

EasyMat® Tile & Stone Underlayment

1 Product Name

EasyMat® Tile & Stone Underlayment

2 Manufacturer

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3 Product Description

A versatile mat underlayment for setting tile and stone over any acceptable subfloor. EasyMat® is so fast and easy to install because it is up to 25 times lighter than 1/4" (6 mm) backerboard, cuts easily with a utility knife, doesn't require any nails or screws, and comes in a peel & stick version. The mat was specially designed so that the mortar locks in, creating a bonded crack-prevention system for subfloor movement up to 1/4" (6 mm). This bonded system will withstand repeated stress and still maintain its tenacious bond. It is a superior alternative to cork underlayments because it will not rot, shrink, or absorb water. EasyMat® has SoundGard® Technology and therefore offers high and credible impact sound reduction. Use EasyMat® with other Custom® materials to qualify for a lifetime warranty.

Key Features

- Set tile and stone over any acceptable subfloor
- Highest level of impact sound reduction (up to 71 dB sound reduction)
- Specially designed so the mortar locks in and forms a bonded crack prevention system
- No mechanical fasteners required
- Up to 9 times lighter than other sound reduction mats
- Will not shrink, rot or absorb water
- Use as thermal break under floor heating systems

Suitable Tile Types

EasyMat® can be used with the following tile types:

- Ceramic tile, all types including impervious porcelain
- Natural stone tile
- Precast cement terrazzo tile

Suitable Substrates

- Concrete, cement mortar, masonry
- Cement Backerboard
- Exterior Plywood and OSB (interior, dry areas only)
- Exterior Decks – Contact Technical Services
- Post-Tension Concrete – Contact Technical Services
- Lightweight Concrete (min. 2000 psi compressive strength)
- Gypsum-Based cement topping (min. 2000 psi compressive strength)
- Existing ceramic tile and resilient flooring

Composition of Product

Polypropylene foam spheres bonded together with the use of Polyurethane Adhesive in sheet format.



Sizes

- 4' x 100' x 3 mm
- 4' x 75' x 5 mm
- 4' x 30' x 12 mm
- 4' x 10' x 5 mm

Benefits of Product in the Installation

- Set tile and stone over any acceptable subfloor
- Up to four times faster to install than 1/4" (6 mm) backerboard
- Optional peel & stick version
- Up to 25 times lighter than 1/4" (6 mm) backerboard
- Cuts easily with a utility knife
- Mortar locks in to form a bonded-crack prevention system
- No mechanical fasteners or tape needed
- High and reliable-impact sound reduction

Limitations to the Product

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass or plastic.
- Do not use as a wear surface.
- When setting glass tile, contact Custom's Technical Services for recommendations.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Custom's Technical Services for recommendations regarding subfloor deflection requirements.
- Not for controlling vertical or differential movement cracks.
- Suitable for residential and light commercial applications only

4 Technical Data

Applicable Standards

American National Standards Institute (ANSI) ANSI A108.01, A108.17, A118.12 and A118.13 American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- ASTM D638 Standard Test Method for Tensile Properties of Plastics



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Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171, F125 & F125A

Technical Chart

| Property | Test Method | Requirement | Typical Results |
|--------------------------------------|---------------------------------------|----------------------|---|
| Thermal Resistance (R Value) | ASTM C518 | | 0.4 for 3 mm 0.8 for 5 mm 1.8 for 12 mm |
| Fungus Resistance | A118.10 Section 4.1 | No Growth | No Growth |
| Seam Strength | A118.10 Section 4.2 | > 8 lbs/ inch width | >8 pli |
| Breaking Strength | A118.10 Section 4.3 | > 170 psi | >170 psi |
| Dimensional Stability | A118.10 Section 4.4 | +/- 0.7% | <0.7% |
| Waterproofness | A118.10 Section 4.5 | No Water Penetration | N/A |
| Shear Bond Strength to Cement Mortar | | | |
| Four Week Shear Strength | A118.10 Section 5.5 | > 50 psi | >50 psi |
| Shear Strength After Water Immersion | A118.10 Section 5.4 | > 50 psi | >50 psi |
| System Crack Resistance | | | |
| Standard Performance | A118.12 Section 5.4 | > 1/16" and < 1/8" | Pass |
| High Performance | A118.12 Section 5.4 | > 1/8" | Pass |
| Point Load | A118.12 Section 5.2 | > 1000 lbs | >1000 psi |
| Robinson Test | A118.12 Section 5.3 | As Specified | Light Commercial |
| * Sound Transmission Reduction (IIC) | A118.13 Section 5.3; ASTM E2179 | > 10 | 16 for 3 mm 20 for 5 mm 23 for 12 mm |

