

**PRODUCT & FIXER GUIDE**

## YOU CAN TRUST IN NORCROS ADHESIVES

Norcros Adhesives is a rapidly growing and well-established manufacturer and supplier of branded adhesives, grouts, surface preparation and aftercare products for fixing ceramic and porcelain tiles, mosaics, natural stone and marble. Based in Stoke-on-Trent, the company serves the UK market, as well as exporting to Ireland, the USA and the Middle East.

We provide excellent technical support and back-up both from our experienced technical department and our team of Regional and Area support managers. We perform site visits, prepare reports and letters, offer remedial advice and are also licensed by RIBA to prepare full NBS M40 tiling specifications.

Norcros Adhesives have an extended product offering to enable them to supply a full system solution for a variety of tiling scenarios to help make the sourcing of materials fast and simple for fixers.



## LIFETIME GUARANTEE

Norcros are now offering a full “guarantee for life” across the whole of their product range. This means that the product is guaranteed to last for a lifetime provided that the correct recommended fixing and application techniques are used. The recommended application techniques for tiling to a variety of backgrounds can be viewed in the extensive “how to” section of the website in downloadable PDF format or available to watch via YouTube.

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## TECHNICAL SUPPORT SERVICE



Norcros Adhesives is well equipped for the challenges and issues customers may encounter during the fixing process. A working day for the technical team brings everything from 'which product should be used for fixing glass mosaic tiles', to 'strengthening a floor with minimal build up of height' and even 'how to tile to external metal bridge structures'.

Be assured, assistance is always available to ensure jobs are completed effectively, efficiently and to current British Standard recommendations.

Technical support is evident both through manned helplines and on-site visits. Free of charge site visits by highly experienced staff can be arranged during the fixing process. In the event of any issues or problems arising following the completion of a project, a technical investigation can be requested complete with a site report.

A comprehensive site visit report details the findings, together with detailed recommendations for remedial work where required. Clients can rest assured that Norcross Adhesives are with them every step of the way.

**Technical Support: 01782 524140**

## EXPERT ADVICE @ YOUR FINGERTIPS

Introducing the new Norcross Adhesives website. Specification support and expert advice at a click.

- Full product range
- Extensive guides & videos
- Coverage calculators
- Smartphone App
- Case studies



[www.norcros-adhesives.com](http://www.norcros-adhesives.com)

## TRAINING

Norcros Adhesives offer bespoke product & fixing training for Distributors, Retailers, Fixers and Specifiers, which can be carried out either in-house or at the customer's premises.

## ENVIRONMENTAL INITIATIVE

Norcros are highly conscious of their carbon footprint and work hard to minimise the mark left on planet Earth with some of the following:

- Norcros products have a very low volatile organic compound
- Pallets are re-used, repaired or recycled
- Over 80% of Norcross bought in items are sourced from a 30-mile radius
- Over 90% of waste material created during the manufacturing process is recycled



## SUSTAINABILITY SCHOOL



Launched in 2012, the Sustainability School is an initiative designed to promote sustainability in construction supply chains. It provides free practical support in the form of e-learning modules, tailored self-assessment and action plans, sustainability training and networking.

In 2016 and 2017 Norcros won The Tile Association Gold Award for Best Environmental Initiative. This was in recognition of the many measures the company has implemented to improve the environmental management of its operations.

The company has also achieved ISO 14001 accreditation for its work to reduce waste and improve resource efficiency. Within just two months of joining the Sustainability School, Norcros Adhesives achieved Silver Member status and we are now Gold Members. The Supply Chain Sustainability School is an initiative of the UK Construction Strategy 2025. This sets out clear ambitions for the construction industry - including 50% less CO<sub>2</sub> and a 50% improvement on speed of job completion with 33% less cost.

An independent third party, Action Sustainability, delivers the work of the School and all partners sign up to a Code of Ethics. Over a period of time, the School aims to drive up awareness and understanding of sustainability issues in the supply chain nationally.

