# 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**

Norcros 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 Norcros Thick Bed Stone & Porcelain White or Rapid Porcelain & Stone White to avoid staining.

**Conforms to BS EN 12004 C2F**

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| **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 | |

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| **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/m² 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 Norcros 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 Norcros 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 Norcros Permalayer antifracture membrane is used.

**Anhydrite & Hemihydrite (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 Norcros 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 Norcros 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 Norcros 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 Norcros 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 Norcros 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 Norcros 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 Norcros 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.

CE **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/mm² |
| - High initial tensile strength | ≥ 1N/mm² |
| **Durability for:** | |
| - High tensile adhesion strength after heat ageing | ≥ 1N/mm² |
| - Tensile strength after water immersion | ≥ 1N/mm² |
| - Tensile adhesion strength after freeze/thaw cycles | ≥ 1N/mm² |