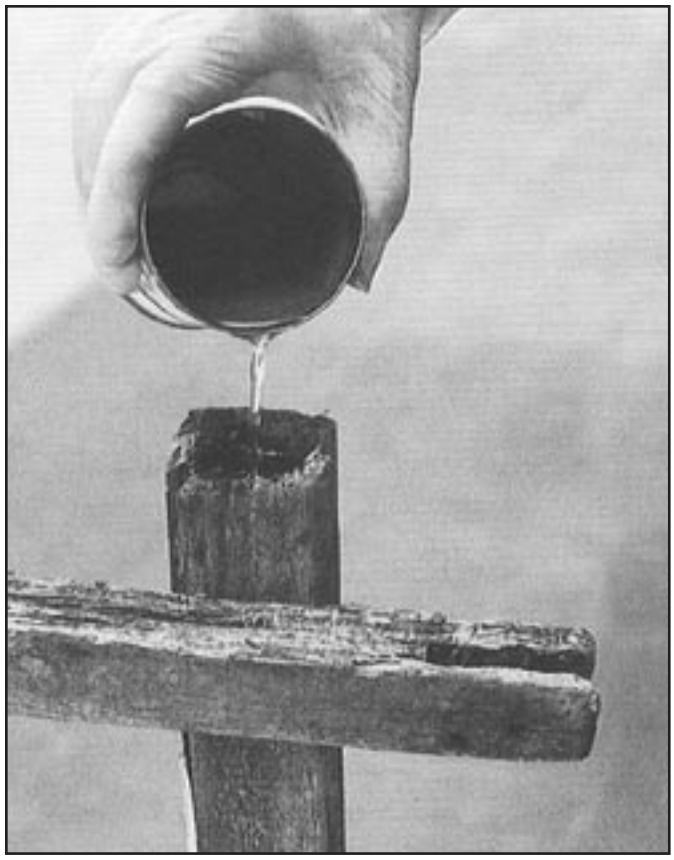
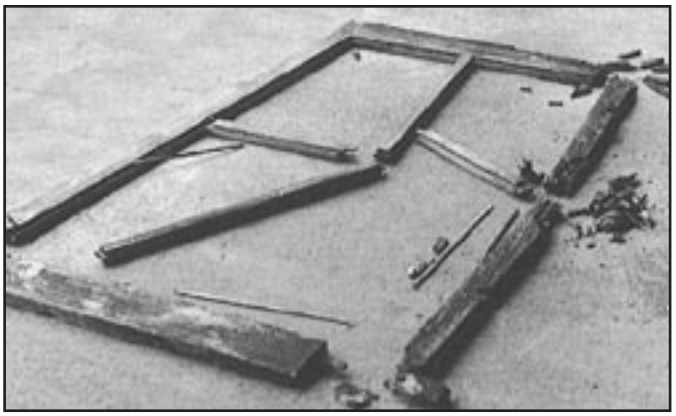
Unprecedented Wood Restoration System
The New Standard To Restore & Replace Wood

Specified by the U.S. Government, national restoration centers, museums, architects and other professionals, **LiquidWood** and **WoodEpox** represent the greatest advance in wood restoration. They restore rotted, severely damaged windows, columns, frames, broken furniture, structural and decorative wood components, broken furniture. They are the only hope for parts that cannot be replaced because of size, shape or other reasons. The objects restored with **LiquidWood** and **WoodEpox** are not merely museum pieces or delicate memorabilia, but fully functional parts often stronger and far more durable than the original.





Hopeless without WoodEpox

Half was left unpainted to show WoodEpox

LiquidWood®

Liquid wood consolidant. Reinforces, rebuilds, water- and insect-proofs wood by hardening after penetrating. Regenerates rotted window sills, frames, structural and decorative parts, furniture, boats, columns, floors. Primer for WoodEpox.

WoodEpox®

Structural adhesive putty. Most versatile, high-strength no-shrink adhesive paste to fill, repair and replace wood and other materials in structures, walls, floors, furniture, sculptures. A new standard in workshops, plants, buildings, museums, shipyards and homes. Unaffected by water and insects.

LiquidWood®

Wood Consolidation with LiquidWood®

Consolidation with LiquidWood is the restoration and reinforcement of wood by impregnation with a special resin that hardens after penetrating.

LiquidWood excels in:

- **Penetration**
- **Adhesion**
- **Water resistance**
- **Permanence**
- **Versatility**
- **Wetting Properties**
- **Dimensional Stability**
- **Structural Strength**
- **Transparency**
- **Ease of Handling and Use**
- **Rot resistance**
- **Insect resistance**
- **Virtually no shrinkage**

With **LiquidWood**, a piece of deteriorated wood that would crumble under finger pressure can be impregnated and restored to rigidity, durability, water, insect and weather resistance superior to that of the original wood.

LiquidWood consists of **2 clear liquids**: the **resin (A)**, and the **hardener (B)**. When A and B are mixed by simple stirring, a blend is formed with unusual properties to impregnate and restore wood and other porous masses.

