions of wood. It is easily tooled, carved, planed, drilled or sanded. It will accept nails and screws, and can be painted or stained solid. Applications include windows, doors, trim, siding, porch elements (columns, balustrades, flooring), stair parts, framing, logs, timbers, and ornamental components etc.

**NOTICE:** ConServ epoxy product labels and literature are **color coded for proper identification**. Please take time to acquaint yourself with all labels, instructions and precautions before mixing. View instructional videos at [conservepoxy.com](http://conservepoxy.com). Due to the variety of uses, application methods and conditions that customers might use these epoxy products for, no warranty is written or implied.

**WOOD PREPARATION:** Normally involves removing most of the loose and soft decay close to good wood prior to applying epoxy consolidant 100 or W100. Wood to be epoxied should be **clean and dry with a moisture content below 20%**. Porous areas to be filled with Epoxy Patch 200 should be primed with ConServ 100 or W100 so the 200 patch adheres to stabilized wood. For vulnerable moisture prone areas that have sustained decay, consider first treating with liquid borate preservative 700-BC or 700-BD.

**MIXING:** *In hot weather put the can of A resin on ice* and keep it in the shade to slow the curing process and increase working time. **This can be done with the S200, but is especially important for faster curing large batches of the W200 or 200.** The preferred mixing method is to pour the entire contents of bottle B (curing agent) into can A (epoxy resin). Blend thoroughly for three minutes by hand with a firm flat stick or use a power mixer. Blend in the entire bag C (reddish brown filler) with stick or mixer. Slowly add and mix in D (white thickener) as needed to achieve the desired consistency. If you intend to use less than a full matched set, the easiest basic method is to break down components A and B into as many sets as you choose of equal volume, using clear wide mouth plastic bottles, then return A into metal cans and keep B in the bottles. (Conserv offers various sizes of bottles and cans). Filler C should then be broken down into equal parts and match the number of A and B components that were made up from the original matched set. Thickener D can be left in the original bag and used as needed with each batch. A simple break down video of this method is on our website. Or, see the Technical Data sheet for more **advanced options** by volume or weight. This is important with the 200 standard mix and especially important with the faster W200 formula. It is important to mix small amounts of the 200 standard speed mix and especially important when mixing the faster W200 formula in order to provide enough working time in hot weather.

**CAUTION:** The A resin may **crystallize** in prolonged cool storage and become cloudy or form crystals on the bottom of the can. This condition can easily be corrected and **does not** in any way alter or inhibit the effectiveness of the epoxy. Dissolve by gradually warming in direct sun, use a hair dryer, heat gun or carefully place the A can in boiling water or a double boiler and stir gently until the material is almost clear. Do not over heat. Allow epoxy to regain normal room temperature before using. Large quantities of mixed epoxy will generate heat in 5 to 10 minutes. **To prolong working time, put cans on ice, roughly spread out small globs of epoxy to lessen the volume and or use quickly.** This is important with the 200 standard mix and especially important with the faster W200 formula.

**APPLICATION:** Apply ideally in a temperature range of 50°-90°F to achieve a reasonable cure time. Use W200 when the temperature is below 50°F and as low as 35°F. Use S200 to slow the cure in hot temperatures from 80°F to 95°F. If possible, avoid applying epoxy in direct sunlight during hot weather, or in rain. Preferably use a wet on wet application over the ConServ 100 consolidant for the best chemical bond, but the 200 patch series can be applied after the 100 has cured. The **ConServ Mini Hawk 900-MH** is a convenient way to handle the epoxy patch. Plastic or metal putty knives, straight edges etc. are good tools for applying the epoxy patch. Two sizes of empty caulk tubes are available to load with patch for specific applications. Fill large voids (over 1½" deep) in layers. Allow a few hours or more between lifts unless working in large timber, using wood infill, using S200 or if temperature is cool. This will keep the epoxy from curing too fast. Protect treated areas with clear polyethylene or another type of cover to keep the repair zone warm in cold weather and dry until epoxy has cured.

**CURING:** ConServ 200 Patch cures in 1½-2½ days at 72° F or room temperature, S200 is 3-5 days at 72° F and W200 is 1-2 days at 72° F. Temperature is the determining factor. Heat will cause epoxy to cure faster and cool temperatures will slow down the cure. As a guide, use S200 to slow the cure in hot temperatures from 80°F to 95°F, use W200 when

the temperature is below 50°F and as low as 35°F and use the standard 200 formula for midrange temperatures. Choosing the right speed will help maintain good quality. Expect to double the cure time for approximately every 20°F drop in temperature.

