

Protecto Wrap Co.



# Premium Building Products That Protect

# 1. Product Name

WhisperMat-CS

Primers & Accessories

• No. 6000 Water-Based Primer

#### 2. Manufacturer

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#### 3. Product Description

#### **BASIC USE**

WhisperMat-CS is a peel-and-stick sheet membrane that reduces impact and airborne sound transmissions and isolates finished flooring from subfloor cracks. It is designed for use with ceramic, porcelain and natural stone tile where sound absorption is required, specified or desired.

Constructed of a cross-linked polyolefin foam sheet combined with an aggressive rubberized adhesive and a polyester mesh fabric, WhisperMat-CS also has the flexibility and strength to withstand structural movement and concrete shrinkage cracks up to 1/4" (6.4 mm) without transferring stress load to finished tile. In addition, excellent moisture resistant properties make this a most comprehensive underlayment for tile floors.

WhisperMat-CS can be applied to any structurally sound and clean surface, including concrete, plywood, gypsum underlayments, precast floor panels, OSB, ceramic tile, terrazzo, natural stone, leveling and patching compounds, cement backerboard and existing VAT, VCT and vinyl floors. WhisperMat is also approved for application over radiant heated floors.

WhisperMat's sound absorption and antifracture properties make it an excellent system to enhance ceramic, porcelain and stone flooring installation performance in:

- Condominiums
- Office buildings
- Apartments
- Hotels

# Schools

Single-family homes

# BENEFITS

- Sound reduction: IIC: 71; STC: 72; Delta IIC: 16
- Moisture resistant
- Anti-fracture resistant to 1/4" (6 mm)
- Provides thermal insulation
- Light commercial load rating
- Approved over radiant heated floors
- Uniquely thin system 110 mil (2.8 mm)
- Economical

# **PACKAGING**

- WhisperMat-CS is available in 36"  $\times$  40' (914 mm  $\times$  12.2 m) rolls
- No. 6000 Primer is available in 1 gal (3.8 L) containers

#### **COMPOSITION & MATERIALS**

WhisperMat-CS is constructed of a top layer of reinforced polyester mesh fabric embedded into rubberized adhesive; a middle layer of dense, cross-linked polyolefin foam sheeting for additional sound reduction properties; and a bottom layer of aggressive rubberized adhesive with an attached release liner for peel-and-stick application.

The underside of the membrane is tacky, providing superior adhesion to concrete, steel and wood substrates. The polyester mesh fabric top makes an excellent bonding surface for latex-modified thinset and medium bed mortars.

WhisperMat-CS contains no VOCs and is environmentally safe, which allows it to be used in confined areas. The aggressive rubberized adhesive retains its flexibility throughout the floor's life span and will not dry out or decay over time.

## **ACCESSORY MATERIALS**

No. 6000 Primer is a water based primer that contains no VOCs. It comes in 1 gal (3.8 L) containers.

#### LIMITATIONS

- WhisperMat-CS is not intended for use as a waterproofing membrane
- WhisperMat-CS is not recommended for use on concrete floors where hydrostatic pressure exists or where moisture vapor transmission exceeds 4 lb (1.8 kg), as tested by the calcium chloride test method
- WhisperMat-CS is not recommended for use where horizontal floor movement is greater than 1/4" (6 mm)
- Existing cracks larger than 3/16" (4.8 mm) should be prepared with proper backing material prior to installation of membrane
- WhisperMat-CS is not recommended to cover



WhisperMat-CS reduces sound transmission through floors.

joints or cracks larger than 3/8" (9.5 mm)

- For installations over plywood substrates and for expansion joints, refer to TCA Method F147
- For expansion joints, reference TCA Method EJ171
- Do not apply over marine-grade plywood or other substrates containing solvent based waterproofing preservatives that could chemically react with the membrane
- Do not use solvent based sealants or sealers where contact with membrane may occur
- When installing natural stone over WhisperMat-CS (or any other impervious membrane), it is important to maintain a thinset thickness of 3/8" (9.5 mm) or less after the tile is embedded, even if the mortar manufacturer allows for thicker installations. Thicker mortar beds can potentially provide sufficient moisture to cause some natural stones to warp or crown
- Installation procedures and jobsite conditions must be in accordance with flooring manufacturer's recommendations and TCNA installation standards

#### 4. Technical Data

APPLICABLE STANDARDS

#### **ASTM** International

- ASTM C482 Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester







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- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
- ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
- ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors

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

- TCA Method F147
- TCA Method EJ171

#### **APPROVALS**

Consult manufacturer for current information on approvals by code bodies and other industry entities.

