RESTORE-RITE
"THE RIGHT WAY TO RESTORE WOOD"
www.restore-rite.com

STRONGBOND EPOXY WOOD SEALER
Deep-Penetrating Sealer and Adhesion-Promoting Primer
TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Restore-Rite's StrongBond Epoxy Wood Sealer is a deep-penetrating super-thin two-part epoxy that permanently restores the structural strength and durability of deteriorated and damaged wood. The Sealer also can be used as an adhesion-promoting primer that makes topcoats bond better and last longer on repaired wood, and on new wood helps prevent dry rot and paint failure.

High-performance StrongBond Sealer can be used safely indoors and outdoors. Its low-odor zero-VOC formula is free of air-polluting chemicals that adversely affect human health and the environment. Homeowners, DYI enthusiasts, contractors, and painters can use it to permanently repair and restore damaged doors, windows, moldings, decks, floors, fences, and other structural and decorative parts of wooden buildings.

The deep penetration of StrongBond Sealer makes it more effective than thicker epoxies. Quickly propelled into cracks and deep hairline fissures using low surface tension and a capillary action, it hardens and strengthens the wood to renew its resistance to decay. The strong chemical bonds the Sealer makes inside the wood and with StrongBond Filler or Putty on the surface form a durable barrier that protects the wood from moisture, insects and other environmental factors.

Wood restoration projects can be finished faster with StrongBond Sealer. Its solvent-free formula enhances adhesion and eliminates waiting several days for solvents to off-gas before the wood can be painted or varnished. Unlike thicker epoxies, there's no need to spend time drilling holes in the wood and filling them with sealer in order to sufficiently strengthen the wood, saving valuable project time.

StrongBond Sealer is easy-to-use. Its 1/1 mixing ratio streamlines the blending of its two components: Part A (resin) and Part B (hardener). The general process is this: After all rot is removed and the damaged area is free of dust, the Sealer is mixed and brushed onto the wood. Two-to-three hours later when the Sealer becomes tacky (or at your convenience anytime afterward) StrongBond Filler or Putty can be spread over it to fill holes, cracks and areas of missing wood. All StrongBond epoxies are fast curing, allowing the wood to be restored to as-good-as-new condition in as little as one day, if desired.

StrongBond Sealer also is an excellent adhesion-promoting primer. On repaired wood it makes water-based paint bond better and last longer. On new wood it helps prevent dry rot and paint failure.

USES

- Repair and restoration of dry-rotted and damaged wood
- Excellent for both indoor and outdoor projects, and horizontal or vertical applications
- Ideal for restoring a wide variety of wooden architectural elements, such as window frames and sills, rafter tails, beams, door frames, columns, decks, fences, boat hulls, and more
- Adhesion-promoting primer for making epoxy-compatible topcoats bond better and last longer on repaired wood, and for preventing dry rot and paint failure on new wood

FEATURES & ADVANTAGES

- Restores the wood's structural strength and durability
- Easy-to-use 1/1 mixing ratio
- Quickly penetrates very-fine capillaries deep inside deteriorated wood
- Low-odor no-VOC formula is safe to use indoors and outdoors
- Solvent-free formula lets users finish projects faster
- Moisture insensitive; can be applied on damp surfaces
- Creates a strong chemical bond

