TAL mosaic fix

DESCIRPTION

TAL MOSAICFIX is a quick-setting high-strength cement-based powder adhesive designed for fixing ceramic, porcelain and natural stone mosaics onto walls and floors.

It can also be used as a grouting or pre-grouting of mosaics. The adhesive was designed for easy use, allowing up to 2 hours Pot Life after mixing.

TAL MOSAICFIX is also suitable for fixing 'fusion-typeglass mosaics with tessera no larger than 100 x 100mm.

NB: Due to the brittle/rigid nature of glass, the installation of this type of material necessitates the use of a flexible adhesive system; TAL BOND or TAL BOND POWDER must be incorporated in the adhesive mix, strictly in accordance with the product instructions.

TAL MOSAICFIX is available in Super White and Light Grey.

FEATURES

- quick setting
- high strength
- wall and floor
- interior and exterior

Classification According to SANS 52004:2013 / EN12004:2007

TAL MOSAICFIX is classified as a C1T adhesive (cementitious tensile adhesion strength (C1), slip resistant (T), adhesive).

When mixed with TAL BOND as a total water replacement, or when TAL BOND POWDER is incorporated in the mix, TAL MOSAICFIX is classified as a C2TS1 adhesive (improved cementitious tensile adhesion strength (C2), slip resistant (T), deformable (S1), adhesive).

TECHNICAL DATA

	With Water	With TAL BOND (TAL BOND POWDER - 1kg)
Mix Ratio	20kg / 6ℓ	20kg / 6ℓ
Pot Life*	5kg / 1.5ℓ	5kg / 1.5ℓ
Open Time*	Max 2 hours	1.5 hours
Application Temperature Range	20 minutes	20 minutes
Initial Set*	10˚C - 30˚C	10˚C - 30˚C
Final Set*	6 - 8 hours	6 - 8 hours
Flexibility	12 hours	12 hours
Temperature Resistance	Poor	Good
Ageing	0˚C - 60˚C	-30˚C - 100˚C
Resistance to Damp	Good	Excellent
	Poor	Good

SURFACE PREPARATION

NB: The installation of mosaics requires a clean, sound, flat and level substrate. Variations in levels in the substrate must be rectified prior to the mosaic installation.

New floor and wall surfaces must be allowed to cure for the minimum periods detailed below to ensure that the mosaic 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 surface beds should have a damp-proof membrane. Should there be no damp proof membrane below a surface bed or if prevailing moisture levels do not attain 5% (75% RH) 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 attached to the underlying concrete or brickwork, and the substrate must be 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 shutter release and curing agents, laitance, polishes, etc. *
Existing Ceramic/Porcelain Tiles	Must be in good condition and firmly attached to the substrate, ie not cracked, loose or hollow sounding. 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. *
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, and all traces of grease, grime, soap residues and other contaminants must be removed. **Domestic / Interior:** Mechanically abrade (chipping, grinding, scabbling, etc) to remove at least 80% of the paint/gypsum skimcoat.* **Commercial / Exterior:** Mechanically abrade to remove all traces of paint/gypsum skimcoat.
Bitumen adhesive / waterproofing	Mechanically abrade (chipping, grinding, scabbling, etc) to remove completely.*

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

* Prime the surface with a slurry consisting of 1 part TAL KEYCOAT to 2 parts TAL KEYMIX powder or 2 parts TAL MOSAICFIX powder (by volume), which is applied using a builder's block brush. Ensure that the entire surface is fully covered with the slurry. Allow this slurry coat to dry for 4-6 hours before applying TAL MOSAICFIX.

MIXING

Using a mechanical mixer, add 20kg TAL MOSAICFIX to 6 litres of clean water (5kg to 1.5 litres) while mixing (for optimal performance water temperature should be between 20oC and 25oC). Mix well to a creamy, lump-free consistency. Let the mix stand for 3 - 5 minutes before stirring again. Use within ±3 hours.

For best results use a full bag in one mix.

Note: For all exterior/exposed and "wet" applications (eg showers), high traffic areas, areas subjected to thermal stresses or temperature changes, or where some flexibility is required, replace the water in the mix with TAL BOND. **Alternatively**, TAL BOND POWDER may be added to the adhesive mixing water, at a ratio of 1 x 1kg Sachet per 20kg TAL MOSAICFIX (½ Sachet per 5kg MOSAICFIX).

NB:

- Never add more liquid to a mix which has been left standing for too long, as this will compromise the integrity of the adhesive.
- Warm weather conditions and/or substrate and water temperatures (generally, temperatures above 30oC) may shorten the working time of the mixture.
- ow ambient temperatures and/or substrate and water temperatures (generally, temperatures below 15oC) will have detrimental effects on the curing and integrity of the adhesive, ie full cure may not be achieved.

MOSAICS:

To facilitate ease of handling, mosaics are assembled as sheets, the individual tessera being glued either face-down onto paper or plastic (paper-faced mosaics), or bed side down onto a synthetic mesh backing, fabric, or onto small tabs. Paper-faced mosaics are preferable since they allow full contact to be achieved with the adhesive bedding.

When sheets are assembled by means of a backing mesh, the mesh should be made of water-resistant synthetic fabric such as nylon, and not from cotton or paper.

In the case of a mosaic that has been assembled with a fabric backing or tabs, the following is critical for a successful installation:

- the fabric or tabs and the bonding adhesive should not occupy more than 25% of the areas of each tessera; the critical factor is the contact of the adhesive with the backs of the tessera, and
- the fabric or tabs and the bonding adhesive should be water resistant, should not weaken when exposed to moisture, and should be compatible with the adhesive bed

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- the backs of the sheets must be clean and dry, and not contaminated with dust or powder
- All mosaics should be inspected, and damaged tessera removed and replaced before installation.

