



# Regener8

ULTIMATE PERFORMANCE.  
REDUCED IMPACT.

## Regener8 RMSL-40 Self Levelling Compound

Regener8 Self Levelling Compound is a single-part, high strength, rapid setting levelling compound. Specifically developed with 40% recycled materials reducing the impact on the environment, Regener8 provides a strong, sound, and level base ideal for floor coverings such as; carpets, vinyl's, timber and ceramic or porcelain tiles - both small and large format. In good ambient conditions, the products fast setting properties allow foot traffic within 3 hours and tiling as early as 7.5 hours.

### PREPARATION

All subfloors should be sound, dry, clean and free from any dust or residues. Surfaces should be protected from moisture by the use of a Damp Proof Membrane.

For concrete screeds moisture levels should be 75%RH or less, where the levels exceed this a surface DPM should be used.

Any surface laitance, dust, debris, adhesive residues, paints, weak smoothing underlayments and any other materials should be removed before continuing.

### PRIMING:

**Porous Substrates:** Apply an even coat of suitable primer diluted 3 to 1 with water and allow to dry completely (usually 1-2 hours). Apply a second coat of primer, diluted 1 to 1 with water and allow to dry. Note: extremely porous substrates may require a third coat, diluted 1 to 1 with water.

**Non-porous Substrates:** All non-porous substrates, including dense substrates should be primed by applying a thin, even coat of undiluted suitable primer and allowed to dry fully.

### SUBFLOOR PREPARATION:

**Concrete Subfloors:** Power floated concrete should be treated as non-porous. Mechanically abrade (shot-blast or scarify) to remove surface hardeners and expose the cement/aggregate. Apply primer neat in a thin uniform coating, allowing it to dry fully (usually 1-2 hours).

**Tamped or Pan Floated Concrete:** Should be treated as porous, and any laitance or weak material should be mechanically removed to ensure a sound, dry and dust-free surface. Apply primer diluted 3:1 with clean water and allow to dry fully (usually 1-2 hours).

**Sand/Cement Screeds:** Ensure substrate is strong enough to accept a self leveller and that the surface is strong and resilient when scraped. Weak, friable or damaged screed should be uplifted and repaired. Apply primer diluted 3:1 with clean water and allow to dry fully (usually 1-2 hours). Two-coat application may be required for very absorbent screeds.

**Existing Smoothing Underlayments:** Regener8 Self Levelling Compound can be used over most intact cementitious underlayments as long as they are firmly bonded and strong. Remove adhesive residues and treat as an absorbent floor. Apply primer diluted 3:1 with clean water and allow to dry fully (1-2 hours). Apply a second coat diluted 1:1 with clean water allowing it to dry to a clear film (1-2 hours). Note: application is only suitable on subfloors that are in equivalent strength to Regener8 Self Levelling Compound.

**Terrazzo/Granolithic Ceramic Tiles:** These must be securely bonded, and any surface treatment should be mechanically removed. A good mechanical key should be ensured by abrading the surface using a Surface Texturing & Grinding (STG) machine (a diamond disc is recommended). These subfloors can be treated as low porosity and primed using primer neat.

**Calcium Sulphate/Anhydrite/Hemihydrate Screeds:** See relevant manufacturer's technical datasheet. A barrier primer application is required. If moisture is above 75%RH we do not recommend using a surface DPM. These screeds often incorporate warm water underfloor heating systems which can be used, along with dehumidifiers, to speed up the drying process. Screed manufacturers normally suggest this can be conducted after 7 days minimum curing. Mechanically remove any laitance or weak material to leave a clean, dry and dust-free surface. We recommend an STG machine with suitable mesh grinding disc of 60-100 grade grit. Apply primer diluted 3:1 with clean water and allow to fully dry overnight. Apply a second coat diluted 1:1 with clean water allowing it to dry to a clear film (usually 1-2 hours).

**Plywood/Tile Backer Board:** Plywood must be of flooring grade, a minimum of 15mm thickness and mechanically fixed to a sound, strong base. Tile backer boards should be a minimum of 6mm thickness.

Plywood should be sealed on the underside and along the edges to ensure moisture absorption from beneath is kept minimal.

Plywood and tile backer boards absorbency differs depending on the nature of the surfaces. Normally a coat of primer diluted 1 to 3 with water is recommended. For dense surfaces of very low absorbency, apply a thin coat of undiluted primer. Allow primer to dry fully.

**Warm Water Underfloor Heating (UFH):** Systems must have been fully commissioned and brought up to their maximum temperature, and ideally switched off 48 hours before application. In the absence of other heat sources, the UFH may be set to 'cutback' position to achieve an air temperature of 15°C. Any expansion or movement joints must be carried through to the floor covering surface.

**\*Radiant Electrical Underfloor Heating Systems (UFH):**

Regen8 Self Levelling Compound may be used where electrical UFH is fitted directly over cementitious or calcium sulphate subfloors. Priming should be as per the substrate. In all cases Regen8 Self Leveller must be applied at a minimum thickness of 5mm above the cables. For further guidance please contact the underfloor heating manufacturer.

