



200, S200, W200 and X200 FLEXIBLE EPOXY PATCH

INSTRUCTIONS

DESCRIPTION: ConServ 200 FLEXIBLE EPOXY PATCH is designed for filling cavities, voids and surface imperfections in wood. There are four cure speeds: S200 Slow formula for hot temperatures, 200 Standard formula for a wide temperature range, W200 Fast formula and the X200 Accelerated formula for temperatures down to 35°F/1°C and even colder, or when 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, 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. 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: This normally involves removing most of the loose and soft decay close to good wood prior to applying epoxy consolidant 100, W100 or X100. 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, W100 or X100 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 order to provide enough working time in hot weather, it is important to mix only small amounts of the 200 standard speed formula or the faster W200 and X200 formulas. Also, 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 X200, 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. Gradually mix in the entire bag C (reddish brown filler) and blend until fully wet. Slowly add and mix in D (white thickener) as needed to achieve the desired consistency. You can stop adding D at anytime to easily control the viscosity from a thin slurry (pour-able or brush grade) to a thick patch/paste (trowel grade). You may not need the entire amount of D provided for each set. Save any extra D for the next batch. If you intend to measure out less than a full matched set of A,B,C & D, 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.

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 hot 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. Hot weather, direct sunlight and large quantities of mixed epoxy will shorten the working time and create excessive heat.

APPLICATION: To achieve a reasonably quick cure, apply in an optimal temperature range of 50°–90°F/10°–32°C. Use W200 or X200 when the temperature is below 50°F/10°C and as low as 35°F/1°C. 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. 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 series for the best chemical bond, but the 200 patch series can also 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 which spreads like butter. 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 2 days at 72°F/22°C F or room temperature, S200 cures in 4 days, W200 cures in 1.5 days and the X200 cures in 1 day @ 72°F/22°C. Temperature is the deciding factor for how quickly the epoxy cures. Warm temperatures 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 80–95°F/26–35°C, use W200 or X200 when the temperature is below 50°F/10°C and as low as 35°F/1°C 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/11°C 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: Use 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 50–75°F/10–24°C 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	OR	By Weight
200 ratio of 3 A : 1 B		200 ratio of 3.4 A : 1 B
S200 ratio of 4 A : 1 B		S200 ratio of 4.5 A : 1 B
W200 ratio of 2.75 A : 1 B		W200 ratio of 3 A : 1 B
X200 ratio of 2.35 A : 1 B		X200 ratio of 2.5 A : 1 B
C Filler Ratio is 1 A & B : 1.4 C by vol.		C Filler Ratio is 8 A & B : 1 C by wt.
D White Thickener added as needed to make a thin slurry to a thick paste.		

CURE SCHEDULE:

200 Epoxy	Working Time: 6 fl oz = approximately 2 hours @ 72°F/22°C Cure Time: 2 days @ 72°F/22°C (75% cured, tack free)
S200 Epoxy	Working Time: 6 fl oz = approximately 4 hours @ 72°F/22°C Cure Time: 4 days @ 72°F/22°C (75% cured, tack free)
W200 Epoxy	Working Time: 6 fl oz = approximately 1.5 hours @ 72°F/22°C Cure Time: 1.5 days @ 72°F/22°C (75% cured, tack free)
X200 Epoxy	Working Time: 6 fl oz = approximately 1 hour @ 72°F/22°C Cure Time: 1 day @ 72°F/22°C (75% cured, tack free)

Cold temperature extends cure time, but W200 and X200 can be used down to 35°F/1°C and colder with wind protection. **Hot temperature** reduces cure time, but S200 can be used up to 95°F/35°C 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 be tinted with dry mortar colorant or liquid tint. Contact ConServ Epoxy if a white C filler option is needed to make the 200 Patch white.
Viscosity: The viscosity of 200 can easily be increased from low (pour-able, brush grade, thin slurry) to a high viscosity (thick paste) depending on the amount of D thickener used.
Operating Range: -30–160°F/-34–71°C for cured epoxy.
Mixing Range: 50–90°F/10–32°C 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, W200 and X200 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, 3 gallon and 3.75 gallon. Both A and B liquids can be packaged in clear HDPE containers for easy dispensing of smaller sizes. Yield is equivalent to the set size purchased. Maximum use of fillers and thickeners supplied will produce the amount indicated.