Tile Repair Professional Thin-Set Mortar



1. Product Name

Tile Repair Professional Thin-Set Mortar

2. Product Description

High bond strength repair formula that is easy to use, develops high early strength and cures fast. Grout in 2 hours. Traffic in 4 hours. Replace broken tile underwater. No need to drain fountains, pools or spas in order to make repairs.

Key Features

- Fast-setting for repairs to damaged tile and fixtures
- Works underwater
- Grout the same day
- Exceeds ANSI A118.4 and A118.11

Suitable Substrates

- Concrete, mortar beds, masonry, Portland cement plaster
- Liquid applied waterproofing membranes such as RedGard® and Custom® 9240
- Crack prevention sheet membranes such as Crack Buster® Pro
- Uncoupling membranes such as RedGard® Uncoupling Mat
- Surfaces treated with MBP Multi-Surface Bonding Primer
- Exterior Grade Plywood (interior residential and light commercial dry areas)
- Gypsum wallboard (interior dry areas)
- Existing ceramic tile (scarified)
- Fully-bonded sheet vinyl flooring (scarified)
- Plastic laminates (scarified)
- Cutback adhesive (see preparation instructions)

Limitations to the Product

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- When setting moisture sensitive natural stone, cement or agglomerate tile use EBM-Lite™ Epoxy Bonding Mortar 100% Solids or CEG-Lite™ 100% Solids Commercial Epoxy Grout.
- Do not use to install resin-backed stone; use EBM-Lite™ Epoxy Bonding Mortar 100% Solids, CEG-Lite™ 100% Solids Commercial Epoxy Grout or contact Custom's® Technical Services for recommendations.
- When setting glass tile larger than 6" x 6" (15 x 15 cm), contact Custom's® Technical Services for recommendations.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Custom's® Technical Services for recommendations regarding subfloor deflection requirements.

Packaging

1.5 lbs/24 oz (.68 kg/680 g) Tub

3. Technical Data

Applicable Standards

American National Standards Institute (ANSI) - ANSI A108.5, A118.5, A118.4, A118.15 and A118.11 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in or [50-mm] Cube Specimens)
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

Resilient Floor Covering Institute - (RFCI) Recommended Work Practices for Removal of Resilient Floor Coverings
Tile Council of North America (TCNA) - TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171
ISO 13007-2

Technical Chart

Property	Test Method	Requirement	Typical Results
Pot Life			30 Minutes
Open Time	A118.4 Section 5.3	> 20 Minutes	Pass
4 Week Shear Bond Strength			
Glazed Wall Tile	A118.4 Section 5.1.5	> 300 psi	425 - 500 psi (29.9 - 35.2 kg/cm²)
Porcelain Tile	A118.4 Section 5.2.4	> 200 psi	300 - 400 psi (21.1 - 28.1 kg/cm²)
Quarry Tile to Plywood	A118.11 Section 4.1.2	> 150 psi	150 - 250 psi (10.5 - 17.6 kg/cm²)

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials

4. Instructions

General Surface Prep

USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.

Surfaces must be structurally sound. Remove all grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, or abraded, and stripped of all contaminants. Concrete must be cured 28 days and accept water penetration. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond.

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Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Technical Services. Smooth concrete surfaces, existing glazed tile, terrazzo, or polished stone should be scarified. Sheet vinyl must be well bonded and stripped of old finish. Roughen the surface by sanding or abrading, then rinse and allow to dry. Expansion joints should never be bridged with setting material. Do not sand flooring materials containing asbestos. Ambient temperature should be maintained above 50° F (10° C) or below 100° F (38° C) for 72 hours to achieve proper bond.

Bonding To Concrete Surfaces

Concrete or plaster must be fully cured and accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved. If water beads, surface contaminants are present and loss of adhesion may occur. The contaminants should be removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a broomed or brushed finish to enhance the bond. Smooth concrete slabs must be roughened to ensure a good bond.