Please refer to the manufacturer's instructions regarding cleaning and maintenance of the mosaics after installation.

APPLICATION

NB: The installation of mosaics requires effective supervision and the employment of skilled operatives. Good adhesive mixing and application procedures, as well as consistent and accurate installation techniques are essential.

The mosaics should be FIRMLY bedded into the adhesive to ensure good contact between the adhesive and tile.

TAL MOSAICFIX can be applied in bed thicknesses between 4 – 6mm, and up to 12mm in isolated areas only.

NOTE: The adhesive bed thickness should not exceed 5mm when using glass products which are 4mm or thinner.

Paper-Covered Mosaics

The adhesive is applied to the surface in a solid bed of 4 – 6mm. The mosaics are pre-grouted by working adhesive into the joints between the mosaics from the back. The adhesive must still be wet when the mosaics are fixed.

Immediately, **FIRMLY** bed the mosaics into the adhesive on the background. A wooden beating block or rubber grouting float can be used to create a flat surface.

Allow the adhesive to dry sufficiently, and then gently remove the paper covering on the mosaics with a dampened sponge. **Excessive water must be avoided as this may compromise the integrity of the adhesive.**

If necessary, fill any voids or depressions with the adhesive mixture.

Mesh-Backed Mosaics

The adhesive is applied to the surface in a solid bed of 4 – 6mm. Immediately, **FIRMLY** bed the mosaics into the adhesive, ensuring that the adhesive penetrates (oozes) through the mesh-backing into the joints between the tesserae. A wooden beating block or rubber grouting float can be used to create a flat surface.

Allow the adhesive to set for approximately 20 minutes to ensure that the mosaic sheets are not disturbed. Thereafter, fill the joints with TAL MOSAICFIX. In this instance a 'wet to wet' bond between the bedding and grouting is preferred.

For areas larger than 1m², it may be necessary to mix fresh adhesive for filling the joints to ensure that the adhesive is still workable and of a consistency suitable for filling the joints.

Note:

- If a different coloured finish is required between the mosaics, the joints can be filled using TAL WALL & FLOOR GROUT once the adhesive has set sufficiently (6 - 8 hours). Excess adhesive should be carefully scraped out of the joints, taking care not to damage or disturb the mosaic installation.
- TAL BOND or TAL BOND POWDER must be incorporated in the Grout mix in installation areas where enhanced flexibility and/or water resistance is required, such as 'wet' or exposed/external areas, suspended slabs, etc.

General – Paper-Covered & Mesh-Backed Mosaics

The adhesive is applied to the surface in a solid bed of 4 – 6mm. The adhesive can be applied using a Notched Floor Trowel, and then smoothed with the straight edge of the Trowel to flatten the ridges.

Gently clean any excess adhesive off the face of the mosaics before it hardens.

At no time spread more adhesive than can be tiled onto in 10 – 15 minutes. Depending on atmospheric conditions, this will normally be around 1 square metre. This prevents the adhesive from drying or "skinning" before the tiles are applied. Should a thin skin form, the adhesive must be freshened up by respreading with the notched trowel. Do not wet the adhesive with water as the water will form an anti-adhesive film. Dry or hardened adhesive must be removed and discarded.

Occasionally lift a mosaic sheet to ensure there are no air pockets.

Gently clean surplus adhesive off the face of the mosaics before it hardens. This is especially important when an additive such as TAL BOND or TAL BOND POWER has been used.

Due care must be taken to ensure that glass mosaics do not get scratched by the adhesive during application and cleaning.

Pot life of the adhesive will vary with climatic conditions. Under no circumstances should adhesive which has been left standing for too long be reconstituted by adding more liquid.

Leave a 'grout joint' between the mosaic sheets, the same width as the joints between the mosaics on the sheets.

Do not tile over structural, expansion or cold joints in the background. These joints must be extended through the various layers to the surface.

Ensure that the tile panel movement joints and perimeter joints are raked out and all adhesive residues removed before the adhesive dries.

NB: Exterior tiling applications must be protected from inclement weather and too-rapid drying during installation. Installations must not be subjected to running water or rain for at least 12 hours and must be protected from frost and direct sunlight for at least 24 hours after installation.

MOVEMENT JOINTS

Tile panel Movement joints should be located in both directions at maximum 5 metre centres for interior surface bed and wall applications, and maximum 3 metre centres for suspended applications and exterior applications.

NB: When using glass mosaics, tile panel movement joints should be located in both directions at maximum 2 metre centres. Movement joints ('soft' joints) must also be created at the interfaces between glass mosaics and other finishes (ie tiles, metal trims, etc).

Movement joints should also be located around the perimeter of all floors, in all horizontal and vertical corners, against obstructions fixed to the structural background and over all discontinuities in building materials, e.g. at interfaces of concrete and brickwork. In addition, movement joints should be located around any fixtures protruding through the tiled surface such as columns or stairs.

The joints should be at least 5mm wide and extend through the adhesive and tile layers. All construction / cold joints and structural joints in the background must be extended through the adhesive and tile layers to the surface in the form of tile panel movement joints. With regards to structural joints, the full width of the structural joints must be respected and extended through the adhesive and tile layers to the surface.

Where practical, the bulk of the depth of the movement joint can be filled with TAL SEALMASTER CORD. Seal the joint using TAL GOLDSTAR SEALMASTER 1000 polyurethane joint sealant in accordance with the manufacturer's instructions.

COVERAGE

Coverage is approximately 4 – 5kg/m^2, including pre-grouting.
(Actual coverages will be determined by site conditions, workmanship, etc)

PACKAGING

TAL MOSAICFIX is available in 20kg and 5kg bags.

STORAGE & SHELF LIFE

When stored in dry, internal conditions between 10ºC and 30ºC 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 & 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: 2008 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.