

TECHNICAL DATA SHEET

GOLDSTAR[®] HB HARD BODY TILE ADHESIVE

SETS AFTER
18 HOURS

C1T
EN12004

**High-strength bonding of Hard Body
tiles onto walls & floors**

DESCRIPTION

TAL Goldstar HB is a grey quick-setting high-strength cement based adhesive formulated for fixing hard body tiles with a water absorption rate of $\geq 1\%$ to walls and floors.

TAL Goldstar HB is also ideal for fixing glazed stoneware porcelain tiles and "gres" porcelain tiles.

The adhesive was designed for easy use, allowing a 4 hour pot life.

TAL Goldstar HB can be applied in bed thicknesses between 3 – 6mm, and up to 12mm in isolated areas only (*non-continuous, and not exceeding 20% of the total area to be tiled*).

When used with larger format tiles (i.e tile edges greater than 600mm) the setting time of the adhesive may be extended; in this instance allow for a longer setting time before **light** foot trafficking or grouting of tiles.

Note:

TAL Goldstar HB is not suitable for use with fully vitrified porcelain tiles, or tiles with a water absorption rate of $< 1\%$.

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

FEATURES

- High strength
- Quick set
- Low VOC

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Issue Date: 1 SEPTEMBER 2025



CLASSIFICATION ACCORDING TO SANS 52004:2013 / EN12004:2007:

TAL Goldstar HB 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 Goldstar HB** is classified as a C2TF1 {improved cementitious tensile adhesion strength (C2), slip resistant (T) } deformable (S1)} adhesive.

VOC CONTENT:

Specification: Green Building Council of South Africa
Office Design V1 IEQ-13
Green Star Office Interiors V1.1 IEQ-11

Ceramic Tile Adhesive: Maximum Limit
65 Grams Per Litre as VOC Content Material

TAL Goldstar HB:
* <10g / ℓ as VOC content material

*Based on historical data – VOC testing still to be conducted.

TECHNICAL DATA:

	WITH WATER	WITH TAL BOND	WITH TAL BOND POWDER
Type	Cement-based tile adhesive		
Setting Type	Quick setting		
Colour	Grey		
Packaging	20kg		
Application Temperature Range (Ambient)	10°C - 30°C		
Open Time*	15 minutes		
Correction Time*	15-20 minutes		
Initial Set*	14-16 hours		
Final Set*	18 hours		
Pot Life* (working time after mixing)	4 hours	3½ hours	3½ hours
Mix Ratio	5ℓ/20kg	5ℓ/20kg	1kg/20kg
Flexibility	Poor	Good	Good
Temperature Resistance (once fully cured)	0°C - +60°C	-30°C - +75°C	-30°C - + 75°C
Resistance to Damp	Poor	Good	Good

* At 23°C and 50% relative humidity.

The above data was obtained under laboratory conditions using freshly manufactured material. Actual results in the field will vary as a result of factors such as Ambient Temperatures, Site Conditions, etc.

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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** moisture/vapour barrier system 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). Please contact TAL for more information pertaining to this product.

Any screeding or rendering must be firmly attached to the underlying concrete or brickwork, and the substrate must be of sufficient strength, must be structurally sound (no crumbling, cracking, etc) and must be 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 and/or mechanically abrade to remove shutter release and curing agents, laitance, polishes, etc. *
Existing Wall Tiles (NB: Only rapid setting adhesives should be used for tiling over existing floor tiles.)	Must be in good condition and firmly attached to the substrate, i.e. not cracked, loose or hollow sounding. Acid wash and neutralize to remove dirt, grease, grime, sealants, polish, etc.*
Existing Vinyl Flooring Existing Carpets	Floor coverings must be lifted, and the floor mechanically abraded (chipping, grinding, scabbling, etc) to remove existing fixative. *
Bitumen Fixative Residues (after removal of Vinyl Tiles/Sheeting)	Remove vinyl floor covering residues, and all loose or unbonded bitumen fixative residues. Substrate must be firm and sound and clean and dry. Prime with TAL Bitumen Primer .
Existing Paint Existing Gypsum Skimcoats	The paint/gypsum skimcoat must be in good condition and firmly bonded to the substrate, i.e. 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.
Bituminous Waterproofing Compounds	Mechanically abrade (chipping, grinding, scabbling, scarifying, etc) to remove completely. *

NOTE: the surface must be clean and dry and free of all traces of dust, debris, loose particles and surface contaminants which could impair adhesion.

* Prime the surface with a slurry consisting of 1-part **TAL Keycoat** to 2 parts **TAL Keymix** powder or 2 parts **TAL Goldstar HB** adhesive powder (by volume), applied using an appropriate builder's block brush (or soft-bristle broom for large areas), and ensuring complete coverage of the substrate. Allow this slurry coat to dry for 4 – 6 hours before applying **TAL Goldstar HB**.

