# 1 Product Name RedGard® Uncoupling Mat

#### 2 Manufacturer

Custom Building Products
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# 3 Product Description

A waterproof, vapor-proof uncoupling membrane that can be used for crack-isolation in most tile, porcelain or natural stone installations, and can be applied over challenging substrates such as installation over green (young) concrete and single ply 19.2" (49 cm) o.c. wood framed floors. RedGard® Uncoupling Mat is designed differently than bonded membranes. When exposed to excessive substrate movement it absorbs stress and preserves the surface and integrity of the tile. RedGard® Uncoupling Mat's bonding layers have reinforced fleece which locks mortar into the mat, ensuring strong, reliable installations.

#### **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 Tile Types

- Ceramic tile, all types including impervious porcelain
- Most natural stone
- Precast terrazzo tile
- Contact Custom Technical Services when installing moisture sensitive tile or stone.

#### Suitable Substrates

- Concrete, cement mortar, masonry
- Young concrete
- 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
- 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.
- Contact Custom's Technical Services regarding in-floor heating systems.

#### **Packaging**

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

# 4 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



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#### **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 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. All exterior applications must be properly and uniformly sloped away from structures or to drains.

#### **Bonding to Lightweight Cement and Gypsum Surfaces**

Gypsum substrates must have a PSI greater than 2000 and must first be primed or sealed per manufacturer's instructions. When using thinset 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 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.

#### **Bonding to Existing Surfacing Material**

Resilient flooring or plastic laminates must be well-bonded, clean and free of all contaminates. 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 we recommend the use of an approved respirator.

#### **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 glue 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. Rapid setting mortars and grouts are recommended for exterior applications to help prevent efflorescence.

# 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 water before material dries.



#### **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

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

# 7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at <a href="https://www.custombuildingproducts.com/product-warranty">www.custombuildingproducts.com/product-warranty</a> or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. © 2017 Quikrete International, Inc.

When the RedGard® Uncoupling Mat 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 <a href="mailto:custombuildingproducts.com">custombuildingproducts.com</a>.

# 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 <u>custombuildingproducts.com</u>.

# 10 Filing System

Additional product information is available from the manufacturer upon request.

# **Related Products**

RedGard® Waterproofing and Crack Prevention Membrane

RedGard® Seam Tape



# Coverage

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

