

THICK BED PORCELAIN & STONE TILE ADHESIVE

**Highly Polymer Modified Fast Setting
Cementitious Grey Adhesive**

- Sets in 3 hours
- 5mm to 25mm bed
- Flexible
- Ideal for plywood overlay
- Internal & external floors only
- Suitable for heated floors
- BS EN 12004 C2F



Norcross Thick Bed Stone & Porcelain Grey Floor Tile Adhesive is a grey cement based thick bed floor adhesive designed for fixing fully vitrified porcelain, ceramic and natural stone* tiles to a variety of floor surfaces. Its shrinkage compensating deep bed formulation makes it ideal for the installation of large format tiles and slabs affording excellent area contact without the need to back butter. It is water and weather resistant and is suitable for both internal and external locations. It has a setting time of 3 hours permitting early trafficking of the tile installations. Containing unique Rock-Tite™ polymeric binders, the enhanced flexibility of the adhesive allows a greater range of fixing possibilities normally only achieved by the addition of separate admixtures. The adhesive has excellent thermal ageing properties and is particularly suitable for heated floors and timber floors when overlaid with WBP/Marine grade plywood.

*When fixing light coloured stone use a white adhesive such as Norcross Thick Bed Stone & Porcelain White or Rapid Porcelain & Stone White to avoid staining.

Conforms to BS EN 12004 C2F

Concrete/Cement:Sand Screed	Yes
Cement:Sand Render	No Not suitable for wall use
Anhydrite Screed	Yes Seal & prime as overleaf
Existing Vinyl	Yes
Flooring Grade Asphalt	Yes
Existing Glazed Tiles	Yes Slurry bond coat
Heated Floors	Yes
Timber Floors	Yes Permalayer or plywood/ Pro Board overlay
Plaster/Plasterboard	No Not suitable for wall use
Total Immersion	Yes

EN Classification	BS EN 12004 C2F
Working Time @ 20°C	Up to 30 minutes
Set Time @ 20°C	3 hours
Bed Thickness	3mm to 25mm
Coverage	Floors: Approx. 5kg/m ² at a bed of 5mm
Trowels: Walls - Dry Areas	N/A
Walls - Wet Areas	N/A
Walls - Mosaics	N/A
Floors	20mm round notches

SURFACE PREPARATION

All surfaces should be dry, clean and strong enough to support the tiles to be fixed. Tiling substrates should be true and flat to permit fixing without visible lipping of tile edges. On floors, any gaps exceeding 3mm under a 2 metre straight edge should be corrected using a suitable Norcross Levelling Compound. This will be particularly appropriate where larger tiles or those with rectified edges are being installed. Porous or dusty surfaces must be sealed using Norcross Prime Bond diluted 1:4 with water.



Concrete/ Cement:Sand Screed

New concrete floors must be allowed to dry for a minimum of 6 weeks. Residual traces of laitance and curing agents should be mechanically removed before tiling commences. Screeds should be a minimum of 21 days old. These drying times may be reduced to 48 hours if Norcross Permalayer antifracture membrane is used.

Anhydrite & Hemihydrate (Gypsum) Screeds

These must be cured to their respective manufacturers directions before tiling can begin. The surface must be free from laitance and primed using progressively stronger coats of Norcross Prime Bond as follows: Diluted 1:4 parts water. Allow to dry. 1:3 parts water. Allow to dry. If the screed is still porous apply a third coat diluted 1:2 parts water. Allow to dry.

Heated Floors (Dense Construction)

Thick Bed Stone & Porcelain Grey Adhesive is suitable for use with underfloor and undertile heating systems on solid floor structures. After tiling the floors should not be switched on for at least 14 days and then brought up to operating temperature gradually during the initial heating of the floor. (Refer to Norcross How to sheet 'Commissioning of Underfloor/Undertile Heating Systems'). Undertile heating cables and mats can be tiled directly or prior to tiling they can be bedded into a screed of a suitable Norcross Levelling Compound. This method prevents damage to the heating elements during the laying process.

Thermoplastic Floor Tile/ Vinyl Sheet

If well stuck down and in good condition these should be degreased and sealed with neat Norcross Prime Bond.