#### ENVIRONMENTAL CONSIDERATIONS

WhisperMat-CS contains no VOCs and is environmentally safe.

## PHYSICAL PROPERTIES

- Thickness 110 mil (2.8 mm)
- Color Gray top, black adhesive bottom
- Elongation (ASTM D412) 500% minimum (rubberized adhesive only)
- Application temperature 45 120 degrees
   F (7 49 degrees C)
- In-service temperature -20 180 degrees F (-29 - 82 degrees C)
- Robinson Floor Test (ASTM C627) Rated for light commercial applications

## SOUND PERFORMANCE

Protecto Wrap's WhisperMat-CS has been tested by a certified independent acoustical laboratory in accordance with ASTM E492 and ASTM E90. Test construction included 6" × 6" (152 × 152 mm) quarry tiles with latex-modified thinset mortar over an 8" (203 mm) concrete slab with a sound rated gypsum board drop ceiling. Test results were Impact Isolation Class (IIC) 71 and Sound Transmission Class (STC) 72. Test results with other subfloor configurations are available by contacting Protecto Wrap Co.



WhisperMat-CS is made with 4 constraining layers.

### 5. Installation

#### STORAGE & HANDLING

Store all material inside in a dry space at temperatures between 50 and 90 degrees F (10 and 32 degrees C). Do not store in direct sunlight. Do not remove material from box until ready to use.

For cold weather applications, store in a heated airspace at a temperature of 50 degrees F (10 degrees C) or higher for at least 2 days prior to application. Remove only the material that can be applied within 2 hours.

#### PREPARATORY WORK

Handle and store product according to manufacturer's recommendations.

Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

Verify that site conditions are acceptable for installation. Do not proceed with installation until unacceptable conditions are corrected.

#### Surface Preparation

Follow flooring manufacturer's recommended installation instructions. Installation and subfloor requirements must also conform to TCNA standards.

Flooring and membrane must acclimate to jobsite conditions before installation. Concrete subfloors must be dry, clean and free of dirt, grease, wax, paint, oil or anything that would adversely affect adhesion of the WhisperMat.

Check subfloor for excessive moisture. If subfloor moisture/vapor is beyond 4 lb (1.8 kg) emissions WhisperMat-CS membrane cannot be used (see Limitations). Leveling cements must be completely dry before membrane application.

# APPLICATION

# Priming

Always apply the Protecto Wrap No. 6000 Primer to the subfloor and allow to dry (approximately 20 - 30 minutes) before installing the WhisperMat-CS to ensure a good bond.

#### Lavout

Unroll WhisperMat-CS with the release liner side down. Cut the length approximately 12" (305 mm) longer than the distance to be covered to allow for a trimmed fit. Fold back half







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of the length of the roll back over the other half of the material.

Score through the release liner only, taking care not to cut completely through membrane. Pull release liner away from membrane where scored. As the release liner is pulled away, hand-smooth the membrane to contact the primed subfloor. Keep the release liner material close to the floor while pulling away; this will allow for a more controlled application of the membrane.

Note - There will be an immediate and aggressive bond of the membrane to the primed subfloor. Realignment of the membrane can be difficult once adherence to the subfloor begins.

After WhisperMat-CS is adhered, ceramic or stone tiles can be installed with a latex-modified thinset mortar meeting the ANSI 118.6 standard. Follow mortar manufacturer's recommendations for trowel size and open time. For natural stone installations, see Limitations section.

Continue to follow the TCNA's installation requirements through the remainder of the installation.

# 6. Availability & Cost

# **AVAILABILITY**

WhisperMat-CS is manufactured in Denver, CO, and is available worldwide through a network of Protecto Wrap distributors. For detailed product information or to find a local representative or distributor, contact the Protecto Wrap Co.

# COST

WhisperMat-CS is competitively priced. Contact a local representative or the corporate office for information.

#### 7. Warranty

WhisperMat-CS is warranted to be free of defects in manufacture for a period of 5 years. Protecto Wrap assumes no warranty as to the installation of its products. Should a Protecto Wrap product prove defective during the term of this guarantee, Protecto Wrap will pay for replacement of the portion of the installation that involves the defective product. This payment will include finish materials, labor and installation; provided the cost per square foot to Protecto Wrap does not exceed the original cost of installation per square foot.

#### 8. Maintenance

None required. If installed in accordance with manufacturer's recommendations, WhisperMat-CS should last the life of the structure.

#### 9. Technical Services

Complete technical assistance and information are available from Protecto Wrap field representatives and distributors or by contacting the manufacturer.

# 10. Filing Systems

- Reed First Source
- MANU-SPEC®
- Additional product information is available from the manufacturer.



