

Tech Patch-MP Multipurpose Rapid Setting Skim Coat & Floor Patch

1 Product Name

Tech Patch-MP Multipurpose Rapid Setting Skim Coat & Floor Patch

2 Manufacturer

Custom Building Products
 Technical Services
 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800- 200-7765
 Email: contactus@cbpmail.net
 custombuildingproducts.com
 customtechflooring.com



3 Product Description

Tech Patch MP is a fast setting, calcium aluminate compound that provides a smooth finish on interior subfloors prior to the installation of a wide variety of floor coverings. Mix with water only to patch, level or skim coat concrete, OSB and plywood up to 1/2" (12 mm) thick per application. Install floor coverings in as little as 30 – 90 minutes.

Key Features

- Patches and smooths interior subfloors
- Apply from featheredge to 1/2"
- Install flooring in as little as 30 - 90 minutes

Uses

Suitable as an Underlayment for:

- Carpet
- Wood, parquet
- Vinyl composition tile (VCT) Sheet vinyl flooring Laminated flooring
- Pavers, brick
- Stone, terrazzo tile

Suitable Substrates

- Absorbent concrete
- Gypsum-based underlayment
- Existing ceramic tile
- Primed cement terrazzo
- Cutback adhesive residue
- Flooring manufacturer's approved wood underlayments
- Approved and prepared moisture control membranes

*Special preparation or primers may be required

Composition of Product

Tech Patch MP is a blend of calcium aluminate cement, inorganic fillers and polymers.

Benefits of Product in the Installation

- Quick-setting formula permits floor covering installation in as little as 30 – 90 minutes
- Use as a thin skimcoat to smooth existing finishes
- Patches and levels concrete and plywood to 1/2" (12 mm)

Limitations to the Product

- Do not bond to hardwood, Luan plywood, particleboard, parquet, cushion or sponge back vinyl flooring, metal, fiberglass or plastic.
- Do not use when substrate/ambient temperature is below 50°F (10°C).
- Not for exterior applications or use in areas with continuous water exposure (ie: showers, swimming pools, spas, water features and fountains).
- Install on concrete slabs with moisture vapor emissions of 8lbs or less as measured by ASTM F1869 and 85% or less as measured by ASTM F2170
- Not for use as a permanent wear surface

Packaging

25 lb (11.34 kg) Bags

4 Technical Data

Applicable Standards

ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens)
- ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
- ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes¹
- ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
- ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in-situ Probes
- ASTM F3191 Field Determination of Water Absorption

Tech Patch-MP Multipurpose Rapid Setting Skim Coat & Floor Patch

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.

American National Standards Institute (ANSI) ANSI A108.01 and A108.02 of the American National Standards for the Installation of Ceramic Tile

Technical Chart

| Test | Method | Value |
|-----------------------------|----------------|----------------------|
| Vicat Set Time | ASTM C191 | |
| Initial Set | | Approx. 15 Minutes |
| Final Set | | Approx. 20 Minutes |
| Compressive Strength | ASTM C109 Mod. | |
| 1 Day | | >1500 psi (10.3 Mpa) |
| 7 Days | | >3500 psi (24.1Mpa) |
| 28 Days | | >3500 psi (24.1 Mpa) |
| Adhesion | BS EN 13408 | |
| Unprimed | | >200 psi (1.38 Mpa) |
| Primed | | >250 psi (1.72 Mpa) |

Environmental Consideration

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

5 Instructions

General Surface Prep

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

All surfaces must be structurally sound, clean, dry and free from contaminants that would prevent a good bond. Concrete must be fully cured. Refer to final flooring manufacturer's requirements for maximum moisture vapor transmission limitations. Smooth concrete surfaces, existing glazed tile, terrazzo, or polished stone may need to be roughened or scarified. Refer to Custom TechPrime™ A Acrylic Primer technical datasheet for use in lieu of mechanical preparation or when applying over Custom TechMVCTM Moisture Vapor and Alkalinity Barrier. For increased performance in demanding applications, concrete surfaces can be mechanically profiled and prepared by shotblasting, sandblasting, scarifying, diamond-grinding or other engineered approved methods (reference ICRI CSP 3 standards for ideal profile height). Any existing flooring must be well bonded and stripped of old finish.