## SKILLS CENTRE

Opened in May 2016, the Norcros Adhesives Skills Centre provides modern, bespoke facilities to enable the delivery of the company's expanding range of product training and tiling courses for the benefit of both its customers and own employees.



The Skills Centre comprises a lecture room and large practical area in which the size and configuration of the tiling bays can be changed to accommodate up to 12 trainees. The nature of the training puts the emphasis firmly on the practical aspects, with all trainees encouraged to improve their own product knowledge and tiling techniques.

Industry-leading training courses delivered within the Skills Centre include:

- Norcros product training, comprising modules which aim to promote Norcros products and their correct use, helping trainees to develop best practice, working towards NVQ level and learning about the requirements of British Standards.
- Natural stone fixing courses
- Norcros Adhesives' own Basic Introduction to Wall & Floor Tiling – a course principally aimed at the DIY market.
- Tiling to Wet Rooms and Underfloor Heating.
- One day bespoke courses aimed at specific customers and their requirements.
- CPD Training for architects, specifiers and contractors.

## BEST PRACTICE GUIDANCE

### BS 5385

We would recommend referring to the British Standards for wall and floor tiling.

BS 5385 is the code of practice for wall and floor tiling. There are 5 parts, each covering a specific area:

- **Part 1:** Design and installation of internal ceramic, natural stone and mosaic wall tiling in normal conditions.
- **Part 2:** Design and installation of external ceramic and mosaic wall tiling in normal conditions.
- **Part 3:** Design and installation of internal and external ceramic and mosaic floor tiling in normal conditions.
- **Part 4:** Design and installation of ceramic and mosaic tiling in special conditions.
- **Part 5:** Design and installation of terrazzo, natural stone and agglomerated stone tile and slab flooring.

### ISO 9001 and ISO 14001



Norcros Adhesives are fully ISO 9001 and ISO 14001 certified and ensure that standards across the company's quality management system are very high and promote continual improvement.

The policy ensures that Norcross Adhesives comply with relevant legislation and environmental standards to provide quality products, which are fit for purpose to our customers.

## TROWEL RECOMMENDATIONS

### ROUND NOTCH TROWELS

#### UNIVERSAL

- Edge Profile: 20mm round notches, 10mm deep at 28mm centres
- Coverage: 100% achievable at 3 to 4mm bed depth
- Use for: Solid bed fixing
- Tiles: Suitable for most wall/floor tiles with keyed backs, fixing large format wall tiles and 300mm floor tiles

#### LARGE FORMAT

- Edge Profile: 20mm round notches, 13mm deep at 28mm centres
- Coverage: Approx. 100%
- Use for: Large format tiles
- Tiles: Floor tiles over 300mm x 300mm

### SQUARE NOTCH TROWELS

#### THIN BED

- Edge Profile: 10mm tapering notches, 5mm deep, at 12.5mm centres.
- Coverage: Approx. 100% at 2 to 3mm depth
- Use for: Solid bed fixing on all wall surfaces
- Tiles: Most ceramics, marble, natural stone wall tiles 300mm and smaller

#### SOLID BED

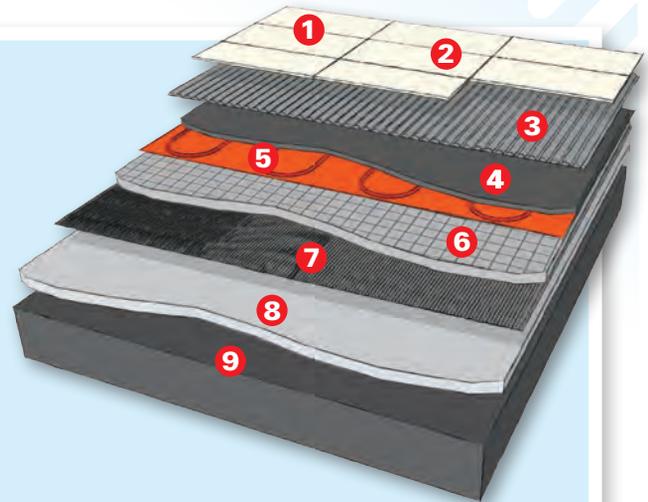
- Edge Profile: 5mm notches at 6mm centres - with 3mm protruding tips above notches to ensure 4mm solid bed.
- Coverage: Approx. 100%
- Tiles: Most floor tiles

