



ZeraBond™ Type 1

Flexible Epoxy Adhesive Gel

DESCRIPTION

ZeraBond™ Type 1 is a 100% solids two component urethane-modified semi-flexible adhesive gel. ZeraBond™ Type 1 is suitable for the repair work of a wide variety of substrates including concrete, metals, plastics, wood, tiles and glass. ZeraBond™ Type 1 adhesive allows two dissimilar materials to move independently of one another without causing undue stress on the substrates.

WHERE TO USE

ZeraBond™ Type 1 is recommended for a wide variety of applications, both indoor and outdoor, which require flexibility and strength such as:

Exterior Wood Repair:

It is recommended for woodwork repair, particularly decks and porches. It offers a permanent structural repair solution versus temporary remedies from conventional wood fillers. It has a light natural wood colour appearance to blend easily with wood boards. ZeraBond™ Type 1 is flexible to accommodate the natural expansion and contraction of wood. It is also recommended for repairing wooden windows and floor frames, stair steps, railings, etc.

Others uses:

- Bonding engineered wood to concrete
- Repairing concrete cracks in porches, gazebos, balcony decks, swimming pools, etc
- Bonding vinyl tiles to concrete and wood
- Bonding tiles to fiberglass reinforced surfaces
- Bonding plastic substrates such as PVC, PU, ABS and SMC
- Bonding dissimilar substrates such as glass, steel, concrete, wood, fiberglass and plastics to one another
- Plumbing, toilet and bathroom fixture

- Marine and ship repairs

BENEFITS

- 100% solids, odourless with zero VOC's; non toxic
- Outstanding adhesion properties
- Has a natural wood appearance and colour
- Suitable for interior and exterior repairs
- Convenient one-to-one mixing ratio for ease of application
- Excellent impact and thermal shock resistance
- Withstands steam cleaning
- Resistant to moisture, water and weather resistance
- Will not harden with age; remains resilient, even at low temperatures
- Highly resistant to moisture, water, oil and salts
- Fills cracks, holes and voids of any size without the shrinkage and crumbling typical of common wood fillers
- Eliminates nailing for sound reduction in high-rise or institution complexes
- Can be sawed, nailed, planed, carved, drilled, sanded, stained, and painted like wood

Handling Properties @ 23°C (74°F)

Mixing Ratio, by volume 1 Part A: 1 Part B
Solids 100%
Density (Mixed) 1.07 kg/litre (8.9 lb./US gal)
Pot-Life 15 minutes
Initial cure 6 hours
Full Cure 7 days
Colour (mixed) light amber

APPLICATION

SURFACE PREPARATION

Wood:

- Remove old paint or sealer by sanding or scraping right until the bare wood

- Remove all decayed wood material to sound, bright, unaffected wood using a chisel, router, die grinder, or flexible shaft router
- Sand to bare wood and thoroughly remove loose wood fibers, paint, sawdust and dirt
- Ensure wood is dry

Concrete:

Concrete should be sound and free from dust, loose particles and all foreign contamination. All concrete should be chemically cleaned (acid etched) or mechanically abraded (shot-blasted) for best results. New concrete should be cured for 28 days and any surface laitance or curing compounds must be removed.

Steel:

Steel surfaces should be free of dirt, grease, oil or rust. The surface should be de-greased and mechanically abraded to reveal continuous bright metal.

Rubbers & Plastics:

Substrates must be abraded to obtain a fresh surface, then de-greased with a solvent. Acid etching may be effective for hard to adhere rubber substrates.

MIXING & APPLICATION:

- Mix an equal volume of Part A of ZeraBond™ Type 1 with Part B and mix thoroughly using a slow speed drill until even and uniform consistency is achieved; scrape down the sides and bottom of the container
- Immediately apply the adhesive into the repaired area using a plastic putty knife to spread and level the material into the wood cracks
- Allow to cure for at least 6 hours before sanding it for the coating application

LIMITATIONS

ZeraBond™ Type 1 is not recommended for:

- Applications where ambient temperatures are below 12°C (54°F)
- Areas requiring rigid bonding, anchoring deck hardware, or structural framing & repair
- Applications in direct sunlight; apply the material immediately and within the working time window
- Wet or damp surfaces

COVERAGE

Bonding Adhesive 2.0 m²/L (81.5 ft²/U.S. gal) applied

on a smooth surface.

PACKAGING

1.9 L (64 U.S. oz) units
7.58L (2 U.S. gal.) units

CLEAN UP

Clean all equipment with xylene solvent before epoxy hardens.

SAFETY PRECAUTIONS

Consult the Material Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Store in a heated warehouse. Storage at temperatures below 4.5°C (40°F) may cause the resin to crystallize.

SHELF LIFE

Two years if kept in original unopened containers under normal warehouse conditions.

WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith. Zeraus Products Inc.’s liability, if any, is limited to a refund of the purchased price or replacement of that portion of the merchandise proven to be defective. Zeraus Products Inc. shall have no other liability, including liability for incidental, consequential or resultant damages, however caused, whether due to breach of warranty, negligence, or strict liability. This warranty may not be modified or extended by representatives of Zeraus Products Inc., its distributors or dealers.”