

## Cementitious Powder Primer Used in Conjunction with TAL Keycoat for Improved Adhesion onto Smooth, Dense Surfaces

### Description :

**TAL Keymix** is a cementitious powder primer to be used in a 2:1 mix (by volume) with **TAL Keycoat**. This mix offers phenomenal adhesion to most dense, impervious and smooth surfaces such as: powerfloated/steelfloated concrete and screeds, existing tiles, glass, etc. When applied to a minimum 2mm thickness it improves the flexibility of the tiling installation, eg when tiling onto conventional reinforced concrete suspended slabs.

It will also enhance the water resistance of the installation, such as showers and balconies, particularly when used in conjunction with a modified adhesive and grout system ie when **TAL Bond** or **TAL Bond Powder** is incorporated in the adhesive and grout mix. (A proprietary waterproofing system, such as **TAL Superflex I** or **TAL Sureproof**, should be applied prior to tiling if a *waterproof* installation is required.)

**Note : This product is designed for the above-mentioned application only. TAL will not be liable for misuse or adulteration of the product.**

### Technical Data

Type	Powder Primer
Colour	Grey
Application Temp Range (Ambient)	+ 10°C - +30°C
Pot Life* (Working time after mixing)	60 minutes
Pack Size	20kg and 5kg
Mix Ratio	20kg – 10L <b>TAL Keycoat</b> 5kg – 2.5L <b>TAL Keycoat</b>

### VOC Content :

Specification : Green Building Council of South Africa Office Design V1 IEQ-13 Green Star Office Interiors V1.1 IEQ-11	
Architectural Sealant : Maximum Limit 250 grams per Litre as VOC content material	<b>TAL Keymix :</b> < 10g / ℓ

### Surface Preparation :

New floor and wall surfaces must be allowed to cure for the minimum periods detailed below to ensure that the tile installation is not compromised by drying shrinkage movement in the substrate :

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

All substrates should attain a moisture content of 5% (75% RH) or less before tiling is commenced. Should there be no damp proof membrane below a surface bed or if prevailing moisture levels do not attain 5% or less, it is recommended that **TAL VaporStop HB** (vapour barrier) be applied prior to tiling to eliminate potential problems associated with excessive moisture in the substrate (such as slow- or non-curing of the adhesive, efflorescence on grout and porous tiles, etc).

Any screeding or rendering must be firmly bonded to the underlying concrete or brickwork, and the substrate must be of significant strength, structurally sound (no crumbling, cracking, etc) and of a quality and consistency suitable for tiling. All damaged, defective, deteriorated or hollow sounding areas must be removed and made good before proceeding.

The substrate must be clean 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. Organic or fungal growth must be removed and the spores killed using an effective fungicide.

Off-shutter concrete, smooth & dense surfaces, powerfloated & steelfloated surfaces	Clean thoroughly or mechanically abrade to remove all traces of shutter release and curing agents, laitance, polishes, etc. (Removal of 500 micron (0.5mm) off the surface is usually sufficient.)
Existing Tiles	Must be in good condition and firmly attached to the substrate, ie not cracked, loose or hollow sounding.

### Important Notice:

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	Acid wash and neutralize to remove dirt, grease, grime, sealants, polish, etc.
Existing vinyl flooring / carpets	Floor coverings must be lifted, and the floor mechanically abraded (chipping, grinding, scabbling, etc) to remove existing fixative.
Bitumen adhesive residues	Remove floor covering residues, loose particles, etc. Substrate must be firm and sound. In this instance prime with <b>TAL Bitumen Primer.</b>
Existing paint Existing gypsum skimcoats	The paint / gypsum skimcoat must be in good condition and firmly bonded to the substrate, ie not loose, flaking or peeling. All traces of grease, grime, soap residues and other contaminants must be removed. <b>Domestic / Interior :</b> Mechanically abrade (chipping, grinding, scabbling, etc) to remove at least 80% of the paint / gypsum skimcoat. <b>Commercial / Exterior :</b> Mechanically abrade to remove all traces of paint / gypsum skimcoat.
Bitumen waterproofing	Remove all traces of existing bituminous waterproofing compounds and primers.

The surface must be clean and dry and free of all traces of dust, debris, loose particles and surface contaminants before proceeding.