**CLEAN-UP:** Reusable tools may be wiped clean with dry paper towels ASAP after the epoxy has been applied. Discard paper towels, non-reusable containers, brushes etc. according to local regulations. White vinegar will soften cured epoxy on tools or equipment if allowed to soak for an extended period of time. Acetone, Methylene chloride and MEK softens cured epoxy for easy removal, but should be avoided due to their toxicity. Clean out the can of excess epoxy patch by using a thin rectangular piece of wood, plywood or squeegee that easily fits inside the can. Press it around the inside wall and wipe off onto a Mini Hawk after each swipe. Start at the rim and work downward.

**SAFETY:** is a function of common sense and good housekeeping. **Wear chemical resistant disposable gloves, dust mask as required, eye protection, and work clothes.** Don't get epoxy on your skin or clothing and work with good ventilation.

**STORAGE:** ConServ 200 series epoxy patch has a **one year shelf life if stored at cool temperatures and kept dry in tightly sealed containers.** Epoxy stored at 50°F to 75°F is a guideline for an ideal long term storage temperature.

## TECHNICAL DATA

**MEASURING:** If you choose not to mix the entire set at one time, the website "Breakdown Video" shows one method, or you can measure either by volume or weight as follows:

### By Volume

200 ratio of 3 A : 1 B  
S200 ratio of 4 A : 1 B  
W200 ratio of 2.75 A : 1 B  
C Filler Ratio is 1 A & B : 1.4 C by vol.  
D White Thickener added as needed to make a thin slurry to a thick paste.

### By Weight

200 ratio of 3.4 A : 1 B  
S200 ratio of 4.5 A : 1 B  
W200 ratio of 3 A : 1 B  
C Filler Ratio is 8 A & B : 1 C by wt.

OR

### CURE SCHEDULE:

**200 Epoxy** Working Time: 6 fl oz = approximately 1-2 hours @ 72°F  
Gel Time: 6 fl oz = approximately 1.5-2.5 hours @ 72°F  
Cure Time: 1.5-2.5 days @ 72°F (75% cured, tack free)

**S200 Epoxy** Working Time: 6 fl oz = approximately 3-5 hours @ 72°F  
Gel Time 6 fl oz = approximately 4-6 hours @ 72°F  
Cure Time: 3-5 days @ 72°F (75% cured, tack free)

**W200 Epoxy** Working Time: 6 fl oz = approximately 30-60 minutes @ 72°F  
Gel Time 6 fl oz = approximately 1-2 hours @ 72°F  
Cure Time: 1-2 days @ 72°F (75% cured, tack free)

**Cold temperature** extends cure time, but W200 can be used down to 35°F with wind protection. **Hot temperature** speeds cure time, but S200 can be used up to 95°F in shade and small quantity. In hot weather avoid exposure to intense sunlight until final cure is complete. Large volumes speed up cure time due to heat generating exothermic reaction of the epoxy.

### PROPERTIES:

**Color:** Reddish brown, can tint with dry mortar colorant or liquid tint. Contact Conserv Epoxy if a white C powder option is needed to make the 200 Patch white instead of reddish brown.

**Viscosity:** Consistency is easily increased from a thin slurry to stiff mashed potatoes depending on the amount of D thickener used for your particular application needs.

**Operating Range:** -30°F to 160°F for cured epoxy.

**Mixing Range:** 50°F to 90°F is ideal, but in colder temperature pre-warm epoxy or mix for 5-10 minutes to start a reaction

**Shelf life:** 1 year in unopened original containers

**PACKAGING and YIELD:** ConServ 200, S200 and W200 standard sizes are 3/4 gallon, 3/8 gallon, 3/4 quart, 3/4 pint, 3/8 pint and 3 fl oz. Call to request larger sizes such as 1.5 gallon, 2.25 gallon and 3.75 gallon etc. Also, both A and B liquids can be packaged in clear HDPE containers for easy dispensing to measure out into smaller sizes. Yield is equivalent to the set size purchased. Maximum use of fillers and thickeners supplied will produce the amount indicated.