**MIXING & APPLICATION**

Mixing ratios of powder and water should be controlled to ensure a free flowing material suitable for 3-60mm application. Do not use excess water as this will affect the product performance and finish. For trowel/hand application mix in a clean bucket using clean cold water, as warm water will greatly reduce the product's working time and may result in shrinkage. Pour 3.4 litres of cold water into an oversized bucket (20+ litres) and gradually add Regen8 Self Levelling powder whilst mixing continually with an electric drill and a mixing paddle. When all powder has been added, mix for a further 2 minutes ensuring to keep the mixing paddle below the surface to minimise air entrapment, and until a lump free consistency is achieved. Note: Do NOT add excess water as this will effect the product performance and finish. Once mixed, the product can be applied by pouring onto the floor and spreading with a smooth edge steel trowel. Plan to begin at the furthest point working back towards the point of entry to avoid walking through wet product. Maintain a wet edge to ensure adjacent mixes blend in correctly. For large areas or deep sections it may be beneficial to batten off areas into sections. Keep free from floor traffic and other trades whilst curing.

**DRYING**

Drying times are based on good site conditions, air temperatures of 20°C, air humidity of a maximum 75% and good ventilation. Cold, humid and damp sites will prolong drying times, so make adequate allowances for this. Avoid strong drafts and direct sunlight during curing as this can 'force-dry' the product and result in excess tension and cracking. Regen8 Self Levelling Compound is ready to receive light foot traffic after as little as 3.5 hours depending on thickness. Once the levelling compound has been installed, it is important to be fully cured before covering.

COVERAGE		
Applied Thickness	Coverage Per Unit (approx.)	Consumption Per 10m <sup>2</sup> Area
3mm	4.0m <sup>2</sup>	2.5 bags
5mm	2.4m <sup>2</sup>	4.2 bags
10mm	1.2m <sup>2</sup>	8.4 bags
15mm	0.8m <sup>2</sup>	12 bags

**CLEANING**

Tools should be thoroughly cleaned with water to remove excess material immediately after use and before self levelling compound sets.

## POINTS OF NOTE

Regenr8 Self Levelling Compound is manufactured to meet the performance requirements of BS EN 13813 and the relevant classifications.

References to BS EN13813:2002 confirms the minimum compressive and flexural strengths that the product will attain when tested to the standard. All figures stated are based on tests carried out under quality controlled environments using Regenr8 Self Levelling Compound with the correct water ratios. Actual results attained will be subject to site conditions and allowances should be made accordingly.

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 8 months (from the production date printed on the bag). High temperatures and high humidity will lead to a reduced shelf life.

## SITE CONDITIONS

The drying characteristics of cementitious levellers are directly influenced by ambient air and floor temperatures. Cement within the leveller cures through a process of hydration using moisture. Extreme site conditions can affect this process i.e. below 5°C and above 30°C.

Ideal ambient air and floor temperatures for application are between 10°C and 22°C. These temperatures should be maintained throughout application and curing periods. Outside of these temperatures consideration should be given to the following guidelines for good practice. Floor temperatures will be slower to respond to ambient air temperature so should be considered in advance.

High humidity and low temperature prolongs evaporation of moisture from the freshly applied leveller and therefore extends drying times. This may ultimately delay installation of floor coverings. In such conditions planned heating (not gas heating) may be required before, during and after application of the product in order to promote ideal site conditions. Heat should be directed into the air, not direct to the floor creating hot spots. Good ventilation without direct drafts will also assist removal of moisture in the air from the building. Failure to adopt such practices in such adverse site conditions may result in damp patches, slow drying and potential surface bleed within the curing leveller. Low humidity and high temperature conditions will speed up drying by fast removal of moisture from freshly applied leveller. Such conditions may cause rapid loss of moisture, required for the curing process, leading to irregular structure and strength build up. Such tensions within the drying leveller could leave hairline surface defects. Under such conditions, levellers should be protected from direct sunlight and drafts across its surface. Good air flow within the build without causing drafts is essential to reduce high temperature build up.

**TECHNICAL HELPLINE: 0800 783 6262**

TECHNICAL DATA	
Classification:	CT-C30-F5
Depth:	3-70mm
Working time at 20°C:	*20-30 Minutes
Walk on hardness time at 20°C:	*3 Hours (3mm application)
Commence the tiling process:	*7.5 hours (up to 5mm depth) *24 hours (up to 20mm depth) *48 hours (up to 35mm depth) *72 hours (up to 50mm depth)  For depths greater than 50mm leave 7 days before tiling.
Compressive Strength (N/mm <sup>2</sup> ):	28 Days: 30.0 (to BS EN 13892-2)
Flexural Strength (N/mm <sup>2</sup> ):	28 Days: 5 (to BS EN 13892-2)

\* Depending on the substrate porosity, nature of flooring and notes in DRYING above.

## HEALTH AND SAFETY

### HEALTH & SAFETY WARNING

Label in Accordance with (EC) No. 1272/2008 (CLP)  
GHS07



**Signal word:** Warning

**Hazard Statements:**

H319 Causes serious eye irritation

**Precautionary Statements:**

P264 Wash hands, forearms and face thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

CE

22  
DOP no. 2219

UK  
CA

23  
DOP no. 3038

Multi Tile Ltd, Thorpe Way, Grove Park,  
Enderby, Leicester, LE19 1SU

EN 13813:2002  
REGENR8 SELF LEVELLING COMPOUND  
Cementitious screed material for use internally  
in buildings

Reaction to fire	Class E
Release of corrosive substances	CT
Compressive strength	C30
Flexural strength	F5