* Sound reduction: (IIC up to 71) (STC up to 72). Estimated total sound reduction, including floor and ceiling construction

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product may contribute to LEED® certification.

5 Instructions

General Surface Prep

Exterior and wet areas must have proper sloping to drains. All surfaces must be structurally sound, clean, dry and free from contaminants that would prevent a good bond. Newly prepared concrete must be troweled smooth and textured to a fine broom finish and cured for 28 days. Existing surfaces must be scarified and flattened, and all defects must be repaired. Cracks exceeding 1/8" (3 mm) should be treated in accordance with TCNA F125 or TCNA F125A.

Bonding to Gypsum Surfaces

Gypsum substrates must have a PSI greater than 2000 and must first be primed or sealed per manufacturers instructions. When using thin-set applied EasyMat®, all gypsum substrates must be coated with [RedGard® Waterproofing and Crack Prevention Membrane](#) or [Custom9240® Waterproofing and Anti-Fracture Membrane](#). Interior dry areas must be primed with Peel & Stick Primer where peel & stick EasyMat® is used.

Bonding to Plywood Surfaces

Plywood flooring including those under resilient flooring must be structurally sound, built to industry standards, and deflection should not exceed L/360.

Plywood subfloor under natural stone tile must exhibit deflection less than L/720. This can be achieved by following the TCNA Handbook recommendation found in detail F250 for natural stone tile.

Detailed wood subfloor minimum requirements for porcelain tile as follows:

16" oc Floor Joist
3 mm EasyMat with 5/8" + 3/8" plywood
5 mm EasyMat with 5/8" plywood
12 mm EasyMat with 5/8" plywood

19.2" oc Floor Joist
3 mm EasyMat with 3/4" + 3/8" plywood
5 mm EasyMat with 3/4" plywood
12 mm EasyMat with 3/4" plywood

24" oc Floor Joist
3 mm EasyMat with 3/4" + 3/8" plywood
5 mm EasyMat with 3/4" + 3/8" plywood
12 mm EasyMat with 3/4" + 3/8" plywood

Bonding to Existing Surfacing Material

Resilient flooring or plastic laminates must be well-bonded, clean and free of all contaminants. Roughen the surface by sanding or scarifying, rinse and allow to dry. Do not sand flooring containing asbestos. For existing well-bonded ceramic tile, mechanically abrade with carborundum stone. Rinse and allow to dry. When sanding, the use of an approved respirator is recommended. CUSTOM's [MBP Multi-Surface Bonding Primer](#) may be used in place of mechanically abrading the surface of existing covering.

Bonding to Cutback Adhesive

Adhesive layers must be removed as they reduce mortar bond strength to cement surfaces. Use extreme caution as adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet-scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. Do a test bond area first, to determine desirable results. Refer to the RFCI Pamphlet, "Recommended Work Practices for Removal of Resilient Floor Coverings", for further information.



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Movement Joint Placement

Expansion joints and cold joints, as described in ANSI A108.01, should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant, such as Custom's [100% Silicone Caulk](#). Contact Custom's Technical Services for the proper treatment of control or saw cut joints. Refer to TCNA EJ171, F125 & F125A.

