RedGard® Uncoupling Mat

1. Product Name

RedGard® Uncoupling Mat

2. Product Description

Both a waterproof and vaporproof uncoupling membrane that can be used for crack-isolation in most tile, porcelain, or natural stone installations. It can also be applied over challenging substrates such as installation over green (young) concrete and single ply 19.2″ (49 cm) o.c. wood framed floors. When exposed to excessive substrate movement, it absorbs stress and preserves the surface and integrity of the tile.

Key Features

- Helps prevent cracks in tile and grout
- Use to replace 1/4" (6 mm) backerboard or a second layer of plywood in tile installations - 1 roll replaces 3-4 sheets of 1/4" (6 mm) backerboard
- Use with polymer modified thin-set mortar - as recommended for bonding porcelain and other difficult to bond tiles
- Reinforced fleece bonding layer locks in mortar for a strong bond
- No fasteners required
- Mat made from 70% recycled pre-consumer waste, by weight

Suitable Substrates

- Concrete, cement mortar, masonry
- Young concrete
- Cement backerboard
- Exterior grade plywood and OSB (interior, dry areas only)
- 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
- Floor heating systems - contact Technical Services

Benefits of Product in the Installation

- Elastic, rot proof and resistant to aggressive substances and liquids such as alkalis, solvents and oils.
- Bridges cracks, uncouples floor assemblies from their substrates, and is suitable as an underlayment for all floor tiles and stone.
- Protected by a Lifetime System Warranty when used with a qualifying mortar.
- Contains 70% recycled material by weight.
- Can be used as an ANSI A118.10 waterproof membrane.
- Allows installation of tile over concrete with high moisture content.

Limitations to the Product

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic.
- Do not use as a wear surface.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), subfloor deflection requirements must be > L720 and additional plywood layers will be necessary.
- Recommended minimum tile size is 2' for normal foot traffic and wear (if heavy loads and point loading will occur, a larger/durable tile will be required).
- Contact Custom's Technical Services regarding in-floor heating systems.
- Not recommended for exterior applications.

Packaging

- 1 m x 30 m Rolls
- 1 m x 5 m Rolls (Available in select locations)

3. Technical Data

Applicable Standards

American National Standards Institute (ANSI) ANSI A108.01, A108.17, A118.10 and A118.12 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
- ANSI A138.1 Green Tile Standard

Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171, F125, F147, F148, F128 & F125A

- TTMAC D313F

Environmental Consideration

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

4. Instructions

General Surface Prep

Wet areas must have proper sloping to drains. All surfaces must be structurally sound, clean, dry and free from contaminants that would prevent a strong bond. Newly prepared concrete must be troweled smooth and textured to a fine broom finish. Existing surfaces must be scarified and leveled, and all defects must be repaired. Cracks exceeding 1/8" (3 mm) should be treated in accordance with TCNA F125 or TCNA F125A. Below are recomended methods for surface preporation. The use of a bonding primer, CUSTOM's MBP Multi-Surface Bonding Primer, may be an acceptable alternative.

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Bonding to Gypsum Surfaces

Gypsum substrates must have a PSI greater than 2000 and must first be primed or sealed per manufacturer's instructions. When using thin-set applied RedGard® Uncoupling Mat, all gypsum substrates must be coated with RedGard® Waterproofing and Crack Prevention Membrane or Custom® 9240 Waterproofing and Anti-Fracture Membrane.

Bonding to Plywood and OSB Surfaces

Plywood flooring including those under resilient flooring must be structurally sound, built to industry standards, and deflection should not exceed L/360 for tile or L/720 for natural stone. Minimum 5/8" plywood over 16" oc joist spacing is required.

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. Contact Custom's Technical Services for additional information regarding questions about the proper treatment of control or saw cut joints. Refer to TCNA EJ171, F125 & F125A.

Application of Product

Mortar and Notch Requirement

Using a thin-set mortar that meets ANSI A118.4, A118.15 and/or A118.11, apply the thin-set mortar using either a 5/16" x 1/4" (7. 9 x 6.4 mm) V-notch trowel or a 1/4" x 1/4" (6.4 x 6.4 mm) square notch trowel (recommended) to the substrate. Be careful not to trowel out more mortar than you can cover in the specified open time with RedGard® Uncoupling Mat.

Installing RedGard® Uncoupling Mat

Apply the RedGard® Uncoupling Mat to the floor, fleece side down. Embed the matting into the bonding mortar using a float or screed joining sections of mat, simply align end and side sections of adjacent sheets. Occasionally check the transfer of the bonding mortar to the mat. Lift up a corner of the matting to check coverage. Proper installation results in full contact between the fleece webbing and the thin-set mortar.

Waterproofing

Each roll of RedGard® Uncoupling Mat is waterproof and offers vapor management. For a waterproof installation, install rolls in parallel strip, eliminating as many seams as possible. Ensure that all joints are butted tight, and use RedGard® Seam Tape (sold separately) according to instructions to ensure the floor is waterproof.

Installing Tile Over RedGard® Uncoupling Mat

Tile can be installed over RedGard® Uncoupling Mat as soon as it has been pressed into place. While working on the mat, place boards on the mat directly under you to prevent damage. Flat coat an ANSI A118.4 mortar, being sure to completely fill all of the depressions in the mat first. Then, thin-set and comb additional mortar using a trowel that is appropriate for the size of the tile. Completely embed the tiles in the setting material. Periodically remove and check a tile to ensure that full coverage is being attained.

Mortar Selection

As described in the TCNA Handbook for Ceramic Tile Installation, a polymer modified (ANSI A118.4) mortar is required for the installation of porcelain tile, and an ANSI A118.11 mortar should be used when bonding to exterior grade plywood. Custom® Building Products supports the use of polymer modified mortars whenever required. For tile over 15" on one or more sides, use a polymer modified mortar designed for large and heavy tile.

Cleaning of Equipment

Clean tools and hands with water before material dries.

Health Precautions

Wear chemical resistant gloves and eye protection while installing this product with mortar. 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.

5. Size & Availability

Item Code	Size	Package
RGM2323	1 m X 30 m	Roll
RGM254	1 m X 5 m	Roll

6. Product Warranty

This product is eligible for Custom® Building Products 10 Year Installation Systems Warranty and a Lifetime Residential 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 noother 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.

7. Product Maintenance

Properly installed product requires no special maintenance.

8. Technical Services Information

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

9. Filing System

Additional product information is available from the manufacturer upon request.

Related Products

RedGard® Seam Tape

RedGard® Waterproofing and Crack Prevention Membrane

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Coverage Chart

Size	Coverage
1 m x 30 m	323 sq. ft. (30 sq. m)
1 m x 5 m	54 sq. ft. (5 sq. m)

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