



# Regener8

ULTIMATE PERFORMANCE.  
REDUCED IMPACT.

## Regener8 RMA-43 Standard Set S1 Tile Adhesive

Regener8 RMA-43 is a single part, flexible grey standard setting adhesive for wall and floor tiles, suitable for fixing ceramic, porcelain and natural stone. Regener8 RMA-43 is specially formulated from Ecosand which is our in house developed composition of recycled waste materials which replaces natural extracted sand. As a polymer modified adhesive, Regener8 RMA-43 provides an enhanced high bond adhesion and flexibility, making it ideal for areas where slight movement or vibration can occur, including installations subject to moisture. Classified as S1 in accordance with EN12004, it has a high level of deformation for greater tolerance to movement.

### PREPARATION

All wall and floor substrates must be clean, dry, firm, and stable, free of dust, dirt, oil, and grease. Substrates should be strong enough to support the weight of the adhesive and tiles being fixed (see below for loadings).

For plasterboard and plaster finishes that have been painted and are showing a weak or flaky surface finish mechanical sanders or hand sanding blocks are generally used to remove the film. However for the likes of floor screed surface contamination, adhesive residues and weak surface laitance or even smooth dense floors such as power floated concrete, these will require a more heavy duty scarifying using specialist flooring equipment to remove the surface of the substrate to ensure the substrate is sound, stable and has a rough open texture. To encourage the best adhesion to a substrate it is advisable that prior to applying adhesive the substrate is primed (please see priming section below). Remember - sanding or mechanical abrasion of any surface will leave powder deposits which must be removed prior to installation using a suitable vacuum to provide a clean, dust free surface. Failing to remove fine powder deposits and weak surfaces is a common reason for de-bonding of tile adhesive and primer from the substrate. Using a wet sponge to clean down a wall or floor of dust deposits only serves to spread it around; it is therefore advisable to vacuum thoroughly prior to using a wet sponge.

**Priming:** Surface preparation and priming is extremely important, and the use of a specific tiling primer will provide improved sealing and bonding properties for a variety of porous and non-porous substrates. Each substrate has its own priming requirement and so it is important to follow the directions for use on the bottle when priming a substrate.

**Tile on Tile:** It is always preferable to remove existing tiles, however fixing over existing tiles is an accepted method as long as the existing tiles are sound, stable, dry, securely bonded and fixed to a background that is capable of taking the additional weight.

For tiling onto existing Ceramic, Porcelain or Quarry tiles, these should be lightly abraded to form a mechanical key, degreased, and ensure the surface is thoroughly clean.

For fitting onto existing vinyl floor tiles, only hard vinyl should be considered. Be aware that some old tiles of this type contain asbestos so should not be abraded. Do not over-tile onto softer vinyl, quartz, or composite tiles.

**Calcium Sulphate Floor Screeds:** It is essential that the floor is completely dry, if in doubt always check the moisture level of the floor is below 75%RH using a hair hygrometer before continuing. This type of floor can also suffer from surface laitance issues creating a weak surface layer and therefore they are highly likely to require specialist mechanical abrasion as indicated above.

**Timber/Wooden Floors:** All chipboard and T&G flooring should be over-boarded using exterior grade or class 3 type plywood boards with a minimum thickness of 15mm or suitable cement-based tile backer boards. All over-boarding should be dry and conditioned to the environment in which they are to be used. Using a suitable tiling primer, Plywood over-boards should have the fronts, backs and edges sealed to prevent ingress of moisture and atmospheric humidity. The plywood boards should then be positioned close butted and firmly screwed (not nailed) through the underlying flooring to joists ensuring a maximum distance between fixings of 300mm centres or less. If using cement backer boards to over-board the timber/wooden floor, it should be of flooring grade and of suitable strength for the application to prevent deflection and a minimum of 9mm thickness. The backer board should be bonded using a minimum classification of S1 type tile adhesive and the original wooden floor should be thoroughly cleaned and free of any surface coating or wood treatment. It should also be primed using a suitable tiling primer, in-line with the directions of use.

**Underfloor Heating (UFH):** If UFH is being installed it must be fully commissioned before starting the tiling process to ensure it is in full working order. This includes both electric and water pipe systems. Once the UFH has been commissioned it can be set to a low level to provide a max floor temperature of 15°C whilst the tiling and grouting processes are undertaken. It is critical that this temperature is not exceeded as this can force dry the adhesive and grout with the potential of causing cracks in the installation or tiles to de-bond. Maintain this temperature for a minimum period of 7 days while the installation cures and hardens. After this time the UFH can be brought up to the required room temperature slowly at a rate of 5°C per day.

**Render:** When tiling to new render it must be ensured that the render is a minimum of 4 weeks old and is thoroughly strong, dry, dust and efflorescence free and stable.