#### MOSAICS

- Edge Profile: 4mm square notches at 8mm centres
- Coverage: Approx. 90% to 100%
- Use for: Thin bed fixing
- Tiles: Mosaics and wall/floor tiles up to 100mm x 100mm

## UNDERTILE HEATING SYSTEM INSTALLATION

- 1 Norcross 4 into 1 Grout
- 2 Tiles
- 3 Norcross Rapid Porcelain Grey Adhesive
- 4 Norcross Pro 50 Levelling Compound
- 5 Under Tile Heating
- 6 Norcross Pro Board
- 7 Norcross Rapid Porcelain Grey Adhesive
- 8 Cement:Sand Screed
- 9 Concrete



### Are timber boards suitable to lay undertile heating cables/mats directly onto?

Timber products can be affected by changes in temperature, which can cause them to expand, shrink and even bow. Additionally they absorb heat resulting in a reduction in the efficiency of the undertile heating system and therefore increased running costs. Laying 10mm thick Norcross Pro Board 1000 onto the timber boards prior to installing the undertile heating will provide a stable insulated layer beneath the heating cables which will not be affected by temperature and will also ensure that the heat is directed through to the tiled surface, increasing the efficiency and reducing the running costs of the heating system.

Additionally, Norcross Pro Board will increase the rigidity of the floor making it possible to fix tiles using highly polymer modified cement-based adhesives such as Norcross Rapid Porcelain Grey, Norcross Rapid Porcelain & Stone White and Norcross Thick Bed Porcelain & Stone adhesives.

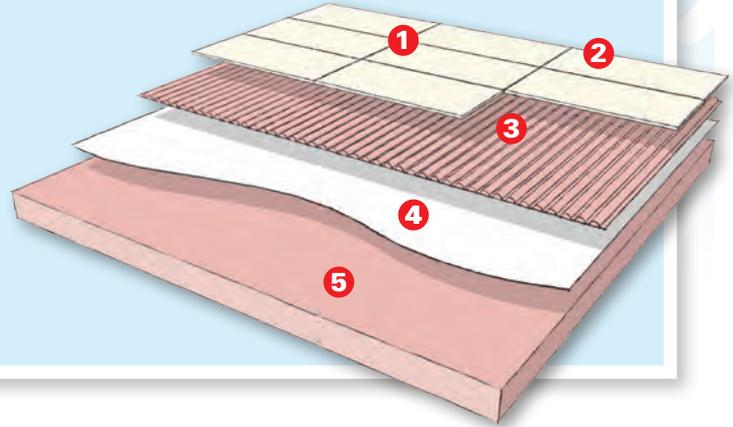
### Is it acceptable to tile directly over undertile heating mats and cables?

This is possible, however there is always a risk that the heating mat/cables can be damaged during the fixing process. For this reason it is advisable to encapsulate the cables in a layer of a suitable levelling compound before fixing commences. Norcross Pro 10 or Pro 10+ Levelling Compounds may be used on solid floors such as concrete or sand:cement screeds. In areas which may be subject to movement, Norcross Pro 50 Levelling Compound should be used.

### How long should the tiles be laid for before the undertile heating is switched on?

The tiles must have been fixed and grouted for a minimum of 14 days before the heating is switched on at a rate of 5°C per 24 hours.

- 1 Norcross 4 into 1 Grout
- 2 Tiles
- 3 Norcross Tile to Gypsum Adhesive
- 4 Norcross Prime Bond
- 5 Anhydrite Screed



### How soon after laying an anhydrite screed can tiles be fixed?

The screed must be:

Allowed to dry out and prepared as per the screed manufacturers' recommendations. Generally anhydrite screeds should be allowed to dry at a rate of 1 day per mm of screed thickness for screeds of up to 40mm thickness and 2 days per mm for any additional thickness over 40mm to achieve a moisture content of no greater than 1% w/w or 75% Relative Humidity (RH), however the screed manufacturer should be consulted for their recommendations.