Application of Product

Basic Non Peel & Stick Application

Unroll EasyMat®, laying out the material to use your cuts efficiently. Cut each roll to the required length. Lay EasyMat® perpendicular to the subsequent installation direction of the substrate. Roll out a section of EasyMat® and fold the material back halfway.

EasyMat® can be bonded with a Custom® polymer-modified [mortar](#) meeting ANSI A118.4, A118.15 or A118.11. Apply with a 3/16" x 1/4" (5 x 6 mm) V-notch trowel for 3 mm and 5 mm or use a 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) square-notch trowel for 12 mm. Apply only enough mortar as can be covered with EasyMat® within 20-30 minutes.

Embed EasyMat® inside face-down (against the curl of the roll), into the wet bonding material. Do not allow the material to flop into place, as this may cause air entrapment. Immediately roll the mat using a 30-50 lb (13-26 kg) roller for 3 mm and 5 mm and a 100 lb (45 kg) roller for 12 mm. Or use a hand roller applying 30 - 50 lbs (13-26 kg) of pressure for 3 mm and 5 mm mats and 100 lbs (45 kg) of pressure for the 12 mm mat to ensure proper adhesive transfer. Overlap each roll of the roller 50% of the previous pass. Roll the width first, then the length. Fold the second half of the roll back over the first half of the material. Spread the adhesive at right angles to the seams in order to prevent the adhesive from oozing up through the seam. Ensure the lengthwise edge of the material is aligned exactly with the neighboring section. Edges must contact but not overlap.

For the 12 mm, as with all thicker-rolled soft-flooring products, back-curling/lifting may occur at the ends. Once laid out and in position, seams and ends may need to be weighted (a few inches in) with a short board, straightedge, or tile until the mortar takes set. Repeat procedure for the next section of EasyMat®.

Tile may be installed immediately after installation of EasyMat® is complete, provided that full coverage with the thin-set bond coat has been attained between the substrate and EasyMat®, and that steps are taken to ensure the bond between the substrate and EasyMat® is not broken as the tile is set.

Basic Peel & Stick Application

First apply Custom's® [Peel & Stick Primer](#) with a paint brush, short-nap roller, or a soft-push broom. Apply an even coat (5-10 mils) and allow to dry until tacky to the touch, about 30-45 minutes. When the primer does not transfer to your finger, the surface is ready for application. Unroll the mat while the release sheet is still attached, position it over the area to be treated, and cut to appropriate length. Roll up half of the cut mat leaving the other half still in position. Cut release sheet from the rolled-up portion and pull it towards you exposing and unrolling the self-stick portion of the mat. Reroll the unrolled portion of the mat and follow the same procedure. Immediately roll the mat using a 30-50 lbs (13-26 kg) roller, or use a hand roller, applying 30-50 lbs (13-26 kg) of pressure, to ensure proper adhesive transfer. Air pockets and wrinkles should be slit and smoothed with a roller or the flat side of a trowel. Align subsequent sheets and butt-join the seams tightly but do not overlap them.

Sound Control Application

Before application, first cut 3" (7.6 cm) wide strips of EasyMat® and bond them (using a bonding material above) to the wall perimeter of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate or break the vibration transmission path between the floor and the wall. Assume that the walls you are butting up against are not square. Using a chalk line, create a starting point for an edge of the material to follow. Trim the ends of each section to exact dimensions to fit the surface area to be covered (e.g., joints with walls, etc.).

Installation of Baseboard/Cove base

If a cove base or baseboard is required, install it after the finished floor has been installed. After the finished floor is installed, trim the excess perimeter-isolation strip around the entire perimeter of the finished floor. Nail the cove base or baseboard to the wall above the perimeter-isolation strip. To isolate or break the vibration transmission path between floor and wall, the baseboard must not touch the finished floor. Adhere the cover to the wall above the finished floor. Toe gap between the floor and the cover must be caulked, not grouted. Grout will allow vibration to flank through the walls.

