

1. PRODUCT NAME

Tenon[®] Vertical Concrete Surface Finisher

2. MANUFACTURER

TCC Materials[®]
 2025 Centre Pointe Blvd.
 Mendota Heights, MN 55120 USA

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3. PRODUCT DESCRIPTION

Tenon[®] Vertical Concrete Surface Finisher is a superior cementitious waterproofing coating for concrete and masonry. It provides a protective and waterproof surface while eliminating the rubbing process. Spray or brush applied, available in light gray or white. For added performance, durability, and improved bonding, Vertical Concrete Surface Finisher is designed to be mixed with Tenon[®] Mighty Bond. Vertical Concrete Surface Finisher when mixed with Mighty Bond is approved by MNDOT under Special Surface Finish System.

Features and Benefits

- Excellent alternative to rubbing
- Spray or brush application
- Unlike paint, product will breathe, and won't cause blisters
- Exceptional filling characteristics to make surfaces more dense and durable
- Provides waterproofing
- Withstands continuous freeze / thaw cycles
- Easy to mix and handle
- Cures with low-shrinkage

Uses

- Waterproofing and finishing all vertical concrete and masonry surfaces
- Fills and seals pores, voids, and honeycombing in concrete
- Can be used on highway bridge parapets, structure supports, parking garages, silo's and building walls.
- Use to waterproof swimming pools, cisterns and water reservoirs

SAFETY

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com or contact TCC Materials[®] at 651-686-9116 (7:30 AM to 4:00 PM, M-F, Central US Time).

CAUTIONS

Read complete cautionary information printed on product container prior to use.

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 Tenon[®] brand product (s) under normal environmental and working conditions. Because each project is different, neither Tenon[®] nor TCC Materials[®] can be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Typical Values • Vertical Concrete Surface Finisher	
Pot Life	15 minutes
Compression (28 days)	4200 psi (28.9 MPa)
Impact	22 inch pounds
Absorption (24 hours)	2.3%
Abrasion	Passed 2400 liter sand abrasion
Resistance	No penetration for 12 hours @ 100 MPH
Freeze / Thaw	Passed 50 cycles
Fungus growth resistance	Excellent
Salt spray resistance	Excellent
MN DOT approved Special Surface Finish System	

Note: Independent test results obtained under controlled laboratory conditions at 73°F (22.7°C) and 50% relative humidity.

LEED[®] Eligibility¹

- Regional Materials (MR-c5)

Packaging

- Light Gray: 50 lb. (22.7 kg) bag (BOM #120765)
- White: 50 lb. (22.7 kg) bag (BOM #120764)

Shelf Life

12 months from the date of manufacture when stored in the original, unopened container, away from moisture, under cool, dry conditions and out of direct sunlight.

Commercial Approvals

- MNDOT approved for Special Surface Finish System

5. INSTALLATION

Preparation

All materials should be conditioned to 40°–80°F (4°–27°C) 24 hours prior to installation. Proper surface repair preparation is crucial to achieving a successful application.

Existing Concrete: Surfaces to be coated must be structurally sound, clean and free of chemical deposits, dust, dirt, form oils, release agents, curing compounds, laitance, efflorescence, mold, salt grease, oil, paint, and any other contaminants that could impair adhesion. Mechanical abrasion of dense or smooth–finished concrete surfaces may be needed for maximum bonding. All cracks or voids in concrete or masonry shall be cut out and patched, repointed, or repaired first. All repaired or repointed concrete must be allowed to cure for at least 3 days. Acceptable surface cleaning methods include shot blasting, sandblasting, water blasting and chemical cleaners. All honeycombing and voids should be patched and form ties need to be broken beneath the surface and patched. Walls in areas with water seepage should have weep holes drilled at floor level, and water must be drained before application.

New Concrete: All concrete surfaces must be fully cured (28 days), structurally sound and non–flexing. Surfaces must be free of form oils and any non–hydrated cement as either could interfere with bonding.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Refer to:

- ASTM C–190 [Standard Test Method for Tensile Strength of Hydraulic Cement Mortars](#)
- ASTM C–109 [Standard Test Method for Compressive Strength of Hydraulic Cement Mortars](#)
- ASTM C–348 [Standard Test Method for Flexural Strength of Hydraulic Cement Mortars](#)
- ASTM C–67 [Standard Test Method for Sampling and Testing Brick and Structural Clay Tile](#)
- ASTM C–666 [Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing](#)

Job Mockups

The manufacturer requires that when its Tenon® products are used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long–term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the tests performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project–specific conditions being addressed, and standardized tests performed for each proposed system or variation.