Free from all surface contamination, dust and laitance (the surface should be lightly sanded and vacuumed).

### Which adhesives can be used to fix tiles onto an anhydrite screed?

C2 adhesives such as Norcross Rapid Porcelain Grey, Norcross Rapid Porcelain & Stone White or Norcross Thick Bed Porcelain & Stone may be used, however following drying and sanding the screed should be primed using progressively stronger coats of Norcross Prime Bond. Initially apply a 1: 4 parts water dilution and when dry follow with a 1: 3 dilution applied at 90° to the first coat. If after these 2 coats the surface is still absorbent, apply a further coat at a 1: 2 dilution and allow to dry. Alternatively, Norcross Tile to Gypsum Adhesive may be used with the following preparation:

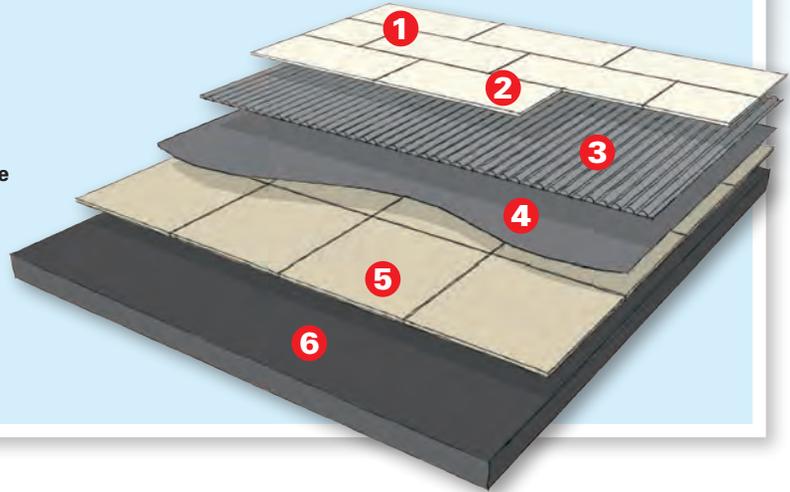
The screed must be:

Allowed to dry out and prepared as per the screed manufacturers recommendations to achieve a Relative Humidity (RH) of 85%.

Free from all surface contamination, dust and laitance.

Porous surfaces should be primed with Norcross Prime Bond diluted 1: 4 with water & allowed to dry before fixing commences.

- 1 Norcross 4 into 1 Grout
- 2 Tiles
- 3 Norcross Rapid Porcelain Grey Adhesive
- 4 Slurry Bonding Coat
- 5 Existing Tiles
- 6 Structural Floor



### Can ready mixed adhesives be used to fix wall tiles to existing tiles?

Yes they can as long as the existing tiles are firmly bonded to the substrate, capable of supporting the additional weight of tiling and the new tiles are a ceramic biscuit body tile. The existing tiles must be thoroughly cleaned with a diluted alkaline detergent and be allowed to dry.

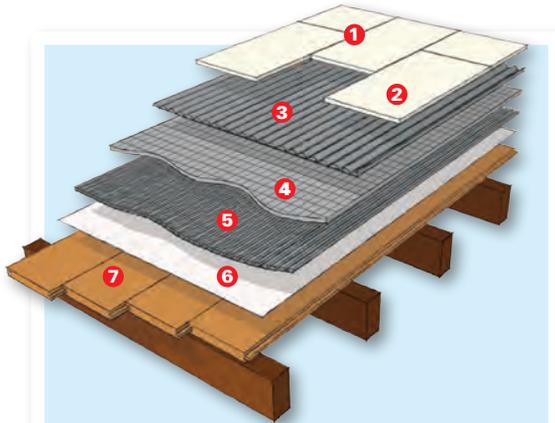
It should be noted however that ready mixed adhesives dry by water loss and fixing them onto impervious backgrounds such as existing tiles will increase the drying time of the adhesive. For this reason, it must be ensured that the adhesive is fully dry before grouting commences.