PRODUCT INFORMATION

Availability	Customers can purchase Restore-Rite® products directly from the website www.restore-rite.com or from a dealer listed on the website. If you have questions, call 415-722-9098.
Sizes	**1 Quart Kit** (RRES-1QT) Kit contains 32 fl. oz. (946 ml) in two cans: 16 fl oz (473 ml) of Part A and 16 fl oz (473 ml) of Part B **2 Quart Kit** (RRES-2QT) Kit contains 64 fl. oz. (1,892 ml) in two cans: 32 fl oz (946 ml) of Part A and 32 fl oz (946 ml) of Part B **2 Gallon Kit** (RRES-2GAL) Kit contains 256 fl. oz. (7,571 ml) in two cans: 128 fl oz (3,785 ml) of Part A and 128 fl oz (3,785 ml) of Part B **Dual Cartridge** (RRESC-DC) Cartridge contains 20.29 oz. of Part A and Part B. Cartridges come with 2 static mixing nozzles that automatically mix Parts A&B in exact ratio. (Additional mixing nozzles can be purchased separately; refer to Accessories list in Products at *www.restore-rite.com)*
Application Temperature	**50°F – 100°F** (10°C – 38°C)
Color	**Part A (Resin)** Clear**; Part B (Hardener)** Amber**; Mixed:** Amber
Material Temperature	**40°F – 95°F** (4°C – 35°C)
Mix Ratio	**1:1 by volume of Part A and Part B** (refer to MPII in this TDS)
Pot Life	**30 minutes at 75°F** (based on 6 fl. oz of bulk-mixed material) Product will cure slower in thinner film and/or colder temperatures and will cure faster in a larger mass and/or warmer temperatures.
Shelf Life	**2 years from date of manufacture, stored in unopened containers.** Manufacturing date is printed on product label. High relative humidity and excessive heat reduces shelf life.

Storage	**Store between 41°F and 77°F** (5°C – 25°C) Keep in a cool, dry place away from direct sunlight; avoid freezing.
Tack-free Time	**24 hr. at 75°F** (30 mil thin film)
Viscosity (Mixed)	**100 cP**
VOC Content	**0**
Working Time	**30 minutes at 75°F**

TECHNICAL CHARACTERISTICS

For information only, not for specification purposes

		Kg/cm²	Mpa	Psi
Compressive Strength		366	36	5,210
Elongation	84%			
Flexural Strength		63	6.2	900
Hardness, Shore D	42			
Tensile Strength		103	10.1	1,460

MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)

NOTE: *To achieve maximum results,* ***proper mixing and application is imperative****. Carefully read the Manufacturers Printed Installation Instructions (MPII). Always use the most current version of the MPII.*

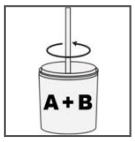
SURFACE PREPARATION

Surface preparation will depend upon the application of the product. Dry-rotted or damaged wood must be clean, with all rotten/soft wood and paint removed. **For good adhesion, remove all dirt, dry-rot debris, oil, paint, wax, grease and dust.**

Prepare the surface of the wood by roughing it mechanically; using a wire brush in a drill works best. A roughened surface is imperative to ensure excellent adhesion.

Make sure to prepare bonding surfaces in advance BEFORE mixing StrongBond Sealer.

BULK MIXING



1. **Mix only the amount of material that can be used before the Pot Life expires (refer to Product Information in this Technical Data Sheet).**
2. **Mix Ratio: 1/1 By Volume**
   1 part by volume of Part A to 1 part by volume of Part B.

   Proportion parts by volume into a clean pail at the exact and proper mix ratio. Initially mix a 4 oz. test batch, then gradually increase the amount.
3. **Mix thoroughly for 2-3 minutes or until one solid uniform color without streaks is achieved.** Small batches can be mixed with a paint stir stick in a clean graduated mixing cup. Larger amounts should be mixed with a low-speed paddle mixer (i.e. Jiffy mixer) in a clean container. While mixing, carefully scrape the sides and bottom of the container and keep the paddle below the surface of the material to avoid entrapping air. For best results, avoid picking up any unmixed material remaining on sides or bottom by transferring the mixed product to clean container before applying.

BULK MIXING (continued)

4. **Immediately brush Sealer onto the substrate of the wood and spread thin.** Continue applying until the wood will not accept any more product. It will appear glossy for a few seconds then will change to a matt finish, signaling another coat is needed.

   Once the Sealer becomes tacky, or anytime afterward, apply StrongBond Filler or StrongBond Putty over it and the two products will cure together. Use only epoxy-compatible topcoats.