Asphalt (Internal Only)

Flooring grade asphalt can be tiled directly with Thick Bed Stone & Porcelain Grey Adhesive providing it is in good condition, clean and able to support the tiling. Seal with undiluted Norcross Prime Bond and allow to dry before tiling commences.

Glazed Surfaces

These must be well fixed and able to support the additional weight of tiling, clean, dry and free from grease. The old glazed surface must be thoroughly degreased and a slurry bonding coat made of 1 part Prime Bond: 2 parts Thick Bed Stone & Porcelain Grey Adhesive should be brushed onto the surface and allowed to dry. This will provide a key onto which the adhesive layer can bond.

Plywood Overlay onto Existing Timber Floors (Water & Boil Proof WBP Grade) Internal Tiling Only

All sheets should be a minimum of 15-18mm thick and be screwed down to existing boards and joists with staggered joints at 300mm centres and 150mm centres along board edges. The sheets must be sealed on the back, face and edges with Prime Bond. All timber constructions must be adequately ventilated behind to prevent atmospheric moisture distortion and warpage of the boards themselves. In areas subject to wetting, timber should be waterproofed using Norcross Wet Seal Tanking Membrane.

MIXING

Into a clean pail add 1 part of cold water and gradually introduce approximately 3.5 to 4 parts of adhesive powder stirring to blend the mixed mortar to a smooth lump free consistency. The properly mixed mortar will be thick enough to hold the adhesive ribs without slumping. Mix only enough material that can be used within the pot life of the product which will be around 30 minutes - this will be extended in cold conditions and reduced in hot weather/ warm temperatures.

APPLICATION

Using a suitably notched trowel spread the adhesive onto the fixing surface to form parallel ribs into which the tiles should be applied with a firm twisting action. Spread only enough material that remains workable and as such fully wets out on the tile backing. Solid-bed void-free fixing will be necessary on floors and in wet areas. Tiles with deeply keyed back profiles may need to be back buttered. Tiles may be grouted as soon as the adhesive bed is set. Under normal conditions this will be around 3 hours after fixing although this will be extended in cold conditions. Do not use below 5°C.

COVERAGE

At an average bed depth of 5mm, 5kg of adhesive will be required per 1m². At an approximate bed depth of 15mm a 20kg bag will cover approximately 1m².

STORAGE

Store in dry internal conditions away from direct sunlight between 5°C to 25°C. The product has a 12 month shelf life from date of manufacture.

TECHNICAL ADVICE


For advice on tile installation products call Norcross Technical Helpline on 01782 524140.

HEALTH & SAFETY



CONTAINS
 CHROMIUM VI
 DANGER

Causes skin irritation. Harmful if swallowed. Causes serious eye damage. May cause respiratory irritation. Keep out of reach of children. Avoid breathing dust. Wear protective gloves and eye protection. Wash hands thoroughly after handling. IF SKIN IRRITATION OCCURS: Get medical advice/attention. IF SWALLOWED: Call a poison centre or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison centre or doctor/physician. Dispose of contents/container in accordance with local/regional regulations.

	EN 12004 : 2007 + A1 : 2010 Improved fast setting cementitious adhesive with additional characteristics for internal and external tiling
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Reaction to fire	Class E
Release of dangerous substances	See SDS
Bond strength as:	
- Early tensile adhesion strength	≥ 0.5N/mm ²
- High initial tensile strength	≥ 1N/mm ²
Durability for:	
- High tensile adhesion strength after heat ageing	≥ 1N/mm ²
- Tensile strength after water immersion	≥ 1N/mm ²
- Tensile adhesion strength after freeze/thaw cycles	≥ 1N/mm ²

THICK BED PORCELAIN & STONE TILE ADHESIVE

**Highly Polymer Modified Fast Setting
Cementitious White Adhesive**

- 3 hour set
- Internal & external
- Flexible
- Undertile heating
- 5mm to 25mm
- Plywood overlay
- Large format tiles
- Limestone & Marble
- BS EN 12004 C2F



