

# TAL RAPIDFIX

Issue Date 1/06/2015

# PRODUCT DESCRIPTION

TAL RAPIDFIX is a single-component high-performance Patching and Repair compound manufactured from rapid-setting shrinkage-compensated cement and selected aggregates specially designed for repairing of deteriorated concrete and mortar surfaces as well as patching holes in floor and wall surfaces.

It is a multi-purpose system designed to withstand heavy loading and trafficking in both industrial and domestic installations. TAL RAPIDFIX can be applied to fill holes prior to installing floor coverings, underlayments or screeds, or can be left exposed in both high traffic industrial applications, ie factories, and in domestic applications.

TAL SCREEDBINDER must replace the water in the mix for all exterior and/or 'wet' applications (showers, etc), where possible ingress of water or building movement is expected, and for heavy traffic areas.

#### **TECHNICAL DATA**

Туре	Modified cement-based repair compound
Colour	Grey
Setting Type	Rapid setting
Pot life*	± 1 Hour
Open Time*	45 minutes
(Working time after mixing)	
Initial Set*	Minimum 1 hour
Trafficable (light) after*	3 hours
Floor covering installation*	After 24 hours, depending on application
	thickness and ambient conditions
Compressive strength	> 25 MPa
Flexural strength	> 5 MPa
Application temperature range	10°C - 30°C
Temperature Resistance	+5°C - +60°C
Mixing ratio	Between 4 – 5I / 20kg
Min application thickness	1mm
Max application thickness	50mm
Density	1.60
Pack size	20kg

<sup>\*</sup>At 25°C and 50% relative humidity.

# **SURFACE PREPARATION**

New floor and wall surfaces must be allowed to cure for the minimum periods detailed below:

- New concrete 6 weeks
- New screed 4 weeks
- New brickwork 4 weeks
- New render 2 weeks

All surface beds should have a damp proof membrane, and all substrates must attain moisture levels of 5% (75% RH) or less before the application of TAL RAPIDFIX can commence.

Should there be no damp proof membrane below a surface bed, or should prevailing moisture levels not attain 5% (75% RH) or less then TAL VAPORSTOP HB must be applied before the application of TAL RAPIDFIX. TAL VAPORSTOP HB is a moisture tolerant, 100% solids epoxy barrier coat that prevents the passage of water vapour and moisture through concrete slabs.

The substrate must be structurally sound, clean and dry and free from all traces of surface laitance and contamination such as dust, dirt, waxes, oils, bitumen, old adhesives, paint, grease, weak cement screeds and renders, shutter release and curing agents, sealing compounds, etc. All damaged, defective, deteriorated, friable (powdery) and hollow sounding areas must be removed until a sold background is achieved.

Bituminous compounds must be removed completely. Organic or fungal growth must be removed and the spores killed using an effective fungicide.

All protruding reinforcing steel bars should be free of rust and primed with a high-grade metal primer. Allow for a minimum of 20mm cover to steel reinforcement. Powerfloated, dense and impervious concrete should be prepared as follows:

#### **Application Thicknesses 5mm or Less:**

The substrate must be suitably prepared to open the surface and to expose the aggregate, preferably by captive sandblasting, to achieve a Concrete Surface Profile (CSP) value of 2 - 3 (Light).

# Applications Exceeding 5mm:

The floor surface must be thoroughly scabbled or scarified in cross-directions to a Concrete Surface Profile (CSP) value of 5 - 6 (Medium Scarification), or to ensure that the aggregate in the concrete is fully exposed and open.

# FLOOR LEVEL SURVEY / FLOOR TOLERANCES

The success of the flooring installation is highly dependent on the background conditions and the quality of the background preparations before applying TAL RAPIDFIX. Rotate a 3m straight edge 360° around the centre point to identify valleys and ridges together with occasional highs and lows.

# CONSTRUCTION JOINTS / VOIDED JOINTS (If Applicable):

All construction/cold joints and structural joints in the substrate, as well as structural cracks which may be dynamic before and/or after the TAL SCREEDMASTER installation, must be extended through to the surface of the screed application in the form of voided joints. With regards to these voided joints already in the concrete slab, the full width of the joint should be maintained and extended through the screeds to the surface.



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All voided joints in the substrate, including saw cuts, must be filled with TAL SEALMASTER CORD prior to the TAL RAPIDFIX application to prevent these joints from being filled with the patching and repair compound.

#### **PRIMING**

The floor must be thoroughly swept to remove all traces of dust and loose particles. (Vacuuming is preferred.) The substrate must have a moisture content of 5% (75% RH) Prime the surface with a slurry consisting of 1 part TAL FLOORKEY mixed with 2 parts TAL RAPIDFIX (by volume) which is applied by block brush, ensuring that the entire surface is covered with the slurry priming coat. TAL RAPIDFIX must be applied when the priming coat is dry and well anchored to the substrate.

#### **MIXING**

Add 20kg TAL RAPIDFIX to the required amount of clean, cool water (4 litres for vertical applications, and 5 litres for horizontal applications) while stirring slowly with an electric drill of 1.1 Kilowatts with a mixing paddle attachment, and mix until the desired trowelable paste is achieved, which must be smooth and lump-free. Stir occasionally whilst in use. Do not mix up more than can be used in 20 – 30 minutes. For best results use a full bag in one mix.

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#### NOTF ·

- Never add more liquid to a mix which has been left standing for too long (retempering), as this will compromise the integrity of the product.
- Warm weather may shorten the working time of the mixture.
- Extreme cold conditions will slow the setting time of the mortar
- IT IS IMPORTANT THAT RAPIDFIX IS NOT OVERWATERED WHEN MIXING, AND THAT IT IS NOT "WATERED" AFTER IT HAS BEEN APPLIED.

# APPLICATION (Maximum Application Area 1m<sup>2</sup>)

After mixing TAL RAPIDFIX is useable for approximately 30 minutes, as follows:

- Apply the paste to the area using a steel trowel and work to a smooth, level surface.
- TAL RAPIDFIX can be applied from featheredge (1mm) up to 50mm in a single operation.
- Should a further build be required it is advisable to allow the first application to dry overnight.
- The RAPIDFIX installation should be protected from too-rapid hydrating by covering with PVC cover sheets immediately after application, and must be protected from other building operations and trades until fully cured.
- The surface can be subjected to light foot traffic after 3 hours Floor coverings can be fixed after 12 - 24 hours, depending on application thickness and ambient conditions.

#### **COVERAGE**

Approximately 1.6kg / m<sup>2</sup> / millimetre thickness.

# **PACKAGING**

TAL RAPIDFIX is available in 20kg bags.

#### **STORAGE & SHELF LIFE**

When stored in dry internal conditions between 10°C and 30°C and out of direct sunlight the product has a shelf life of 12 months from date of manufacture. Never store directly on a concrete floor.

### WARNING

DO NOT INGEST. USE ONLY AS DIRECTED. WEAR PROTECTIVE GLOVES AND GOGGLES. USE A SUITABLE DUST MASK WHEN MIXING. WORK IN A WELL-VENTILATED AREA. DISPOSE OF THIS PRODUCT IN ACCORDANCE WITH LOCAL REGULATIONS. CONTACT TAL FOR FURTHER HEALTH AND SAFETY INFORMATION.