This will take at least 72 hours in good drying conditions and significantly longer in cold or humid conditions.

### Can the installation of tile on tile be fast tracked in any way?

A fast track solution is possible by using cement-based adhesives. Once the existing tiles have been cleaned using a dilute alkaline cleaner and have been allowed to dry, a slurry bonding coat consisting of 2 parts cement-based adhesive: 1 part Norcross Prime Bond should be brush applied to the existing tiles and be allowed to dry (this should take no more than 60 minutes).

This will give a hard sand-paper type finish to the existing tile which will provide a key for the cement-based adhesive to bond on to. This method is suitable for use on both walls and floors.



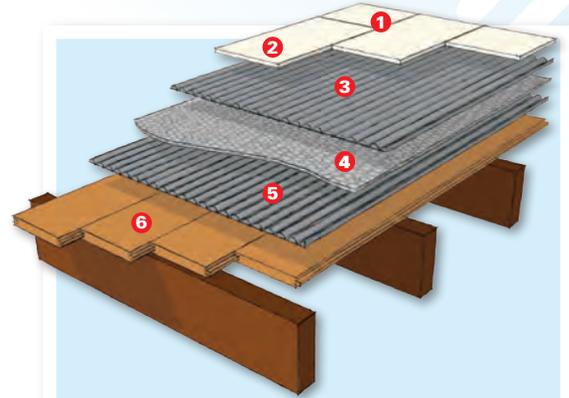
- 1 Norcross 4 into 1 Grout
- 2 Tiles
- 3 Norcross Rapid Porcelain Grey Adhesive
- 4 Norcross Pro Board
- 5 Norcross Rapid Porcelain Grey Adhesive
- 6 Norcross Prime Bond
- 7 Tongue & Groove Floorboards

**It is now standard working practice in new build houses to install timber floors before the roof is put on leaving the timber exposed to the elements and increasing the risk of movement in the boards after tiles have been fixed.**

**What can be done to overcome this?**

The fast track nature of new build homes means that it is not possible to allow the timber boards to dry out to the correct moisture content causing the boards to shrink, curl and even drop after tiles have been fixed, resulting in the grout and tiles cracking and debonding. To overcome this problem, it is recommended that the timber is overlaid with 10mm thick Norcross Pro Board 1000 as soon as possible after the timber has been laid. Pro Board is waterproof and suitable for external use, meaning that the timber will be protected from moisture ingress and the subsequent movement stresses. Additionally, when it is time for the tiles to be fixed, the floors will be

## TILING TO TIMBER FLOORS



- 1 Norcross 4 into 1 Grout
- 2 Tiles
- 3 Norcross Rapid Porcelain Grey Adhesive
- 4 Norcross Permalayer
- 5 Norcross Rapid Porcelain Grey Adhesive
- 6 Tongue & Groove Floorboards

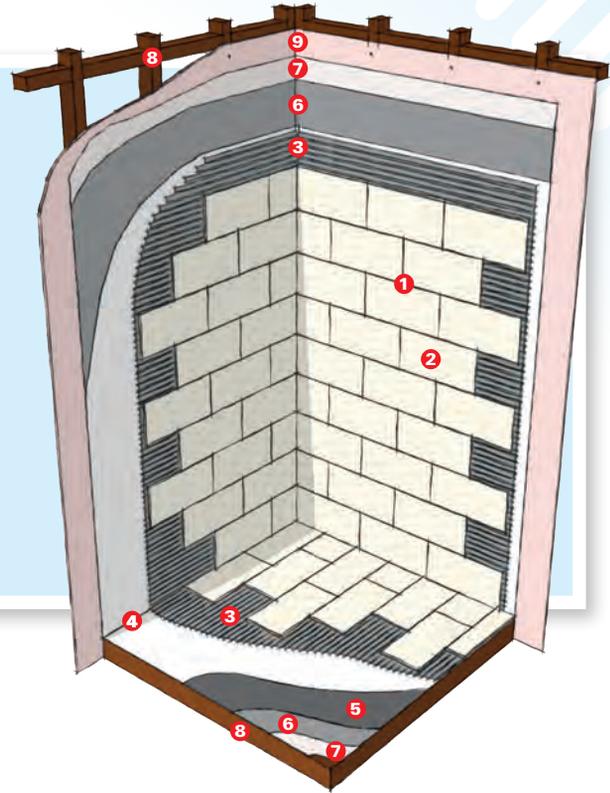
sufficiently rigid to enable a C2 polymer enhanced cement-based adhesive such as Norcross Rapid Porcelain Grey, Norcross Rapid Porcelain & Stone White or Norcross Thick Bed Porcelain & Stone Adhesive to be used.