#### Mixing :

Mix ratio with **TAL Keycoat** is 2:1, ie  
20kg **TAL Keymix** to 10.0 litres of **TAL Keycoat**  
5kg **TAL Keymix** to 2.5 litres of **TAL Keycoat**  
Measure the correct amount of **TAL Keycoat** into a clean bucket, then add the **TAL Keymix** powder to the **TAL Keycoat** liquid whilst mixing

slowly using a suitable mechanical mixer. Mix well until a smooth, lump-free viscous liquid is obtained.

Let the mix stand for 3 - 5 minutes before stirring again. Use within 60 minutes.

For best results use a full bag in one mix.

#### Note :

- Never add more liquid to a mix which has been left standing for too long, as this will compromise the integrity of the product.
- Warm weather conditions (generally, temperatures above 30°C) may shorten the working time of the mixture.

#### Application

##### Smooth & Dense Substrates (eg Powerfloated/Steefloated Concrete and Screeds, Off-Shutter Concrete, Existing Ceramic and Porcelain Tiles, Glass, etc)

Apply the **TAL Keycoat & TAL Keymix Slurry** using a builder's block brush, ensuring that the entire surface is fully covered with the priming coat.

Allow **TAL Keycoat & TAL Keymix Slurry** coat to dry for 4 - 6 hours (touch dry, with no visible transfer when rubbed) before applying the tile adhesive.

##### Highly Porous Substrates (eg Fibre-cement Boards, Gypsum Plasterboards, Woodfloated Surfaces, Clay or Cement Brickwork, etc)

Boards or sheets should be sealed in accordance with the manufacturer's instructions. Highly porous/absorbent renders, screeds and brickwork should be primed with a neat coat of **TAL Floor Primer.**

This should be followed by a **TAL Keycoat & TAL Keymix Slurry** coat when using cementitious tile adhesives.

##### Previous Coatings and Fixatives (eg Painted / Gypsum Skimcoated Substrates, Acrylic and Bitumen Fixatives, Cementitious Adhesives, etc - after being prepared as per Surface Preparation table above)

Apply a **TAL Keycoat & TAL Keymix Slurry** coat as for Smooth & Dense Substrates above.

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## Cleaning :

Spillages of dry, unmixed powder should be collected in plastic bags. Spillages of wet, mixed product should be cleaned with a damp sponge before it dries. Dried product can be removed using **TAL Epoxy Cleaning Fluid** or **Epoxy Cleaning Gel**. Clean tools with water before the product dries.

## Coverage

20kg **TAL Keymix** mixed with 10L **TAL Keycoat** will cover  $\pm 35 - 40\text{m}^2$ .

5kg **TAL Keymix** mixed with 2.5L **TAL Keycoat** will cover  $\pm 8.5 - 10\text{m}^2$ .

(Actual coverages will be determined by site conditions, substrate porosity and surface profile, workmanship, etc)

## Packaging :

**TAL Keymix** is available in 20kg and 5kg bags.

## Storage & Shelf Life :

When stored in original sealed packaging 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 working with cementitious products. Work in a well-ventilated area. Dispose of this product in accordance with Local Regulations.**

**Contact TAL for further Health & Safety information.**

## Product Guarantee :

TAL products are manufactured and tested in accordance with TAL procedures, which are maintained in line with Quality Control System Standard ISO 9001 : 2015 and Environmental Management System ISO 14001:2004. TAL products are guaranteed to be free from manufacturing defects and fit for design purposes.

This guarantee is subject to the performance of TAL products when used strictly in accordance with their materials and methods specifications for the particular project, and where good workmanship is followed. However, we have no

influence over specific site conditions and therefore, if in doubt, the user must always carry out sufficient tests to satisfy himself/herself that the product is suitable for the intended purpose.

In special cases, obtain professional advice.

TAL shall not be liable for the standard of workmanship on site, or for any defects or damage due to external causes or factors beyond the control of TAL including, without limitation, unsound structures or foundations, building movement (cracking, creep, deflection, vibration, etc), design defects, earth tremor or other seismic disturbances, land slip, fire, flood or other immersion, or any products which have been adulterated, contaminated or misused in any way. The aforementioned list is not exhaustive.

**NOTE :** We require timeous notification, *in writing*, of an alleged defect and the opportunity to assess and investigate the problem to our satisfaction **prior** to any remedial work whatsoever being carried out.

## TAL Technical Advice Centre :

For a detailed Materials and Methods Specification contact the TAL Technical Advice Centre on 0860 000 TAL(825), or e-mail [taltech@tal.co.za](mailto:taltech@tal.co.za).

Branches : Gauteng (011) 206-9700; Cape (021) 386-1810; Natal (031) 579-2263

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