

TVIS™ PREMIUM FULL CONTACT PANEL MORTAR

1. Product Name

TVIS Premium Full Contact Panel Mortar

2. Manufacturer

Custom Building Products
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3. Product Description

Custom TVIS Premium Full Contact Panel Mortar is a polymer-modified, full contact mortar with a rapid curing formula that allows finishing in as little as 3 hours. Excellent for thin brick, thin veneers, large modular tile and stone, Premium Full Contact Panel Mortar is suited for thin and medium bed applications. It offers full mortar transfer to the back of the veneer and can be used for interior and exterior prefabricated panel assemblies.

TVIS Premium Full Contact Panel Mortar can be used with the following veneer types:

- Manufactured stone, veneer, brick and thin brick
- Precast terrazzo
- Natural stone tile
- Vitreous, semi-vitreous or non-vitreous tile
- Ceramic, mosaic, quarry, cement body tile
- Impervious porcelain and glass tile

Possible substrates include:

- Concrete, mortar beds, masonry
- WonderBoard®, cement backerboards
- Exterior grade plywood (interior residential and light commercial dry areas)
- Waterproofing membranes, TVIS Waterproofing Membrane
- Cold Rolled Carbon Based Steel with Shop-coat Primer Applied

COMPOSITION & MATERIALS

TVIS Premium Full Contact Panel Mortar is a dry, proprietary blend of Portland cement, copolymers, inorganic aggregates and chemicals.

BENEFITS

- TVIS Premium Full Contact Panel Mortar offers rapid curing, allowing finishing in as little as 3 hours
- Provides full mortar transfer to the back of the veneer to save installation time by eliminating the need for back-buttering



- Holds ridges and supports the deeper notch trowel sizes required for larger veneer finishes
- More fluid than traditional bonding mortars
- Exceeds ANSI A118.4 and A118.11 standards without the need for additives

LIMITATIONS

- Do not bond directly to hardwood, Luan plywood, particle board, metal, fiberglass, plastic or OSB panels
- When setting moisture sensitive natural stone, cement or agglomerate tile, check with Technical Services; use EBM-Lite™ Epoxy Bonding Mortar.
- Do not use to install resin backed stone, contact Custom Building Products Technical Services for recommendations.

PACKAGING

- 50 lbs (22.68 kg) bag
- Gray

4. Technical Data

APPLICABLE STANDARDS

TVIS Full Contact Panel Mortar is compliant with the following:

- American National Standards Institute (ANSI) – ANSI A108.5, A118.4, A118.11.
- ASTM C91 Standard Specification for Masonry Cement
- ASTM C144 Standard Specification for Aggregate for Masonry Mortar, as a component of the manufactured mortar.
- ASTM C150 Standard Specification for Portland Cement, as a component of the manufactured mortar



- ASTM C207 Standard Specification for Hydrated Lime for Masonry purposes, as a component of the manufactured mortar.
- ASTM C270 Standard Specification for Mortar with Masonry Units
- ASTM C1072 Standard Test Method for Measurement of Masonry Flexural Strength.
- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars.

Tile Council of North America (TCNA) – TCNA Handbook for Ceramic Tile Installation

TECHNICAL PROPERTIES

Property	Results
Pot life	45 – 60 minutes
Open time	15 – 20 minutes
Adjustment time	30 minutes
Shear bond @ 28 days	
Bisque tile	550 psi (38.7 kg/cm ²)
Porcelain Tile	450 psi (31.6 kg/cm ²)
Compressive Strength @28 days 2" cube (50 mm)	Greater than 2500 psi (175.7 kg/cm)

ENVIRONMENTAL CONSIDERATIONS

Custom Building Products is committed to environmental responsibility in both products produced and in manufacturing practices.

The use of TVIS Premium Full Contact Panel Mortar may contribute to LEED® certification.

5. Installation

PREPARATORY WORK

General Surface Preparation:

Surfaces must be structurally sound, clean, dry and free from grease, oil, dirt, curing compounds, sealers, adhesives and other contaminants that would prevent a good bond. Glossy or painted surfaces must be sanded, stripped and cleaned of waxes, dirt and other contaminants. Ambient temperature, surfaces and materials should be 50° – 100° F (10° – 38° C) for 72 hours.

Cementitious Surfaces:

Concrete or plaster must be fully cured and must 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. Contaminants should be mechanically 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 must be mechanically abraded to ensure a good bond.

