

RAPID PORCELAIN GREY S1 TILE ADHESIVE

Fast Setting Grey Cementitious Adhesive with Reinforced Polymer Technology

- Increased flexural strength
- Extended open time
- Improved bed thickness of 2mm to 10mm
- Crack bridging
- Improved coverage
- Underfloor heating & plywood overlay
- BS EN 12004 C2FE S1



Norcross Rapid Porcelain Grey S1 Tile Adhesive is a highly polymer modified fast setting grey cement-based powder adhesive designed with increased flexural strength and extended open time for fixing all types of tiles to a variety of building surfaces in internal, external and total immersion locations. The increased polymer level combined with fibres gives reinforced flexural and bond strength in addition to giving the adhesive crack bridging properties up to 3mm and also an extended pot life to improve workability. The adhesive has excellent thermal ageing properties and is particularly suitable for heated floors and strengthened timber floors. A further benefit of the adhesive is its anti-shrinkage properties, making it suitable for a bed thickness up to 10mm.

*When fixing light coloured or translucent stone a white adhesive such as Norcross Rapid Porcelain & Stone White S1 should be used to avoid staining.

Conforms to BS EN 12004 C2FE S1

Cement:Sand Render	Yes
Anhydrite Screed	Yes Seal and 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/Pro Ply overlay
Plaster/Plasterboard	Yes Prime with undiluted Prime Bond
Total Immersion	Yes

EN Classification	BS EN 12004 C2FE S1
Working Time @ 20°C	Up to 60 minutes
Set Time @ 20°C	3 hours
Bed Thickness	2mm to 10mm
Coverage	Walls: Approx. 3kg/m ² Floors: Approx. 4kg/m ²
Trowels:	
Walls - Dry Areas	6mm round notches
Walls - Wet Areas	10mm tapering notches
Walls - Mosaics	4mm square notches
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 anti-fracture membrane is used.

Cement:Sand Render

Must be at least 14 days old. New render should not be applied to new masonry walls until 6 weeks after the brick or blockwork has been completed. This allows for drying shrinkage to have taken place. In cold conditions these times will be extended.

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. Diluted 1:3 parts water. Allow to dry. If the screed is still absorbent then a third priming coat diluted 1:2 parts water should be applied. Allow to dry.

Heated Floors (Dense Construction)

Rapid Porcelain S1 Tile Adhesive is suitable for use with underfloor and undertile heating systems. 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 Rapid Porcelain S1 Tile Adhesive providing it is in good condition, clean and able to support the tiling.

Gypsum Plasterboard**

Seal with Norcross Prime Bond prior to tiling.

Gypsum Plaster**

Must be sealed with Norcross Prime Bond before tiling. If finishing plaster is polished, rub down to form a key before priming.

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 Rapid Porcelain S1 Tile 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**

(BS EN 636-3 WBP/Marine Grade Plywood) 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 undiluted Prime Bond. All timber constructions must be adequately ventilated behind to prevent atmospheric moisture distortion and warpage of the boards themselves.

Beware of some grades of Eastern European and Far Eastern Plywood which may be susceptible to disintegration when wet. Plywood which has been treated/coated may not be suitable to receive a tiled finish as the coating may inhibit adhesion to the board.

**In wet areas or those of intermittent wetting such as shower areas, moisture sensitive backgrounds such as plaster 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 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 60 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. The adhesive is designed for thin bed fixing up to 10mm although in isolated areas it can be bedded out up to 12mm in thickness. 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

On true surfaces with small tiles <200 x 200mm on walls approx. 2.75kg per m² and on floors approx. 3.3kg per m². With larger tiles >330 x 330mm on walls approx. 3.3kg per m² and on floors approx. 4kg per m².

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.


Further information may also be obtained from the Norcross 'How to' sheets available on the website.

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			
	<table border="1"> <tr> <td>Reaction to fire</td> <td>Class E</td> </tr> <tr> <td>Release of dangerous substances</td> <td>See SDS</td> </tr> </table>	Reaction to fire	Class E	Release of dangerous substances
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			
BS EN 12002: Transverse Deformation				
- Deformability of the set adhesive	≥ 2.5mm			