Mixing

1. Mix only amount that can be placed within the 15 minute working time. During weather warm conditions, keeping mixing water and material cool should assist in maintaining open time of the product. During cold weather conditions, the use of warm mixing water and warming surfaces should accelerate set times.
2. For mixing liquid, blend 1 part Mighty Bond with 2–2½ parts potable water. To achieve stronger bonds on questionable surfaces or under fast drying conditions, reduce mix water/ Mighty Bond dilution to 1:1 ratio. Use this mixture as the liquid for this product.
3. A mechanical mixer such as a paddle and ½” heavy–duty low speed drill will result in a better consistency and save time. Smaller quantities should be mixed by hand. Mortar mixers can be used for larger jobs.
4. Add dry mix to the liquid blend beginning with approximately 7 qt. (6.65 L) per 50 lb. bag of powder. Add additional liquid sparingly up to 8 qt. (7.6 L) total while mixing 3–5 minutes. Thoroughly mix to a lump–free, creamy, batter–like consistency for spray or brush applications.
5. Let the mixture sit for 5 minutes and remix. Re–tempering or adding additional liquid once mix has been applied is not recommended.

Application

Apply only when air and substrate temperatures are between 50°–90°F (10°–32°C) within 24 hours of application and placement, and when rain is not forecast 24 hours after. Do not apply on substrates that are frozen or contain frost.

- Prior to material placement, dampen the area with clean water to a saturated–surface–dry (SSD) condition. When weather conditions are hot or windy, mist the surface often during the application with clean water to prevent early dry out.
- Spraying the product with a plaster or hopper type gun is the preferred method on larger projects. Brush application is recommended for smaller, level surfaces. When brushing, work the mixture into the surface to fill all voids. After initial application with a brush, the coating should be brushed in one direction to achieve a better appearance.
- Once the material has cured a minimum of 24 hours, apply a second coat. If application is over a masonry substrate, allow a minimum of 5 days curing before a second coat is applied.

Curing

- Maintain a minimum of 40°F (4°C) for 24 hours after application.
- Protect from rapid drying on hot windy days.

Cleaning

Use clean potable water to clean all tools immediately after use. Dried material must be mechanically removed. Use a waste water hardener (e.g. Conglez™ or similar product) for cementitious waste disposal.

Limitations

- Mix Vertical Concrete Surface Finisher with Mighty Bond liquid additive. (Sold separately. Refer to “Mixing” section for dilution ratios.)
- Two-coats with a total thickness of at least 1/8 in. (3 mm) is required for waterproofing.
- For spray applications, mix in small batches the amount of product that can be applied within 15 minutes or product can set-up in hopper gun reservoir.
- Warm conditions will accelerate set-times.
- Do not apply to surfaces that are frozen or contain frost.
- Do not overwater, retemper, or over-mix.
- Apply only to clean surfaces.
- Do not apply over painted surfaces.

Coverage

- 1 lb. will cover approximately 1 sq. ft. at 1/8 in. thickness (0.09m² per 0.45 kg at 3 mm)
- 1 lb. will cover approximately 2 sq. ft. at 1/16 in. thickness (0.18m² per 0.45 kg at 1.5 mm)

Note: Coverage will decrease if the substrate is rough or uneven.

6. AVAILABILITY

To locate Tenon® products in your area, please contact:

Phone: 1.651.688.9116
Website: tccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

8. MAINTENANCE

Not applicable.

9. TECHNICAL SERVICES

Technical Assistance:

Information is available by calling TCC Materials®
(hours 7:30 AM to 4:00 PM, M–F, CST):

Phone: 1.651.688.9116
Fax: 1.651.688.6164
Web: tccmaterials.com

Technical and Safety Literature:

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

LEED® is a registered trademark of U.S. Green Building Council.

10. FILING SYSTEM

Division 3

¹ Tenon® products can contribute to LEED® credits within the Material Resource, (Recycled Content & Regional Materials) and Indoor Environmental Quality (Low Emitting Materials).



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