

## Specifications

<b>Classification</b>	BS EN 12004 C2TE-S1
<b>Pot Life @ 20°C</b>	Up to 2 hours
<b>Bed Thickness</b>	2-10mm (12mm in isolated areas)
<b>Approximate Coverage</b>	<b>Walls:</b> Approx. 3kg/m <sup>2</sup> <b>Floors:</b> Approx. 4kg/m <sup>2</sup>
<b>Suitable Trowels</b>	<b>Walls:</b> Dry areas: 6mm round notches <b>Wet Areas:</b> 10mm tapering notches <b>Mosaics:</b> 4mm square notches <b>Floors:</b> 20mm round notches

## Suitable For Fixing Tiles To:

- Concrete/Cement: Sand Screed
- Cement: Sand Render
- Anhydrite & Hemihydrite (Gypsum Screeds)
- Heated Floors (Dense Construction)
- Thermoplastic Floor Tile/Vinyl Sheet
- Asphalt (Internal Only)
- Gypsum Plasterboard\*\*
- Gypsum Plaster\*\*
- Glazed Surfaces
- Plywood Overlay on Existing Timber Floors (Water & Boil Proof WBP Grade) Internal Tiling Only

\*\*Must be sealed with NX Multi-Purpose Primer before tiling

# NX Semi-Rapid Flexible S1 Tile Adhesive

## Fast Setting Cementitious Adhesive

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### DESCRIPTION

NX Semi Rapid Flexible S1 Wall & Floor Adhesive is a grey cement-based medium setting tile adhesive suitable for fixing porcelain and ceramic tiles to walls & floors in interior and exterior areas. Suitable for thickness between 2mm and 6mm (Up to 15mm in small areas not exceeding 1m<sup>2</sup>). At 20°C, the adhesive from when mixed will allow a workable pot-life of 2 hours and then will reach initial set after approx. 6 hours. Please note that the setting time will be extended at lower temperatures.

Conforms to classification BS EN 12004 C2TE-S1.

### 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 NX 3-50mm 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 NX Multi-Purpose Primer 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.

#### 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 NX Multi-Purpose Primer as follows: Diluted 1: 4 parts water. Allow to dry. Diluted 1: 3 parts water. Allow to dry. Diluted 1: 2 parts. Allow to dry.

#### Heated Floors

NX Semi-Rapid Flexible S1 Wall & Floor Tile 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 28 days and then brought up to operating temperature gradually during the initial heating of the floor. Undertile heating cables and mats can be tiled directly or prior to tiling they can

be bedded into a screed of NX 3-50mm Levelling Compound. This method prevents damage to the heating elements during the laying process.

#### Vinyl Tiles / Asphalt (internal only)

Flooring grade asphalt can be tiled directly with NX Semi-Rapid Flexible S1 Wall & Floor Tile Adhesive providing it is in good condition, clean and able to support the tiling.

#### Gypsum Plasterboard\*\*

Seal with NX Multi-Purpose Primer prior to tiling.

#### Gypsum Plaster\*\*

Must be sealed with NX Multi-Purpose Primer 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 NX Multi-Purpose Primer: 2 parts NX Semi-Rapid Flexible S1 Wall & Floor Tile Adhesive, which should be brushed onto the surface and allowed to dry. This will provide a key onto which the adhesive layer can bond.

#### Plywood Overlay On Existing Timber Floors (WBP/Marine grade)\*\*

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 NX Multi-Purpose Primer. All timber constructions must be adequately ventilated behind to prevent atmospheric moisture distortion and warpage of the boards themselves.

\*\*In wet areas or those of intermittent wetting such as shower areas, moisture sensitive backgrounds such as plaster should be waterproofed using a suitable waterproofing 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 2 hours – this will be extended in cold conditions and reduced in hot weather/ warm temperatures.

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### 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. Tile 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 6 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 m<sup>2</sup> and on floors approx. 3.3kg per m<sup>2</sup>. With larger tiles >330 x 330mm on walls approx. 3.3kg per m<sup>2</sup> and on floors approx. 4kg per m<sup>2</sup>.

### STORAGE

Store in dry internal conditions away from direct sunlight between 5-35°C. The product has a 12 month shelf life from date of manufacture.

### TECHNICAL ADVICE

For advice on tile installation products call the Palace Chemicals Technical Helpline on 0151 336 9104.



**Causes Serious Eye Damage**  
**Causes Skin Irritation**  
**May Cause Respiratory Irritation**  
**May Cause An Allergic Skin Reaction**

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.

PALACE CHEMICALS LTD  
Speke Hall Industrial Estate  
Speke, Liverpool, L24 1YA  
Tel: +44 (0) 151 486 6101 Fax: +44 (0) 151 448 1982  
Email: sales@palacechemicals.co.uk  
Web: www.palacechemicals.co.uk




**REFER TO PRODUCT AND SAFETY DATA SHEET FOR FULL DETAILS.**






**MADE IN THE UK**

# NX Semi-Rapid Flexible S1 Tile Adhesive

## Fast Setting Cementitious Adhesive

		
Palace Chemicals Ltd, Speke Hall Industrial Estate, Speke, Liverpool, L24 1YA		
<b>13</b>		
<b>DoP - 82-77</b>		
<b>EN 12004:2007 + A1:2012 - C2TE-S1</b> Improved deformable standard setting cementitious adhesive with reduced slip & extended open time for internal & external tiling		
Reaction to fire	Class E	
Release of dangerous substances	See MSDS	
Bond strength as:		
- Initial tensile strength	≥ 1.0 N/mm <sup>2</sup>	
- Tensile strength after 30 minutes open time	≥ 0.5 N/mm <sup>2</sup>	
Durability for:		
- High tensile adhesion strength after heat ageing	≥ 1.0 N/mm <sup>2</sup>	
- Tensile strength after water immersion	≥ 1.0 N/mm <sup>2</sup>	
- Tensile adhesion strength after freeze/thaw cycles	≥ 1.0 N/mm <sup>2</sup>	
Slip:		
- Slip	≤ 0.5mm	
- Transverse deformation	≥ 2.5mm	

		
Palace Chemicals Ltd, Speke Hall Industrial Estate, Speke, Liverpool, L24 1YA		
<b>13</b>		
<b>DoP - 82-78</b>		
<b>EN 12004:2007 + A1:2012 - C2TE-S1</b> Improved deformable standard setting cementitious adhesive with reduced slip & extended open time for internal & external tiling		
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**WHITE**  
**WEB LINK**



**GREY**  
**WEB LINK**