**Is there a method of strengthening the timber floor without adding 10mm to 18mm to the floor height before tiles can be fixed?**

Norcross Permalayer is an anti-fracture membrane which adds only 2mm to the floor height before tiles are fixed using a C2 polymer enhanced cement-based adhesive such as Norcross Rapid Porcelain Grey, Norcross Rapid Porcelain & Stone White or Norcross Thick Bed Porcelain & Stone. Permalayer is laid into a 2mm bed of Norcross Porcelain Grey adhesive which is allowed to dry before tiling commences. In wet areas, laying Permalayer in a bed of Rapid Porcelain Grey adhesive mixed with Norcross Waterproofing Admixture instead of water will provide a fully tanked area.

## TILING TO WET AREAS

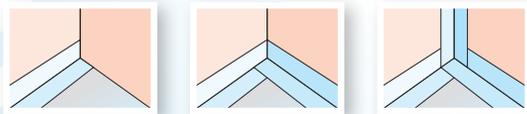
- 1 Norcross Stop Mould Wall Tile Grout
- 2 Tiles
- 3 Norcross Rapid Porcelain Grey Adhesive plus Waterproofing Admixture
- 4 Polyester Tape
- 5 Permalayer
- 6 Norcross Rapid Porcelain Grey Adhesive plus Waterproofing Admixture
- 7 Primer
- 8 Timber
- 9 Plasterboard



### What are the options available for providing a waterproof system in showers and wet rooms?

There are several options available in the Norcross range which, if used in accordance with our recommendations will provide a guaranteed tanked installation.

**Option 1:** Norcross Wet Seal Tanking Kit. This is a paint on system suitable for use on all types of backgrounds including plaster, plasterboard and plywood. The kit consists of 5kg of paint on membrane, 500ml primer & 10m polyester tape which is sufficient to tank approximately 5m<sup>2</sup> of walls or floors. Minimum drying time of approximately 24 hours.

