

Multipurpose Smoothing Mortar

Updated December 2025

1. PRODUCT NAME

TEC® Multipurpose Smoothing Mortar (555)

2. MANUFACTURER

TEC Specialty Products LLC 1105 South Frontenac Street Aurora, IL 60504-6451 U.S.A. 800.832.9002 Customer Service 800.832.9023 Technical Support tecspecialty.com

3. DESCRIPTION

Multipurpose Smoothing Mortar is an ultra-high-performance cementitious surface preparation mortar for smoothing, patching, leveling, ramping and rendering applications for floors, walls and ceilings. This fast-curing formulation was designed for interior and exterior use including pools, facades and balconies. The robust non-sag/non-slump properties are ideal for screeding and easy troweling. Multipurpose Smoothing Mortar has unlimited moisture vapor % RH and water exposure capabilities and may be used under or over moisture mitigation systems.

Key Features and Benefits

- · Surface preparation for interior & exterior walls, floors and ceilings
- Use for smoothing, patching, leveling, ramping and rendering
- · Ideal for pools, fountains, facades, balconies, below grade and submerged use
- Quick setting install tile as soon as 2 hours
- Pot life of 30-45 minutes
- · Approved for freeze/thaw environments
- Nonsagging/nonslumping easily screedable on walls
- Apply from 1/16" (1.6 mm) up to 2" (51 mm) thickness in a single application
- · Excellent bond strength without latex additive
- · Can be used under or over moisture mitigation

Packaging

40 lb. (18.14 kg) moisture-resistant bags

Product #10018991

Coverage

Coverages shown are approximate. Actual coverages may vary according to substrate texture.

Application Depth	Approximate Coverage per 40 lbs. (18.14 kg)
1/16" (1.6 mm)	94.3 sq. ft. (8.8 m²)
½" (3 mm)	50.3 sq. ft. (4.7 m²)
1½" (6 mm)	25.1 sq. ft. (2.3 m ²)
½" (12 mm)	12.6 sq. ft. (1.2 m²)
1" (25 mm)	6 sq. ft. (0.6 m²)
1½" (38 mm)	4 sq. ft. (0.4 m²)
2" (51 mm)	3 sq. ft. (0.3 m²)

Suitable Substrates

When properly prepared, suitable substrates include:

- Concrete
- Shotcrete and pool plaster
- Masonry cement block, brick and cement mortar beds
- · Cement backerboard
- Gypsum wallboard and plaster (primed) interior walls in dry areas only with minimum tensile bond strength 72 psi (0.5 MPa)

Substrate Preparation

Before application, make sure that all surfaces are structurally sound, dry and free from any oil, grease, dust, loose or peeling paint, sealers, floor finishes, curing compounds or any contaminant that would inhibit or prevent a solid bond. Concrete and cementitious substrates must be fully cured and free of any hydrostatic pressure. Concrete substrates must be porous with a minimum surface profile (CSP) of #2 and be saturated surface-dry (SSD). Multipurpose Smoothing Mortar can be installed over green concrete up to 100% RH. This product is not a moisture vapor barrier. If substrate moisture content exceeds the maximum allowed by the flooring manufacturer, then moisture mitigation must be applied before or after application of Multipurpose Smoothing Mortar. To reduce moisture vapor emissions to an acceptable level, use TEC® LiquiDam™ Penetrating Moisture Vapor Barrier or LiquiDam EZ™ Moisture Vapor Barrier (see product data sheets for details). Any protrusions on the surface must be removed by sanding, scraping or chipping. Vacuum all dust before application. DO NOT cover existing building expansion or control joints.

Storage

Store in cool, dry location. Do not expose to, nor store in direct sunlight. Do not store open baos.

Shelf Life

Maximum of 1 year from date of manufacture in properly stored, unopened package.

Limitations

- · Not for use in conditions with hydrostatic pressure.
- Do not use as a permanent wear surface or to patch over sealed concrete.
- · Do not use over deformable substrates.
- Do not use over wood substrates such as plywood, particle board, or strip wood flooring.
- Do not mix with cement or additives.
- Do not apply when the temperature is below 45°F (7°C) or over 95°F (35°C).

Cautions

Read complete cautionary information printed on product container prior to use. For medical emergency information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC brand product(s) under normal environmental and working conditions. Because each project is different, TEC Specialty Products LLC cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Physical Properties

Description	
Physical State	Dry powder
Color	Gray
Compressive Strength (ASTM C109) 28 days	> 2,500 PSI (17.2 MPa)
VOC Content	0 g/L
Pot Life	30-45 minutes
Install tile*	< 2 hours
Storage	Store in cool, dry location. Do not expose to, nor store in direct sunlight. Do not store open bags.
Shelf Life	Maximum of 1 year from date of manufacture in properly stored, unopened package.

^{*}tile installation after application is dependent on thickness, drying conditions, and type of tile

5. INSTALLATION INSTRUCTIONS

Mixina

Slowly add 40 lbs of Multipurpose Smoothing Mortar to 3.7 - 3.9 quarts (3.5 - 3.7 L) of clean, cool water and mix with a low speed drill (300 RPM). Avoid breathing dust and contact with eyes and skin. Mix thoroughly to a smooth, lump-free consistency. Do not overwater.

Application

Immediately after mixing, apply Multipurpose Smoothing Mortar onto the substrate. Using a trowel or screed, work the material into the substrate and then finish with a steel trowel to a smooth level surface. Working time is approximately 30-45 minutes, depending on ambient temperature and relative humidity. High temperatures and low humidity will shorten working time. Multipurpose Smoothing Mortar can be applied from 1/16" up to 2" (51 mm) thick on walls and floors in a single application. For ceiling applications, the maximum thickness is ½" (12 mm) in a single application.

Curing

Multipurpose Smoothing Mortar achieves walkable hardness in approximately 90 minutes. Tile can be installed after 2 hours. Multipurpose Smoothing Mortar is cement-based, and all general rules of concrete work should be observed to achieve maximum results. Never use forced air to accelerate the drying of Multipurpose Smoothing Mortar.

While material is still fresh, wash hands, tools and equipment with warm, soapy water.

6. AVAILABILITY

TEC premium surface preparation, tile, stone, carpet, wood and resilient floor covering installation products are available nationwide.

To locate TEC products in your area, please contact:

Phone: 800-832-9002 Website: tecspecialty.com

7. LIMITED WARRANTY

The product(s) covered by this Product Data Sheet are sold subject to a Limited Warranty and related terms. TEC Specialty Products LLC disclaims the implied warranties of merchantability and fitness for a particular purpose and all incidental and consequential damages arising out of the sale, purchase or use of this product. For Limited Warranty details visit tecspecialty.com. To obtain a hard copy of the Limited Warranty call TEC Specialty Products at 800-832-9023 or mail a written request to the address in Section 2 of this Product Data Sheet.

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical and safety literature

To acquire technical and safety literature, please visit our website at tecspecialty.com.

10. FILING SYSTEM

Divisions 3 and 9



To learn more, visit TECspecialty.com



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TECInstallationSystems



TEC Installation Systems