Norcross Thick Bed Stone & Porcelain White Floor Tile Adhesive is a white cement based thick bed floor adhesive designed for fixing fully vitrified porcelain, ceramic and light coloured or translucent natural stone tiles to a variety of floor surfaces. Its shrinkage compensating deep bed formulation makes it ideal for the installation of large format tiles and slabs affording excellent area contact without the need to back butter. It is water and weather resistant and is suitable for both internal and external locations. It has a setting time of 3 hours permitting early trafficking of the tile installations. Containing unique Rock-Tite™ polymeric binders, the enhanced flexibility of the adhesive allows a greater range of fixing possibilities normally only achieved by the addition of separate admixtures. The adhesive has excellent thermal ageing properties and is particularly suitable for heated floors and timber floors when overlaid with WBP/Marine grade plywood.

Conforms to BS EN 12004 C2F

Concrete/ Cement:Sand Screed	Yes
Cement:Sand Render	No Not suitable for walls
Anhydrite Screed	Yes Seal & prime as overleaf
Existing Vinyl	Yes
Flooring Grade Asphalt	Yes
Existing Glazed Tiles	Yes Slurry bond coat
Heated Floors	Yes
Timber Floors	Yes Permalayer or plywood/ Pro Board overlay
Plaster/Plasterboard	No Not suitable for wall use
Total Immersion	Yes

EN Classification	BS EN 12004 C2F
Working Time @ 20°C	Up to 30 minutes
Set Time @ 20°C	3 hours
Bed Thickness	3mm to 25mm
Coverage	Floors: Approx. 5kg/m ² at a bed of 5mm
Trowels: Walls - Dry Areas	N/A
Walls - Wet Areas	N/A
Walls - Mosaics	N/A
Floors	20mm round notches

SURFACE PREPARATION

All surfaces should be dry, clean and strong enough to support the tiles to be fixed. Tiling substrates should be true and flat to permit fixing without visible lipping of tile edges. On floors, any gaps exceeding 3mm under a 2 metre straight edge should be corrected using a suitable Norcross Levelling Compound. This will be particularly appropriate where larger tiles or those with rectified edges are being installed. Porous or dusty surfaces must be sealed using Norcross Prime Bond diluted 1:4 with water.



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Anhydrite & Hemihydrate (Gypsum) Screeds

These must be cured to their respective manufacturers directions before tiling can begin. The surface must be free from laitance and primed using progressively stronger coats of Norcross Prime Bond as follows: Diluted 1:4 parts water. Allow to dry. 1:3 parts water. Allow to dry. If the screed is still porous apply a third coat diluted 1:2 parts water. Allow to dry.

Heated Floors (Dense Construction)

Thick Bed Stone & Porcelain White Adhesive is suitable for use with underfloor and undertile heating systems on solid floor structures. After tiling the floors should not be switched on for at least 14 days and then brought up to operating temperature gradually during the initial heating of the floor (Refer to Norcross How to sheet 'Commissioning of Underfloor/Undertile Heating Systems'). Undertile heating cables and mats can be tiled directly or prior to tiling they can be bedded into a screed of a suitable Norcross Levelling Compound. This method prevents damage to the heating elements during the laying process.

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MIXING

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The adhesive is designed to be mixed wetter than conventional cement-based adhesives and may be poured onto the substrate instead of being applied by trowel. The adhesive contains specialist additives which cause the wet mix to gel, allowing it to be combed with a notched trowel and support the weight of large tiles. The wet consistency of the mixed adhesive ensure that the backs of tiles are 'wetted out' and

enables solid, void-free bedding to be achieved easily, even under large, heavy natural stone tiles. It should be noted that using less water to achieve a stiffer, drier mix will reduce the pot life and working time of the adhesive considerably.

APPLICATION

Using a suitably notched trowel spread the adhesive onto the fixing surface to form parallel ribs into which the tiles should be applied with a firm twisting action. Spread only enough material that remains workable and as such fully wets out on the tile backing. Solid-bed void-free fixing will be necessary on floors and in wet areas. Tiles with deeply keyed back profiles may need to be back buttered. Tiles may be grouted as soon as the adhesive bed is set. Under normal conditions this will be around 3 hours after fixing although this will be extended in cold conditions. Do not use below 5°C.

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