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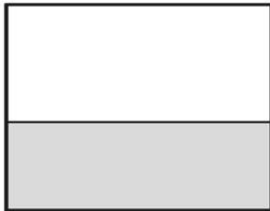
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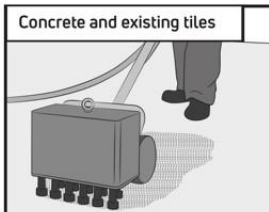
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SURFACE PREPARATION:



Ensure surface has cured.
New concrete – 6 weeks.
New screed and brickwork – 4 weeks. New render – 2 weeks.



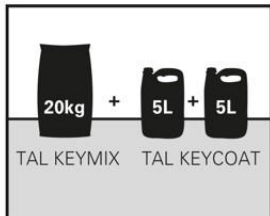
Concrete and existing tiles
Clean thoroughly and mechanically abrade where necessary. Apply a **TAL KEYCOAT & TAL KEYMIX** primer slurry.



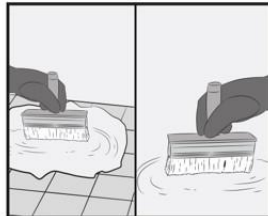
Paint, gypsum skimcoat, bitumen adhesive and waterproofing
Chip surface thoroughly (min 80%). Remove bitumen adhesives and waterproofing completely. Apply a **TAL KEYCOAT & TAL KEYMIX** primer slurry.



Wipe down or dust walls, and sweep floors to remove dust and loose particles. Ensure surface is dry and free of all traces of contaminant.



If surface is smooth and dense, apply a primer slurry (1 part **TAL KEYCOAT** mixed with 2 parts **TAL KEYMIX** powder.)



Spread with a builders block brush. Ensure full coverage.



Wait 4-6 hours before tiling.

MIXING:

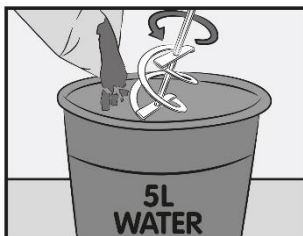
Using a mechanical mixer, add the bag of **TAL Goldstar HB** to 5 litres of clean, cool water whilst mixing and mix well to a creamy, lump-free consistency (for optimal performance water temperature should be between 20°C and 25°C).

Let the mix stand for 3 - 5 minutes before stirring again. Use within 8 hours (Pot Life).

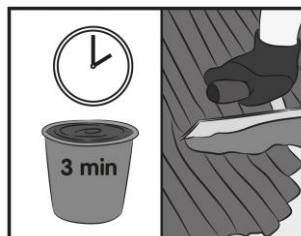
For best results use a full bag in one mix.

For all exterior/exposed and “wet” applications, 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 Goldstar HB**.



Mix 20kg **TAL Goldstar HB** tile adhesive with 5L of cool water. Using a mechanical mixer, mix to a creamy lump-free paste, while adding powder.



Let it stand for 3 minutes then stir again.

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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 30°C) will shorten the working time of the mixture and may even result in flash-setting of the adhesive.
- Low ambient temperatures and/or substrate and water temperatures (generally, temperatures below 15°C) will have detrimental effects on the curing and integrity of the adhesive, ie full cure may not be achieved.

APPLICATION:

Ensure that the tiles are dry, and the backs are free of dust and contaminants which could impair adhesion.

Apply the mix to the surface using a notched Floor Trowel.

TAL Goldstar HB can be applied in bed thicknesses between 3 – 6mm, and up to 12mm in isolated areas only (*non-continuous, and not exceeding 20% of the total area to be tiled*).

Apply only as much adhesive as can be tiled in 10 - 15 minutes to prevent the adhesive from “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.

Bed tiles firmly using a Rubber Mallet. When tiling floors or exterior walls ensure that the tile is in full contact with the adhesive. Occasionally lift a tile to ensure that there are no air pockets or voids. Never fix tiles using the ‘spot’ method.

NOTE: Back buttering with a thin coat of adhesive is also required when using large format tiles to ensure full contact and a solid bed of adhesive behind each tile.

Never butt joint tiles. Always leave grout joints between tiles; at least 3mm wide between hard body, glazed stoneware porcelain and “gres” porcelain tiles.

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

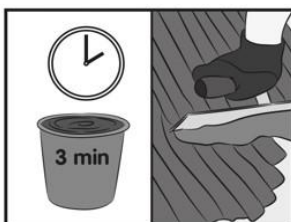
Ensure that the grout joints and tile panel movement joints and perimeter joints are raked out and all adhesive residues removed before the adhesive dries.

