



HERITAGE RESTORATION MORTAR

Description and Use

TB15 is a natural repair mortar specifically formulated for the patching and restoration of terra cotta and brick. TB15 can be featheredged, to repair small chips and spalls in terra cotta and brick. Designed to significantly decrease the time required to complete repairs, TB15 can be ready for sculpting in less than 60 minutes.

TB15 is a mineral-based, single component product that is mixed with water. It is formulated using only natural binders; no synthetic polymers or additives are used. TB15 has excellent freeze-thaw and salt resistance. It is vapor permeable. Skilled masons can easily apply TB15 no special certification is required.

Application and finishing of TB15 repair mortar is 8 to 12 times faster than for other commonly specified repair mortars. With TB15, most small repairs can be completed within 60 minutes, greatly reducing labor, mobilization and staging costs. This can produce considerable savings, especially where a repair is challenging or access to the repair site is difficult. With a commonly specified repair mortar, the same job could take 1 to 2 days to complete, due to lengthy curing procedures and low maximum lift requirements. TB15 is specially formulated to set quickly, and repair surfaces of terra cotta and brick.

Advantages of TB15

- Can be applied in 15 minutes on small repairs.
- No minimum application depth requirement.
- Manufactured using natural binders.
- Contains no synthetic polymers or additives; contains no Portland cement.
- Mineral-based formulation and natural binders make it completely compatible with substrate.
- Produces excellent adhesion to substrate.
- Does not create a vapor barrier.
- Provides good freeze-thaw and salt resistance.
- Easily used by skilled masons; no manufacturer's certification required.
- Custom colors available.

TB15 Package

1-gallon plastic pails 9 lbs.

5-gallon plastic pails 44 lbs.

Available in White.

Custom colors available.

Terra Cotta & Brick 15 TB

Mineral Based Natural Repair Mortar For Terra Cotta & Brick

TB15 Technical Data

Application Time:	Approximately 15 minutes after mixing - depending on temperature, relative humidity and type of finish specified
Compressive Strength: (ASTM C-109)	1 day 2,900 psi 7 days 4,360 psi 28 days 5,800 psi
Specific Gravity:	1.9
Mixing Ratio:	Approximately 5 parts powder to 1 part water by volume
Coverage:	5 gallons (44 lbs.) will cover 6 square feet at 1" thickness or 0.5 cubic feet

Surface Preparation

Cut away all loose and deteriorated terra cotta or brick. Clean the area to be repaired with clean water and a bristle brush to remove any loose particles. Neutralize any salt deposits (efflorescence) with distilled water. Sound off and chisel out delaminated terra cotta or brick.

Mixing

All repairs require a minimum two-coat application consisting of a skim coat and a build-out coat. Additional build-out coats may be applied to meet the required thickness.

Skim coat: For the initial skim coat, mix approximately 5 parts dry powder to approximately 1 part potable water. The prepared mixture should be the consistency of peanut butter. Temperature and humidity will affect the amount of water required. Mixing may be done by hand or using a low-speed drill (300 to 450 rpm) for 2 to 4 minutes. Do not over mix.

Build-Out Coat: The consistency of the mortar for the build-out coat should be similar to wet sand. Add pigments as necessary up to 1% of binder volume. For any additional build-out coats use slightly less water in the mix. Working time is approximately 15 minutes depending on temperature, humidity and wind conditions.

Installation & Finishing

Skim coat: Pre-wet the surface, so that it is glistening wet, with no standing water. Remove loose material from the surface and wash down the surface a second time. We recommend the installation of non-corrosive screws and wires when the stone repair exceeds 4" in thickness. Use trowels and plaster detailing tools to apply the skim coat to small areas. For large areas, the skim coat may be applied by hand using latex gloves.

IMPORTANT: Make sure the skim coat adheres to all surfaces of the repair area. Do not allow the surface of the skim coat to dry completely. The drying time will be affected by weather conditions, so monitor carefully.

Additional Coats: Scoop wet mix from the mixing container by hand (wear latex gloves) or with a small trowel and apply it by pressing and rubbing it into the skim coat. Make sure to fill all pores and voids of the surface to be repaired. The repair mortar may be built up to a thickness of 3" in one lift. Finger test each coat before applying the next. If the mortar moves under your finger, wait until it sets before applying the next coat. If additional coats are applied the next day, you must remove wet and scratch the previous coat before adding additional coats.

Projecting Elements and Overhangs: TB15 can be built out horizontally, if supported by a temporary shelf until firm. In most situations, the temporary shelf can be removed in 60 minutes, and carving can begin immediately. Cover the temporary shelf with thin plastic so that the repair mortar will not adhere to the shelf when it is removed.

Finishing: The surface of the repair may be either tooled or scraped to the required finish. You may finish the same day or wait until the following day. For soft edges, carve the mortar when it is wet. For sharp edges, carve with sharp carving tools when it is partially cured. It may be desirable to wait longer for particular finishes. Always test finishing techniques before applying to large areas. Craftsmen should understand the timing of the finishing techniques, and make adjustments for weather conditions. Air chisels may be used to create the desired finishes.

Curing Procedure: No special procedures necessary.

Limitations of TB15

- Cannot be mixed or applied at temperatures below 40°F or above 90°F.
- Cannot be used to consolidate loose terra cotta and brick.
- Cannot be used with other bonding agents.
- TB15 should be used for the full depth of the repair.
- Cannot be re-tempered. (Mix only as much as you can use in 15 minutes.)

Clean Up

Remove mortar from tools and mixing equipment with water immediately after use. Repair mortar is difficult to remove after it has set.

Storage & Handling

Storage: TB15 repair mortar should be stored in a dry location, at a temperature above 32° F. Product shelf life is one year in the original, unopened container.

Safety Recommendations: Precautions should be taken to avoid eye contact, prolonged skin contact and inhalation of dust during mixing. Protective eyewear and gloves should be worn while mixing and applying this product. A dust mask with NIOSH-approved silica dust filters/P-2 filters should be worn while mixing. For complete safety and handling information, see MSDS information. **Caution:** Not for human consumption. Keep out of reach of children and animals.

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Additional information and illustrated examples of projects using Heritage Restoration Mortars can be found at www.usheritage.com



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