LiquidWood is brushed or poured on the surface where it must be absorbed. The more porous the wood, the more resin it will absorb, and the greater the improvement. **LiquidWood** impregnates the wood fibers and hardens into a water- and insect-resistant, distortion-free, high-strength mass in hours or minutes. The hardened mass can be sawed, planed, routed, carved, drilled, sanded, glued and painted.

LiquidWood is also a primer and surface consolidant on rotted and porous surfaces, for subsequent applications of **WoodEpox** , paints or glues. For sound surfaces that require no consolidation, **PrimKote** primer is mostly used. The preparation with **LiquidWood** creates a proper interface on porous masses, a strong receptive surface for adhesion on most areas.

LiquidWood is designed to impregnate and reinforce fibers and other absorbent masses. That is: holes, cracks or other voids are best filled with **WoodEpox** , after impregnating and priming the existing fibers with **LiquidWood.** The combination of these two products offers superb results unequaled by any other restoration material.

TYPICAL APPLICATIONS: Rotted, dried-out or spongy windowsills - thresholds - window and door frames - columns - posts - stair steps - railings - balustrades - indoor and outdoor furniture - porches - gazebos - stages - platforms - balconies - countertops - cornices - capitals - entablatures - structural and decorative components - walls - mouldings - doors - shutters - artifacts - archeological and art restoration - protective impregnation.

Pouring or brushing is sufficient where absorption is easy

Drilling allows deeper penetration

Squeeze bottles are excellent for injecting

Only LiquidWood plus WoodEpox could save this column

WoodEpox®

Wood Repair and Replacement with WoodEpox

Whereas **LiquidWood is a liquid** for penetration and impregnation, **WoodEpox is a paste** for filling, adding and building up ,

WoodEpox is a light-weight structural adhesive putty system and wood substitute consisting of 2 components: **resin paste (A)** and **hardener paste (B)**. When A and B are mixed, the blend hardens within 1-2 hours into a lighter-than-water non-shrinking, tough adhesive mass with high dimensional stability, chemical, water, heat and weather resistance. Its appearance is a light neutral color that can be changed, while mixing, with stains, dyes or pigments. It has a no-slump paste consistency that allows it to be applied like putty to fill gaps, holes, or to build up virtually any thickness and shape.

WoodEpox offers unique properties:
- **It bonds permanently** with high strength to most rigid surfaces.
- **It fills** cracks, holes and voids of any size without the shrinking and crumbling typical of common wood fillers.
- It can **replace or add missing or new sections** in window frames and sills, furniture, sculptures, structural and decorative components indoors and outdoors.
- Because of its **strength** and **durability**, it is as different from conventional wood fillers as a permanent solution from temporary remedies.
- **It can be sawed, nailed, planed, sanded, machined, carved, stained, and painted like wood.**

Large and small holes or cracks, missing corners, edges, depressions can be filled, replaced or restored by adding the **WoodEpox** paste by hand, spatula, knife or trowel. The material becomes a permanent part of the surface to which it is applied. It bonds equally well to wood, ceramics, concrete, metal, glass, fiberglass and most rigid materials.

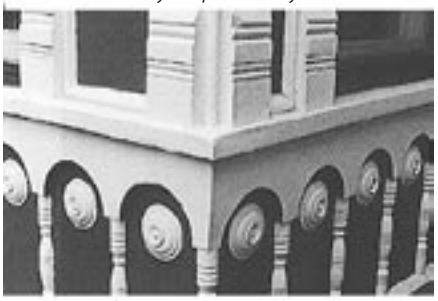
Plastic film, masking tape, contact paper, wax-coated plywood, other sheets or shapes can be used to level or mold the freshly applied mass until it hardens. Furthermore, unshaped **WoodEpox** masses can be easily carved, cut, sawed, planed and otherwise worked after the material has hardened.

WoodEpox can also be **sculptured by hand into any shape, before hardening** . Besides the obvious use for sculptors, another interesting application is shaping handles, knobs, larger-sized or modified handling devices for handicapped people . When the shaped **WoodEpox** is applied to the intended surface, it bonds permanently as it hardens.

TYPICAL APPLICATIONS: damaged, cracked or broken windowsills - thresholds - window and door frames - columns - posts - stair steps - railings - balustrades - indoor and outdoor furniture - porches - gazebos - stages - platforms - balconies - countertops - capitals - entablatures - structural and decorative components - walls - mouldings - doors - shutters - artifacts - archeological and art restoration - sculptures - protective filling and resurfacing - models - patterns - mock-ups - handles - knobs - all kinds of shapes.

This rotted - and irreplaceable - woodwork...

...can be easily and permanently restored...



...sanded, nailed, stained, or painted.

10" rotted bottoms of these load-bearing columns...

...were completely sawed off and replaced with...

...WoodEpox, which outperforms and outlasts wood.

