



# 100 and W100 FLEXIBLE EPOXY CONSOLIDANT

## INSTRUCTIONS

**DESCRIPTION:** ConServ 100 FLEXIBLE EPOXY CONSOLIDANT is a slow curing, low viscosity liquid epoxy series designed for saturating and encapsulating wood decay, or priming damaged areas. The W100 is a faster curing formula created for cold weather applications down to 35°F. The **ConServ 100 series** is flexible to withstand some of the ongoing expansion and contraction of wood. The properties of both formulas are ideally suited for consolidating and stabilizing pockets of wood decay, checks, fissures and other surface imperfections due to weather exposure, insect infestation or minor charring from fire damage. Applications include porous end grain, window and door sills, sash, jambs, trim, siding, porch elements, stair parts, framing, log and timber elements etc. Use as a stabilizing primer for ConServ 200 Flexible Epoxy Patch or ConServ W300 Flexible Epoxy Paste.

**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:** Normally involves removing most of the loose and soft decay close to good wood prior to the application of the epoxy consolidant. If serious decay exists and if practical, drill 1/8" to 1/4" holes close together in the **decay zone** to provide for better penetration. Wood to be consolidated should be **clean and dry with a moisture content below 20%**. 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 100, but is especially important for faster curing large batches of the W100 or 100.** 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 power mixer. 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). A simple break down video of this method is on our website. Or, see the Technical Data sheet for more advanced options using 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.

**APPLICATION:** Apply ideally in a temperature range of 50°F-90°F to achieve a reasonably quick cure. Use W100 when the temperature is below 50°F and as low as 35°F. Provide covers to protect the epoxy from wet weather and hold in heat. Covers also increase the temperature of the substrate and shorten the epoxy cure time which is especially helpful in cold weather. The original 100 formula is our slowest curing epoxy and can be used in warm temperatures; but if possible, avoid applying epoxy in direct sunlight during hot weather, or in rain. Apply 100 by funneling epoxy into a narrow mouth squirt bottle used to saturate areas like checks and fissures or brush on directly from the can or a wide mouth bottle. Spraying should only be done by experienced professionals. When practical, apply consolidant repeatedly until the wood glosses over and accepts no more epoxy. The objective is fiber saturation to encapsulate and stabilize any remaining decay. 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. Protect unaffected areas from over spray or spills. Before applying ConServ 200 Patch or W300 Paste, the 100 consolidant **need not be fully cured**. Apply 200 or W300 on wet 100 (preferred) or at a later time.

**CURING:** ConServ 100 Consolidant cures in 3-5 days at 72°F and W100 cures in 1½-2½ days at 72°F. The 100 cures slowly in hot weather to maximize penetration, W100 will cure slowly at 50°F and very slow at 35°F. Heat causes epoxy to cure faster and cold causes epoxy to cure slower. 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.

**SAFETY:** Use common sense and good housekeeping. **Wear chemical resistant disposable gloves, eye protection, and work clothes.** Don't get epoxy on your skin or clothing. Work with good ventilation.

**STORAGE:** ConServ 100 series epoxy consolidant 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 Measure		By Weight
100 ratio of 4 A : 1 B	OR	100 ratio of 4.5 A : 1 B
W100 ratio of 3.25 A : 1 B		W100 ratio of 3.5 A : 1 B

### CURE SCHEDULE:

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

**W100 Epoxy** Working Time 4 fl oz = approximately 1-2 hours @ 72°F  
Gel Time: 4 fl oz = approximately 1.5-2.5 hours @ 72°F  
Cure Time: 1½-2½ days @ 72°F (75% cured, tack free)

**Cold temperature** extends cure time, but W100 can be used down to 35°F with wind protection. **Hot temperature** speeds cure time, but 100 can be used up to 100°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:** Clear

**Viscosity:** Consistency of vegetable oil @ 72°F

**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 100 and W100 standard sizes are ½ gallon, 1 quart, 1 pint, ½ pint, ¼ pint and 2 fl oz. Call to request larger sizes such as 1gallon, 2 gallon and 4 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. **Coverage is variable** depending on the extent of the decay and subsequent degree of saturation. Sufficient saturation to stabilize the damaged material is imperative for proper protection and preparation for the ConServ 200 Patch or W300 Paste.