Lightweight, Gypsum Based Underlayments:

Lightweight or gypsum based underlayments must first be treated with TVIS Veneer Waterproofing Membrane and 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 ANSI standards.

All lightweight concrete and gypsum based underlayment surfaces to receive Veneer Waterproofing Membrane must be primed with properly applied sealer or a primer coat of Veneer Waterproofing Membrane, consisting of 1 part Veneer Waterproofing Membrane diluted with 4 parts clean, cool water. Mix in a clean bucket at low speed to obtain a lump free solution. The primer can be brushed, rolled or sprayed to achieve an even coat. Apply the primer coat to the floor at a rate of 300 ft² / gal (7.5 M² / L). Drying time depends on site conditions, but is normally less than 1 hour. Extremely porous surfaces may require 2 coats. At this point, Veneer Waterproofing Membrane can be applied to the primed lightweight or gypsum based surface. Refer to the individual technical data sheet or packaging directions for application instructions.

Plywood Substrates:

Plywood must be structurally sound and must meet all ANSI 3.4 requirements. For questions about proper plywood substrate preparation, contact Technical Services.

WonderBoard Backerboard:

As an alternative to an additional layer of plywood, WonderBoard backerboard may be used.

Expansion Joints:

Expansion joints should never be bridged with setting material. They must be brought through the finished masonry work and filled with an approved elastomeric sealant.

METHODS

Mixing

Mix 5 quarts (4.73 L) clean water per 50 lbs (22.68 kg) bag of mortar.

Mix by hand or use a low 150 – 200 rpm speed 1/2" (13 mm) drill to achieve a smooth, paste-like consistency. Let the mixture slake or stand 5 – 10 minutes; stir again and use. Stir occasionally, but do not add more water. When properly mixed, troweled ridges will stand without slump.



Application

Use a properly sized notch trowel to ensure proper coverage under stone veneer. Using the flat side of the trowel, apply a skim coat of mortar to the surface. With the notched side of the trowel held at a 45° angle, apply additional mortar to the surface, combing in one direction. Press the thin brick or veneer firmly into place in a perpendicular motion across ridges, moving back and forth. The perpendicular motion flattens ridges and closes valleys, allowing maximum coverage. Adjust the veneer promptly and beat it in with a block and rubber mallet. Periodically pull up a veneer piece and check the back to ensure proper adhesive coverage. Do not spread more material than can be filed within 10 minutes or while material has a wet tack (sticky to the touch). If the material has skinned over (not sticky), recomb with the notch trowel; if too dry, remove and replace the dry material with fresh material.

Coverage

SQUARE FOOT COVERAGE PER 50 LB BAG (SQUARE METER PER 22.68 KG)	
TROWEL SIZE	COVERAGE
3/16" x 5/32" (5 x 4 mm) V-Notch	120 - 130 sq. ft. (11.2 - 12.1 M ²)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) Square-Notch	80 - 90 sq. ft. (7.4 - 8.4 M ²)
1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) Square-Notch	56 - 63 sq. ft. (4.6 - 6.0 M ²)
1/2" x 1/2" x 1/2" (13 x 13 x 13 mm) Square-Notch	40 - 45 sq. ft. (3.7 - 4.2 M ²)
3/4" x 9/16" x 3/8" (19 x 14 x 9.5 mm) U-Notch	32 - 36 sq. ft. (3 - 3.3 M ²)

Curing

Curing time is affected by ambient and surface temperatures and humidity. Use the following guideline. Allow 3 - 4 hours before finishing. Allow an additional 24 hours for substantial movement or shipping of the panel.

Cleaning

Clean with water before the material dries.

PRECAUTIONS

This product contains Portland cement and free silica. 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. Do not breathe dust; wear a NIOSH approved respirator

BUILDING CODES

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

6. Availability & Cost

Contact the manufacturer or visit customTVIS.com for information about product cost and availability.

ITEM CODE	SIZE	PACKAGE
TFCPM50	50 lbs (22.68 kg)	Bag

7. Limited Product Warranty

Eligibility for Installation Systems Warranty

This product may be eligible for a Custom Building Products Installation Systems Warranty of up to 15 years, provided our products are used as a complete installation system.

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, contact Custom Building Products or visit customTVIS.com.

8. Maintenance

Properly installed product requires no special maintenance.

9. Technical Services

For technical assistance, contact Custom Building Products or visit customTVIS.com.

10. Filing Systems

Additional product information is available from the manufacturer upon request.

Related Products

TVIS Premium Veneer Pointing Mortar

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