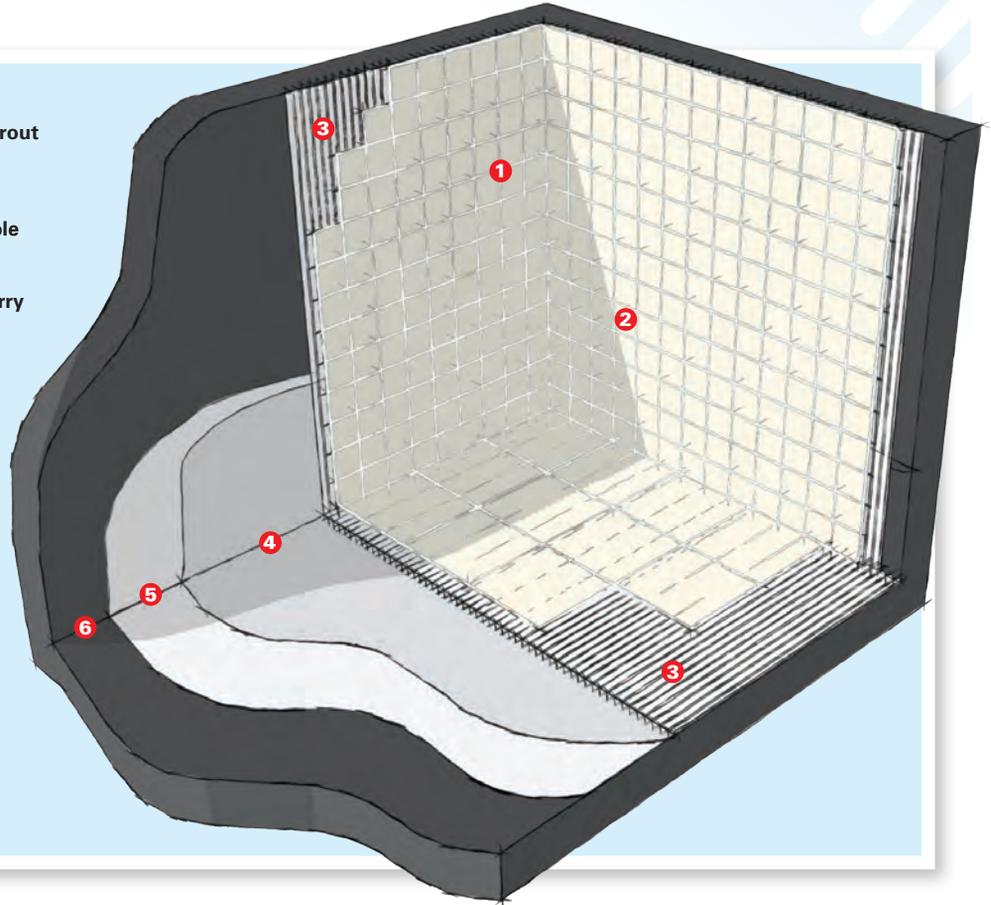


**Option 2:** Norcross Waterproofing Admixture, a specially formulated admixture used as a replacement for water

when mixing cement-based adhesives. It is ideal for use with Norcross Permalayer anti fracture membrane. Minimum drying time of approximately 3 hours if a rapid setting adhesive is used.

**Option 3:** Norcross Pro Board & Shower Trays. Fibre reinforced, cementitious insulated tile backer boards and pre-formed wet room trays. Available in a range of sizes and thicknesses. The boards and trays are waterproof and only require the use of Norcross Butyl Tape to seal joints between board junctions and around the perimeter of the installation. No priming or tanking is required. Minimum drying time of 3 hours if Norcross Rapid Porcelain Grey is used to fix the boards and tray. No drying time required if the boards are mechanically fixed.

- 1 Norcross Super Epoxy Grout
- 2 Tiles
- 3 Norcross One Part Flexible White Adhesive
- 4 Waterproof Sealing Slurry
- 5 Render
- 6 Concrete Shell



### What products are suitable for fixing tiles in a swimming pool tank?

Should it be deemed necessary to apply a waterproofing layer to a pool tank before the commencement of tiling, Norcross One Part Waterproofing Sealing Slurry should be brush applied or trowelled onto the cement:sand render. A minimum of 2 coats are required and the sealing slurry should be allowed to dry for a minimum of 24 hours before

tiles are fixed. Tiles may be fixed in a solid bed of Norcross One Part Flexible Adhesive. Once the adhesive has dried, joints between the tiles may be filled as follows:

#### **Hard Water Areas (>200mg/l CaCO<sub>3</sub>):**

Norcross Stop Mould Flexible or Norcross 4 into 1 Grout.

#### **Soft Water Areas (<200mg/l CaCO<sub>3</sub>):**

Pools with rapid water movement or where an impervious grout is required: Norcross Super Epoxy.

### RAPID REPAIR MORTAR

A cement-based rapid setting mortar designed to repair concrete/cement:sand screed floors and cement:sand render walls internally and externally. Designed for use up to a thickness of 25mm and dries in 1 to 1.5 hours at 20°C.



- Rapid setting
- Vertical and horizontal surfaces
- Suitable for forming ramps
- Ideal for patch repairs and filling cracks

### ADI FLEX

A water-based polymer additive designed for enhancing the flexibility and adhesion strength of Norcross cement-based adhesives and grouts permitting a greater range of fixing possibilities not usually obtained with standard non-polymer enhanced products.