Bonding to Plywood and OSB Surfaces

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all ANSI A108.01 Part 3.4 requirements. Maximum allowable deflection: L/360 tile L/720 stone. See TCNA F150-13 Tile Installations, TCNA F141-13 and F250-13 for Stone. For questions about proper subfloor installation requirements, call Custom technical services.

Bonding to Cutback Adhesive

Adhesive layers must be removed as they reduce mortar bond strength to cement surfaces. Use extreme caution as adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet-scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. Do a test bond area first, to determine desirable results. Refer to the RFCI Pamphlet, Recommended Work Practices for Removal of Resilient Floor Coverings, for further information.

Movement Joint Placement

Expansion joints, control joints and cold joints should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant.

Mixing Ratios

Approximately 4 oz. (118 ml) of clean, cool water per 1.5 lb. (.68 kg) of Tile Repair Mortar.

Mixing Procedures

Mix vigorously for 2-3 minutes. The mixture is ready for immediate application; no waiting required. Use within 30 minutes. Re-stir occasionally to ensure a creamy, smooth consistency but do not add more water. If the mortar hardens, discard and mix fresh material. For underwater repair, mix with slightly less water for thicker consistency.

Application of Product

Tile Replacement

When replacing tiles where Tile Repair Mortar cannot be applied with a notch trowel, apply a sufficient amount of mortar to back of tile (back-butter) to ensure 100% coverage of mortar to tile. Apply skim coat of mortar to the surface. Press tile firmly into place, moving back and forth. Pull up a tile and check the back of the tile and surface are completely covered with Tile Repair Mortar. Reset and adjust. If material has skinned over (not sticky), recomb with notched trowel. If too dry, remove and replace with fresh material.

Underwater Repair

Apply mortar to the back of the replacement tile with the flat side of a trowel. This forces the mortar into any depressions between ridges or grooves for maximum coverage and adhesion. Then apply a generous amount of mortar to the back of the tile and comb through the mortar with the notched side of the trowel to ensure uniform coverage. The type and size of the tile will determine the size of the notched trowel. The tile can then be taken underwater for installation. Press the coated tile firmly onto the prepared area making sure the tile is set flush with adjacent tile. The excess mortar should squeeze up out of the surrounding joints. Remove this excess but leave enough to serve as the grout (mortar is white in color and may not match existing grout exactly). Dress grout joints to be even with surface of tile and wipe away any excess.

Curing of Product

Allow to cure for at least 2 hours before grouting depending on temperature and humidity. Polyblend® or Prism® SureColor® Grout is recommended. Allow an additional 4 hours before exposing to heavy traffic.

Cleaning of Equipment

Clean tools with water before material hardens.

Storage

Store in cool, dry area.

Health Precautions

Contains Portland cement. Wear rubber gloves and eye protection. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes. Consult physician immediately. Keep out of reach of children. Do not take internally.

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

5. Size & Availability

Item Code	Size	Color	Package
TRMW1	1.5 lbs/24 oz (.68 kg/680 g)	White	Tub

6. Product Warranty

Custom® Building Products warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Custom's® sole liability under this warranty shall be limited to the replacement of the product. Some states, countries or territories do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Custom's® printed instructions. Custom® makes no other warranties either expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state or from one country/territory to another. For details and complete warranty information, visit custombuildingproducts.com.

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7. Product Maintenance

Properly installed product requires no special maintenance.

8. Technical Services Information

For technical assistance, contact Custom® Building Products.

9. Filing System

Additional product information is available from the manufacturer upon request.

Coverage Chart

SQUARE FOOT COVERAGE PER 1.5 lbs/24 oz (SQUARE METER PER 68 KG/680 G)

Min Coverage	Max Coverage
2 sq. ft. (0.18 M^2)	3 sq. ft. (0.27 M^2)

Recommended minimum coverage (80% for dry areas and 95% for wet areas and exteriors). Back buttering may be necessary.

Note that mortar coverage does not include backbuttering tiles. When backbuttering, consider the tile underside pattern and depth to estimate thickness and usage to add to your estimate.

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For questions, contact CUSTOM Technical Services at 800-282-8786.