

1. PRODUCT NAME

TechPro® Polymer–Modified Stone Veneer Base Coat

2. MANUFACTURER

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

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3. PRODUCT DESCRIPTION

TechPro® Polymer–Modified Stone Veneer Base Coat is used as a scratch and base coat for real or manufactured stone veneer units. Also referred to as a cement plaster coating, it is a blend of cementitious materials, dried sand, and special performance admixtures designed to produce a highly–bondable substrate and to optimize consistency between batches. The special admixtures help create both a mechanical and chemical bond to the substrate, significantly outperforming standard Type S and N mortars. TechPro® Polymer–Modified Stone Veneer Base Coat is “Step 1” of the TechPro® stone veneer installation system used to create decorative exterior or non–load bearing interior veneer walls and can be applied over TechPro® Moisture Barrier or directly to fully cured concrete .

Features and Benefits

- Excellent workability
- Polymer–modified, mix with water only
- Non–sag performance
- High bond strength and impact resistance
- Reduces cracking and pop–offs
- Excellent resistance to water penetration and efflorescence
- Convenient for small or large jobs
- Pre–blended for consistency between batches
- Meets requirements of ASTM C 1714, ASTM C 270, ANSI 118.4
- ACI 530 Shear Bond Standards

Uses

- Conventional thick–bed scratch and base coat
- Interior or exterior
- Above and below grade applications

For installation of:

- Natural stone veneer*
- Masonry veneer stone (cast and simulated stone)

* All natural stone should be tested to be sure discoloration by bleed–through does not occur. Not intended for moisture sensitive or resin–backed stone.

Recommended Substrates:

- Concrete *
- Concrete Masonry Unit (CMU) *
- Brick masonry *
- Cement Backer Unit (CBU) **
- Exterior grade plywood ***
- Plaster ****
- Gypsum wall board ****

* Suitable as a load bearing substrate for installation of direct adhered stone veneer applications when fully cured.

** Suitable as a substrate that supports its own weight for installation of direct adhered stone veneer applications when verified by CBU manufacturer for exterior use and specific installation instructions are provided.

*** Suitable as a substrate when verified for exterior use by manufacturer and proper preparation methods are followed.

**** Interior dry areas only.

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 651–688–9116 (7:30 AM to 4:00 PM 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 TechPro® brand product(s) under normal environmental and working conditions. Because each project is different, neither TechPro® nor TCC Materials® can be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Shear Bond Standard	Requirement	PSPMSVM
ACI 530 (6.3.2.4) 28 day Shear Bond	50 psi (0.34 MPa)	330 psi (2.27 MPa)
ANSI 118.4 (F–5.1.5) 28 day Shear Bond	300 psi (2.07 MPa)	428 psi (2.95 MPa)
Latex Modified Portland Cement Mortar ANSI 118.4		
Open time at 70°F–77°F (21°C–25°C)		60 min.
Adjustability time at 70°F–77°F (21°C–25°C)		20–30 min.
Sag on Vertical Surfaces		0 inch

Note: Test results obtained under controlled laboratory conditions at 72°F (22°C) and 50% relative humidity.

4. TECHNICAL DATA (Cont.)

TechPro® Polymer–Modified Stone Veneer Base Coat has been tested under laboratory conditions to meet or exceed the following performance standards:

- Meets or exceeds requirements of ASTM C–270 Table 2 for Type S and Type N Mortar
- Meets or exceeds requirements of ASTM C–1384 Standard Specification for Admixtures for Masonry Mortars

Packaging

- Gray: 50 lb. (22.7 kg.) bag – Product #120442

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.

5. INSTALLATION

Preparation

Refer to selected stone manufacturers installation instructions for more complete instructions. Install in accordance with all local building code provisions and applicable ASTM standards.