For a Waterproofing System

Waterproof subfloor using [RedGard® Waterproofing and Crack Prevention Membrane](#) as per package instructions. Then bond EasyMat® to subfloor as per general application instructions.

Alternate Usage

Floating Floor Systems (Laminate or Engineered Wood):

EasyMat® is approved for use under floating floor systems. Follow instructions above for bonding EasyMat® to subfloor, then follow floor manufacturer's instructions for installation of the floor.



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Hardwood

EasyMat® is approved for use under hardwood floor systems. After bonding EasyMat® to the subfloor (see basic instructions):

1) Consult with the wood adhesive manufacturer for compatibility with EasyMat®.

or

2) Apply a full, minimum 1/16" (1.6 mm) skim coat of either Custom's [Skim Coat & Patch](#) or [SpeedFinish™ Patching & Finishing Compound](#) to the top. Allow the skim coat to cure, then bond the hardwood to the cementitious surface following manufacturer's instructions.

Protection

If tile or stone will not be set immediately after curing, protect the application from heavy traffic damage. Protect from rain and inclement weather for 72 hours after application. If delays longer than 72 hours are expected, cover the area with felt paper. Care should be taken to prevent the application from becoming soiled or punctured during and after application.

Tile and Stone Installation

Install tile or stone with a Custom® Building Products polymer-modified mortar that meets ANSI A118.4, A118.15 or A118.11 standards.

Cleaning of equipment

Clean tools and hands with soap and water.

Storage

Store and transport in a cool dry area.

Health Precautions

Wear impervious gloves and eye protection while using this product. Avoid contact with eyes or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, rinse cautiously with water for several minutes, remove contact lenses if easy to do: continue rinsing. Immediately seek medical advice if symptoms are significant or persist. Do not take internally. KEEP OUT OF REACH OF CHILDREN.

Conformance to Building Codes

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

6 Availability & Cost

| Location | Item Code | Size | Thickness | Peel & Stick | Package |
|--------------|-----------|-------------------------------|-----------|--------------|---------|
| USA & Canada | SGL3 | 4' x 100' (1.2 M x 30.5 M) | 3 mm | No | Roll |
| USA & Canada | SGL3P | 4' x 100' (1.2 M x 30.5 M) | 3 mm | Yes | Roll |
| USA & Canada | SGL5 | 4' x 75' (1.2 M x 22.9 M) | 5 mm | No | Roll |
| USA & Canada | SGL5P | 4' x 75' (1.2 M x 22.9 M) | 5 mm | Yes | Roll |
| USA & Canada | SGL12 | 4' x 30' (1.2 M x 9.14 M) | 12 mm | No | Roll |
| USA | EM40-4 | 4' x 10' (1.2 M x 3 M) | 5 mm | Yes | Roll |
| Canada | CEM40-4 | 4' x 10' (1.2 M x 3 M) | 5 mm | Yes | Roll |

7 Product Warranty

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. This warranty is not transferrable.

When EasyMat® Tile & Stone Underlayment is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a lifetime system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

8 Product Maintenance

Properly installed product requires no special maintenance. Do not use as a wear surface.

9 Technical Services Information

For technical assistance, contact Custom technical services at 800-272-8786 or visit custombuildingproducts.com.

10 Filing System

Additional product information is available from the manufacturer upon request.



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Related Products

Prism® Color Consistent Grout

FlexBond® Premium Crack Prevention Thin-set Mortar

Fusion Pro® Single Component® Grout



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Coverage

| Size | Thickness | Coverage |
|----------------------------|-----------|--|
| 4' x 10' (1.2 M x 3 M) | 5 mm | 40 ft ² (3.7 M ²) |
| 4' x 30' (1.2 M x 9.14 M) | 12 mm | 120 ft ² (11.1 M ²) |
| 4' x 75' (1.2 M x 22.9 M) | 5 mm | 300 ft ² (28 M ²) |
| 4' x 100' (1.2 M x 30.5 M) | 3 mm | 400 ft ² (37 M ²) |



CUSTOM®