DUAL CARTRIDGE OPERATION

Each dual cartridge comes with 2 static mixing nozzles that automatically mix the 2-part epoxies at a precise 1:1 ratio. The cartridges fit in a 22 oz. dual cartridge dispensing gun that helps deliver the consistent pressure important for smooth, efficient application.

Additional mixing nozzles and dispensing guns can be purchased from the Accessories section at www.restore-rite.com, or ask your local dealer.

STEP 1: **SURFACE PREPARATION**
Surface preparation is the same as Bulk Mixing. (Refer to MPPI on previous page.)
To ensure good adhesion the surface must be thoroughly cleaned and roughened.

STEP 2: **INSTALLATION**
Shake the cartridge vigorously for 20 seconds. Then stand the cartridge upright for at least 1 minute, letting any bubbles to rise to the top. Insert cartridge into the dispensing gun, with the shoulder flush with the front/top of the bracket. Remove the cartridge cap and plug.

Screw on the mixing nozzle supplied with the cartridge. Do not modify the mixing nozzle. Confirm that the internal mixing element is in place prior to dispensing the epoxy.

Prior to injection, check the Material Temperatures and review the Working and Tack-Free times listed in "Product Information" in this Technical Data Sheet.

STEP 3: **MIXING**
Keeping the dispensing gun straight up, slowly move product to the tip. Then slightly tilt the gun and dispense the initial amount of material from the mixing nozzle onto a disposable surface until the product is a uniform amber color.
Epoxy must be properly mixed in order to perform as published.

USE AS A PRIMER

On repaired wood: To make paint and other epoxy-compatible topcoats bond better and last longer, use StrongBond Sealer as an adhesion-promoting primer. After StrongBond Filler has been sanded to the desired shape, mix and apply an even coat of Sealer onto the surfaces of the repaired wood. Once the Sealer becomes tacky, or anytime afterward, apply an epoxy-compatible topcoat.

On new, sound wood: StrongBond Sealer should cure at least 2 hours, or until it becomes tacky, before applying a water-based paint, gloss-finish varnish, or other epoxy-compatible topcoat.

LIMITATIONS & WARNINGS

- DO NOT dilute with solvents as this may prevent cure.
- NEVER leave mixed epoxy in an unattended open container.
- Initially mix a 4 oz test batch to get familiar with the characteristics of the mixed epoxy. Then increase or decrease the batch size depending on the amount of material that can be used before the Pot Life expires. (Refer to MPII in this TDS.)
- Beware of condensation. During application, the Substrate Temperature should be a minimum of 50 °F above dew point to a maximum of 100 °F, and the Material Temperature must be between 40 °F - 95 °F.
- Use ONLY water-based paints, gloss-finish varnish, or other epoxy-compatible topcoats.
- Not intended for aesthetic finishes as product may turn discolor when exposed to UV light.
- Not intended for repairing damaged weight-bearing structural elements. Consult an architect.

HEALTH & SAFETY INFORMATION

Clean Up:
Always wear appropriate protective equipment such as chemically resistant nitrile rubber gloves, clothing, and splash-proof safety chemical goggles during application and cleanup. Avoid contact with skin; if this occurs immediately wash skin with soap and water (NOT solvent) and rinse thoroughly.

Uncured materials on tools and equipment can be cleaned with a mild solvent, such as mineral spirits. Cured material on tools and equipment can only be removed mechanically.

Dispose of product in accordance with federal, state and local regulations.

Safety:
Always refer to the Safety Data Sheet (SDS) at www.restore-rite.com for information and advice on safe handling, storage, and disposal.

Ensure indoor areas are properly ventilated. Be sure to wear protective chemically resistant gloves, clothing and goggles during application and clean-up. For more information call New Enterprises at 415-722-9098.

EMERGENCY CONTACT: VelocityEHS 1-800 255-3924 (24 hours)