- Surfaces must be clean and free from dirt, loose particles, wax, sealers, curing compounds, paint, efflorescence, grease, and any foreign materials that could inhibit adhesion. Any concrete or masonry surfaces that have been painted, sealed, or treated must be cleaned back to the original surface.
- Surfaces must be plumb and true with square corners, free of movement, and structurally rigid and sound enough to support the veneer finish.
- For best results all materials should be conditioned to 40°F–80°F (4°–27°C) 24 hours prior to installation.
- For all substrates other than concrete or masonry, apply TechPro® Moisture Barrier to the substrate prior to application of Polymer–Modified Stone Veneer Base Coat.
- For sheetrock, wallboard paneling, plywood, or other rigid wood–related sheathing, install a 2.5–3.4 lb. or heavier diamond mesh expanded metal lath. A galvanized lath should be used for exterior applications or interior wet areas.

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

Mixing

1. Use cool, clean, potable water in the range of 50°–80°F (10°–27°C) for mixing. Always use clean tools and mixing containers. Mix with water only, no bonding additives.
2. For best results, use an electric drill with paddle mixer or mechanical batch mixer to ensure homogeneity and workability. Avoid high–speed mechanical mixing which can entrap air into the mixture. Hand mixing mortar is not recommended
3. Add just enough dry mix to the liquid, begin with 3.25 qt. (3.1 L) water per 50 lb. (22.7 kg) bag. Add additional water sparingly up to 4.25 qt. (4.0 L) total, while mixing 3–5 minutes. Too much water will cause reduced strength. Mortar should be a firm, uniform, lump–free consistency, workable to be trowelable, and stiff enough to retain ridges

and peaks when troweled on a horizontal or vertical surface.

4. Let mortar slake/rest for 5 minutes, Remix for 2 minutes and use. Do not add additional powder or liquid after slaking, as this may cause shrinkage and poor bonding. Stir occasionally to keep fluffy. Maintain water and mixing time consistency among batches.
5. Bucket life is approximately 1 hour, at normal temperatures of 70°F (21°C). Warmer temperatures will reduce the bucket life. Do not mix more product than can be placed in 1 hour. Mortar shall be used and placed in final position within 1 hour after initial mixing or discarded at that time.

Application

Apply only to surfaces that are frost free and between 50°–90°F (10°C–32°C) within 24 hours of application and 72 hours thereafter. Do not apply in direct sunlight on hot, windy days, or when rain is expected within 24 hours.

- Refer to selected stone manufactures installation instructions for more complete instructions.
- Apply a 1/8–1/4 in. (3–6 mm) thick coating, pressing the mortar into the secured metal lath. Lath should remain flat while completely and evenly embedded by the Polymer–Modified Stone Veneer Base Coat.
- While the mortar is pliable, within approximately 20–30 minutes, use a notched trowel to rake horizontal grooves, creating a texture for the veneer units to grab on to.
- Allow the base coat to cure for a minimum of 24 hours before installing the veneer units. Refer to TechPro® Heavy–Duty Stone Veneer Mortar (Step 2 in TechPro® Stone Veneer System) for proper installation of stone veneer units.

Clean up

- Clean all tools with soapy water before mortar dries.

Limitations

- Install in accordance with local building codes and applicable ASTM standards.
- Freshly poured concrete or masonry substrates must be cured a minimum of 7 days prior to the application of Polymer–Modified Stone Veneer Base Coat.
- Individual stones should be less than 7 lbs. (3.8 kg) each.
- Prevent work from occurring on the opposite side of walls to which the stone veneer is being applied within 48 hours during and after the installation.
- Follow stone veneer unit manufacturers instructions for layout and installation techniques.

Curing

Allow 24–36 hours minimum cure time. Strength will increase over the following 28 days. If conditions are very hot, dry, or windy, curing with a gentle mist of water will help prevent premature drying and improve mortar strength. A drape of plastic over the wall will help retain moisture; if the surface begins to appear dry, remove the plastic, mist/moisten the surface and replace the plastic.

Coverage

- 50 lb. (22.7 kg) bag: Yields approximately .44 cu. ft. (12.5 L), or 12–14 sq. ft. (1.1–1.3 m²) at ½ in. (13 mm)

6. AVAILABILITY

To locate TechPro[®] products in your area, please contact:

Phone: 1.651.688.9116
Email: info@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 CST):

Phone: 1.651.688.9116
Email: info@tccmaterials.com
Web: tccmaterials.com

Technical and Safety Literature:

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

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