Application Methods for LiquidWood & WoodEpox

COMPOSITION: Both **LiquidWood** and **WoodEpox** consist of one resin portion (A) and one hardener portion (B), both solvent-free, packaged in separate containers. They harden only when A and B are mixed, whereas conventional paints or wood fillers must contain solvents or high-shrinkage components to be usable, with consequent shrinkage, distorsion and poor performance.

PREPARATION: Surfaces for **LiquidWood** or **WoodEpox** must be stripped, cleaned and dried by washing, degreasing, scraping, sanding or sandblasting. The best wood preparation for **WoodEpox** is impregnation and coating the cleaned surface with **LiquidWood**.

MIXING: Equal volumes of A and B are mixed in a deeper-than-wide can or other disposable container (not on a flat surface or tray). As mixing is easy, anything, from a stick to a paint stirrer, can be used for it. Due to it consistency, WoodEpox is mostly mixed by thoroughly kneading with disposable-gloves-protected hands.

The **HARDENING** process begins after mixing A and B. The time a pint of mixed A/B blend remains workable (before hardening) in the mixing container is called **POT LIFE**. The material is applied during the pot life period.

An **INDUCTION PERIOD** (10-20 minutes permanence of the A/B blend in the deep mixing container, after mixing, before applying) may be necessary in difficult conditions, like high-relative-humidity or cool (under 15ºC or 59ºF) environment, to avoid tackiness of exposed layers.

Special hardeners are also available for application in **cold weather and underwater**.

The larger the mass, the faster it hardens, as its bulk retains the reaction heat which, in turn, speeds the process. This is the opposite of what happens with paints or conventional wood fillers, which harden from solvent evaporation. Thin layers harden slowly.

Heat accelerates hardening; cold retards it. LiquidWood or **WoodEpox** can harden in 1-3 hours at room temperature, or in a few minutes with heating.

CURING is the total reaction that continues after hardening and optimizes most properties. It may last 1-3 weeks at room temperature, or a few minutes or hours with heating.

PRIMING is unnecessary for **LiquidWood**. On the other hand, **LiquidWood** is a good primer for WoodEpox on surfaces of areas that need consolidation. A more specialized primer, like **PrimKote** , is the preferred choice for compact wood, metal and difficult-to-bond materials. For best results, **WoodEpox** should be applied while **LiquidWood** or other solventless primer is still hardening, or after **PrimKote's** solvent has evaporated, or within 1-3 days after either primer.

LiquidWood can be sprayed, brushed, rolled or poured. It can also be poured into holes drilled in the porous mass. As the resin spreads, its hardening is slowed down to hours, because the reaction heat is absorbed by the fibers. This allows plenty of time for penetration.

If **WoodEpox** is not available, **LiquidWood** -impregnated sawdust, paper, burlap, cotton or other fibers can be stuffed into the holes or cracks to fill them. The resulting mass can approach the wood texture and workability to a surprising degree. Even higher strength is obtained by alternating layers of **LiquidWood** and fiberglass cloth.

These combinations can build new sections, extend shapes or structural elements, thicken and reinforce existing surfaces. Even laminations of **LiquidWood** and newspapers provide surprising reinforcement for thin panels in furniture or other structures.

If **LiquidWood** is to be used for special structural purposes, special instructions may be available from our technical staff.

WoodEpox is applied with trowel, putty knife or similar tools. It can also be shaped by hand, like modeling clay.

The shaped putty bonds equally well to wood, ceramics, concrete, metal, glass, fiberglass and most rigid materials. For best adhesion, the surface should be coarse-sanded or roughened, as well as firm, clean and dry.

WoodEpox is ideal to trowel or sculpt missing parts, to repair window frames, furniture, tables, steps, doors or to fill holes in other cavities of any size. It can be easily colored with sawdust, dry pigments and compatible stains.

WoodEpox is easy to carve, saw, plane, nail, tap, drill , stain, paint . Nails, wire, rods or other reinforcements can be inserted and embedded for added strength.

New **WoodEpox** can be added over hardened **WoodEpox** , where needed, as it bonds well to itself, within 2-4 days, or with a primer like **PrimKote 8006-1** after **WoodEpox** has hardened for over 4-5 days.

WoodEpox/LiquidWood blends are used for intermediate results. The mixed **WoodEpox A/B and LiquidWood A/B blends** can be added to each other in any ratio for any desired consistency.

Thinning, diluting and cleaning is done with our **AboSolv** or other compatible solvents. Tools and brushes must be washed with **AboSolv** before the epoxy hardens on them.

Hardened material is removed with special solvents (our **ClearStrip stripper**) or scraped away while softened by high heat (250ºF or higher), or burned. Working surfaces should be protected with plastic films, newspapers or similar disposable materials.

Skin, eye and respiratory protection is assured with gloves, goggles, aprons, good ventilation, masks and other precautions normally used with chemicals. Soap and water or waterless cleanser are used to wash the skin.

VARIATIONS: Numerous versions of the above products are available and being developed for special purposes, like: extremely high or low temperatures, viscosities, reaction speeds, chemical or other properties, freezing-weather and underwater applications, as well as matches for virtually any product.