Bonding to Cement Surfaces

Contaminants or curing compounds should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to moisture beyond the floor covering manufacturers' limits or hydrostatic pressure. All concrete surfaces must be able to achieve **tensile bond strengths in excess of 200 psi (1.4 n/mm²)**. For more information about concrete curing compounds see CUSTOM Building Products Technical Bulletin # 92 available on the website under Reference Library.

Bonding to Plywood Surfaces

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all industry guidelines. For questions about proper subfloor installation, call Custom® Building Products.

OSB Underlayments

Gypsum-based underlayment must be sealed or primed to avoid issues related to mineral formation; OSB panels require a primer for adhesion. Gypsum substrates must obtain a minimum 2000 psi (13.8 MPa) compressive strength at the recommended cure time. The underlayment must be sufficiently dry and properly cured to the manufacturer's specifications for permanent, non-moisture permeable coverings. Surfaces must be structurally sound and subject to deflection not to exceed the current industry standards. All OSB and gypsum-based underlayment surfaces to receive Tech Patch MP must **be primed with properly applied sealer or a primer coat of Custom® Tech Prime A Acrylic Primer**, consisting of 1 part primer diluted with 3 parts clean, cool water in first coat; when dry, apply 1:1 dilution for second coat. Drying time depends on site conditions, but is normally less than 1 hour.

Bonding to Cutback Adhesive

Adhesive layers must be removed. Use extreme caution; 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. To determine desirable results, do a test bond area before starting. Refer to the RFCI Pamphlet, "Recommended Work Practices for Removal of Resilient Floor Coverings", for further information.

Mixing Ratios

Mix 4.0-4.25 qt (3.8-4.0- L) clean, cool water to a 25 lb (11.34 kg) bag of Tech Patch MP or for smaller applications mix approximately 1 part liquid to 3 parts powder.

Mixing Procedures

Slowly add powder to liquid while mixing with a high speed drill (650 RPM or more) and mixing paddle to a lump-free consistency. Mix only amounts that can be applied in 5-10 minutes depending on surface porosity and temperatures.

Tech Patch-MP Multipurpose Rapid Setting Skim Coat & Floor Patch

Application of Product

Apply material into all voids up to 1/2" (12 mm) thickness using a broad knife or trowel and finish flush with surface. For skim coating, use a smooth edged trowel to flatten the surface area. Only spot patching should be done on wood surfaces. If an area more than 5 ft. (1.5 M) in diameter is required, use an appropriate CustomTech™ selfleveling underlayment.

Curing of Product

Allow to dry for minimum 30 – 90 minutes. Drying time can vary with thickness, temperature and humidity.

Cleaning of equipment

Clean with water before material dries.

Health Precautions

This product contains Portland cement. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. Use with adequate ventilation; do not breathe dust and wear a NIOSH approved respirator. If ingested, do not induce vomiting; call a physician immediately.

Conformance to Building Codes

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

6 Availability & Cost

| Location | Item Code | Size | Package |
|----------|-----------|------------------|---------|
| USA | TPMP25T | 25 lb (11.34 kg) | Bag |

7 Product Maintenance

Properly installed product requires no special maintenance.

8 Technical Services Information

For technical assistance, contact Custom technical services at 800-272-8786 or contact us online.

9 Filing System

Additional product information is available from the manufacturer upon request.

Tech Patch-MP Multipurpose Rapid Setting Skim Coat & Floor Patch

10 Related Products

Coverage

SQUARE FOOT COVERAGE PER 25 LB BAG (SQUARE METER PER 11.34 KG). Coverage will vary depending on the texture of the surface being smoothed.

| THICKNESS | MIN COVERAGE | MAX COVERAGE |
|----------------|--|--|
| 1/16" (1.6 mm) | 55.2 ft ² (5.13 M ²) | 62.4 ft ² (5.80 M ²) |
| 1/8" (3 mm) | 27.65 ft ² (2.57 M ²) | 31.39 ft ² (2.92 M ²) |
| 1/4" (6 mm) | 13.82 ft ² (1.28 M ²) | 15.70 ft ² (1.46 M ²) |
| 1/2" (12 mm) | 6.91 ft ² (0.64 M ²) | 7.85 ft ² (0.73 M ²) |