NB:

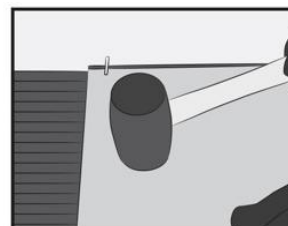
- Allow a **minimum** of 14 - 16 hours before **light** foot trafficking or grouting, depending on site and ambient conditions. Adhesive set should be achieved after 18 hours in summer/warm ambient conditions.

NB: Longer setting times will apply to installations using larger format tiles (ie exceeding 600 x 600mm), in cold ambient conditions, as well as installations subjected to loaded traffic.

- It is important that newly installed tiles are protected from traffic (other trades, etc.) while the adhesive sets. This is especially important in fast-track installations. Too early trafficking of newly installed tiles before the adhesive has set sufficiently may result in an impaired bond (hollow-sounding and/or loose tiles).
- Ensure that heavy or large format wall tiles are well supported by means of a batten or some type of mechanical device for a minimum of 18 hours, until the adhesive has set sufficiently. Mechanical supports should be incorporated in elevated installations.
- 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 36 hours and must be protected from frost and direct sunlight for at least 72 hours after installation.



Let stand for 3 minutes, then stir again. Use within 4 hours (Pot Life). Apply adhesive with a suitable notched trowel. Ensure the tile is in full contact with the adhesive. Apply only as much adhesive as can be tiled in 10-15 minutes.



Bed tiles with a rubber mallet. Ensure tiles are in full contact with the adhesive including edges and corners.

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GROUTING:

Allow a minimum of 14 - 16 hours after completing the tiling before **light** foot trafficking or grouting, depending on site and ambient conditions.

Longer setting times will apply when using large format tiles or in cold ambient conditions.

Use **TAL Grout** according to the instructions on the packaging. **Do not grout with neat cement.**



Grout after 14 – 16 hours with TAL Grout (as per instructions). Adhesive set should be achieved after 18 hours (in summer/warm ambient conditions). Allow for longer setting times when using larger format tiles or in cold ambient conditions.

MOVEMENT & PERIMETER JOINTS:

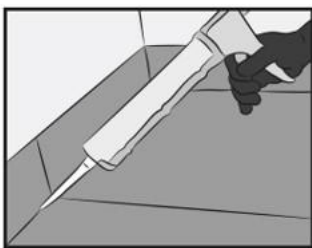
Tile panel Movement joints should be located in both directions at maximum 5 metre centres for interior surface bed and wall applications, and maximum 3 metre centres for suspended applications and exterior applications.

Movement joints should also be located around the perimeter of all floors, including interfaces between floor tiling and aluminium shopfronts/sliding door tracks, 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 down to the substrate. 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.

NB: TAL Goldstar Sealmaster 1000 Polyurethane Joint Sealant is not suitable for commercial or institutional shower environments, or for permanently submerged installations such as swimming pools.



Construct tile panel movement joints – soft joints – located at max 5m centres for interior surface bed and wall applications, and max 3m centres for suspended applications and exterior applications, as well as around the perimeter of all floors and in all vertical corners. Joints must be minimum 5mm wide and extend through the tile adhesive layers. Fill joints with **TAL GOLDSTAR SEALMASTER 1000** polyurethane joint sealer.

COVERAGE:

Circa 6kg/m² when applied with a notched floor trowel.

NB: This coverage is intended as a guide for ordering purposes only. Actual coverage will be determined by site conditions, substrate levels, workmanship, tile sizes, etc.

CLEANING:

Dry powder spillages – sweep off or vacuum powder spillages, ensuring reduced exposure to moisture which potentially activates the adhesive.

Mixed product – wipe the area with a DAMP (not wet) sponge before the adhesive has dried.

Dry product - remove using **TAL Epoxy Cleaning Fluid** or **TAL Epoxy Cleaning Gel**.

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Clean hands and tools with warm, soapy water before the product dries.

PACKAGING:

Available in 20kg bags.

STORAGE & SHELF LIFE:

When stored in the 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.

NB: To protect from damp, never store directly on a concrete floor.

WARNING:

Keep out of reach of children and pets. Use only as directed. Do not ingest or inhale. Wear appropriate PPE such as a dust mask, protective gloves and goggles 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 (MSDS/SDS).

TAL TECHNICAL ADVICE CENTRE:

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

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

NB: Ensure you have the latest version of this data sheet.

PRODUCT PERFORMANCE GUARANTEE:

TAL products are manufactured and tested to TAL procedures, which are maintained in line with Quality Control System Standards ISO 9001 and ISO 45001, and Environmental Management System ISO 14001. TAL products are guaranteed to be free from manufacturing defects and fit for design purposes.

Any guarantee regarding the performance of **TAL Goldstar HB** will be subject to the professional and practical application of the product in accordance with the instructions on the packaging and in the technical data sheet.

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, damage to the tile installation by following trades or abusive trafficking, or any products which have been adulterated, contaminated or misused in any way. Debonding due to cohesive failure within the substrate is not classified as product failure. 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.

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