### Wall and Tile Loadings

Wall types vary considerably, however all have the same basic need to be structurally sound, strong, smooth, and level. It is essential that the wall to be tiled has sufficient inherent strength to hold the proposed tile and the adhesive being used. The following chart lists maximum national standard loadings for a variety of wall substrates:

LOADINGS	
Gypsum plaster	20kg/m <sup>2</sup>
Plasterboard (gypsum)	32kg/m <sup>2</sup>
Gypsum fibre boards	40kg/m <sup>2</sup>
Cement tile backer boards	Check manufacturers guidance
Glass reinforced cement sheets	50kg/m <sup>2</sup>

**Please note, these weights include the weight of the tiles, adhesives, and grouts.**

### MIXING

Once the substrate has been prepared, continue with the tiling installation. Regener8 RMA43 should be added slowly to clean water in a suitable clean mixing bucket and mixed thoroughly using a drill/mixer and paddle to give a slump free, easily worked adhesive consistency. Once mixed the adhesive is immediately ready for use and has a pot life of approximately 2 hours at 20°C. Mix only sufficient material to be used within the pot life of the product. Do not remix or rewet/dilute product which has aged and is starting to thicken or set.

Mixing Ratio: 20kg unit requires 5.2L - 5.5L of water.

## **APPLICATION**

Apply the adhesive to the required thickness (minimum 3mm – maximum 20mm depth) in areas up to 1m<sup>2</sup> at a time. For internal walls, use a notched trowel to the following notch dimensions to provide solid ribbed lines:

Mosaic tiles: 4mm notched trowel

General wall tiles: 6mm notched trowel

General floor tiles: 8mm notched trowel

For floors and external applications, it's advised to use the solid bed method. This involves applying a uniform bed of adhesive to the floor and “buttering” the back of the tile with the same adhesive. When the tiles are bedded with a twisting action, pressing firmly down it ensures 100% contact is made with both the floor and the tile.

When fitting tiles, with the use of tile spacers, leave uniform gaps between each of the tiles to allow for grouting (approx: walls 1mm – 3mm and floors 2mm – 12mm).

Before the tile adhesive sets clean off any excess adhesive from the face of the tile and grout joints with a clean damp cloth or sponge.

## **GROUTING**

Leave the installed tiles for a minimum period of 18 hours to set hard before grouting and/or walking on the tiles. This time may be extended on impervious/non-porous substrates, or with temperatures and room conditions. Always check and ensure that the adhesive has set hard before grouting commences.

## **Tool Cleaning**

Tools should be thoroughly cleaned with water to remove excess material immediately after use and before the tile adhesive sets.

## **Further Points of Note**

The curing period for cement-based tile adhesives will be affected by extremes in temperature. High temperature site conditions will increase the speed of cure, therefore reducing the pot life and set times. Low temperatures will reduce the speed of cure, extending the pot life and set times. It is therefore good practice to consider site conditions and storage of materials as essential factors in planning tiling installations.

Regenr8 adhesives are manufactured to meet the performance requirements of BS EN 12004 and the relevant classifications.

Regenr8 would always advise that tiling installers follow the guidelines for tiling as laid down in BS EN5385. It is essential that expansion joints are built into the design of the tiling installation to prevent tension build up. This is a common occurrence which can result in tiles de-bonding. Please note that this product uses natural aggregates and other materials that may marginally vary in colour. This does not affect the consistency or characteristics of the product.

## **STORAGE**

This product must be stored in unopened bags, clear of the ground in dry conditions. Avoid frost. Ideal storage temperatures are between 5°C and 25°C.

## **SHELF LIFE**

Under the above storage conditions this product has a shelf life of 12 months.

## **HEALTH & SAFETY**

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals.

Please dispose of packaging and waste appropriately. A full Material Safety Data Sheet relating to this product is available from where the product was purchased.

## QUALITY ASSURANCE

All products are manufactured in a plant whose quality management system is certified as being in conformity with ISO 9001. Regenr8 products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how our products are used.

**TECHNICAL HELPLINE:** 0800 783 6262

TECHNICAL DATA	
Unit Size:	20kg Bags
Colours:	White
Classification:	EN12004 Class C2TE S1
Bed Thickness:	3mm - 20mm
Grout After*:	18 hours
Coverage:	4.5kg / m <sup>2</sup> at 3mm Bed Thickness
Pot Life*:	2 Hours at 20°C
Set Time*:	16 Hours at 20°C
Open Time*:	30 Minutes
Application Temperatures:	5°C to 25°C

**\*Depending on temperatures, substrate and site conditions.**

**UK  
CA**

1289

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**CE UK  
NI**

Multi tile LTD, Thorpe Way, Grove Park, Enderby, Leicester, LE19 1SU  
DOP - 708576

EN 12004:2007+A1 2012-C2FTE-S1

Improved cementitious adhesive with reduced slip for internal and external tiling.

Release of dangerous substances See MSDS

Initial Tensile adhesion strength	>1.0N/mm <sup>2</sup>
Tensile strength after 30 minutes open time	>0.5N/mm <sup>2</sup>
Tensile adhesion strength after heat ageing	>1.0N/mm <sup>2</sup>
Tensile adhesion strength after freeze thaw cycles	>1.0N/mm <sup>2</sup>
Tensile adhesion strength after water immersion	>1.0N/mm <sup>2</sup>
Reduced Slip	<0.5mm
Reaction to Fire	Class E