- Internal & external
- Adds flexibility to cement-based adhesives and grouts
- Suitable for heated floors
- Ideal for timber substrates

### PRIME BOND

A multi-purpose water-based synthetic SBR polymer. It is water and weather resistant and is suitable for internal and external use on a wide range of substrates as a primer, sealer, dust proofer, slurry bonding coat and admixture in screeds and renders.



- Multi-purpose:  
Primer, sealer, dustproofer slurry bonding coat and admixture
- SBR
- Internal & external
- Water & frost resistant

## REPAIR MORTAR, ADMIXTURES PRIMERS & DPM

### PRO GYP-BASE FAST TRACK SEALER

Norcross Pro Gyp-Base is a 3-part preparation system which allows ceramic & porcelain tiles to be fixed onto anhydrite screeds that are a minimum of 7 days old (95% Relative Humidity). The system offers a fast track solution when tiling onto anhydrite screeds, greatly reducing the minimum drying times generally quoted for this type of screed of 1mm/day up to 40mm and an additional 1mm/2 days above 40mm thickness.

Norcross Pro Gyp-Base consists of a primer, moisture suppressant and gritted primer which allow fast track tile installation without detracting from the overall screed strength. It is ideal for use on both unheated and heated anhydrite screeds. Once dry, tiles may be fixed to the Pro Gyp-Base system using Norcross Pro Gyp-Base Adhesive. A 15kg kit contains everything required to prepare and seal approximately 25m<sup>2</sup> area.

- Tile to 7 day old screeds (up to 95% RH)
- Kit contains all you need to prepare 25m<sup>2</sup>



### PRO DPM

A solvent-free, one component, ready to use Hybrid system that dries quickly to provide a waterproof surface membrane up to 97% RH. Norcross Pro DPM impedes the passage of residual moisture, allowing early installation of floor coverings in fast-track building programmes. The product is applied in two coats and can be used to isolate residual construction moisture up to 97%. The product has a pot life of 6 hours and a walk on hardness time of 45 to 60 minutes. A 6kg unit will cover approximately 25m<sup>2</sup> for a 2-coat application. It should be noted that coverage will vary according to the condition of the subfloor.



- Fast drying - 45 minutes per coat
- Impedes the passage of construction moisture with a 2 coat application
- Pigmented to aid coverage uniformity
- No priming required with underlayments
- Low emission
- Re-sealable container – store for future use

### PRO FE FEATHER EDGE RAPID

A cement-based, fine textured, rapid drying patching and smoothing compound designed for use in commercial and domestic installations prior to the installation of resilient floor coverings such as vinyl and carpet. It is suitable for use from a feather edge to 3mm onto concrete/sand:cement screed, existing floor tiles, smoothing compounds, terrazzo, plywood overlay (minimum 6mm), 18mm chipboard overlay, T&G floorboards, tile backer boards and flooring grade asphalt.



- Suitable for use on plywood, concrete, sand:cement screeds/smoothing compounds, existing floor tiles
- Priming not necessary
- Install floor coverings after a minimum of 15 minutes
- Suitable for use with underfloor heating
- Just add water
- Up to 46m<sup>2</sup> per 10kg

### PRO IO LEVELLING COMPOUND

A single-part polymer modified self-smoothing floor levelling compound that is suitable for levelling a variety of substrates including concrete, cement:sand screed, flooring grade asphalt, terrazzo and existing quarry and vinyl tiles.



- Internal and external
- Traffic after 3 hours
- Polymer enhanced
- Self smoothing
- 0mm to 8mm
- 0mm to 20mm with granite chippings

### PRO IO+ LEVELLING COMPOUND

A single-part self-smoothing floor underlayment. It is suitable for use from feather edge to 10mm in one application without the need for additional granite chippings. Suitable for levelling a variety of substrates including concrete, screed, flooring grade asphalt, terrazzo and existing quarry and vinyl tiles.



- Feather edge to 10mm
- Traffic after 3 hours
- Wearing surface
- For hard & soft floor coverings
- Ideal for plywood overlay
- Ammonia free
- Suitable for heated floors

### PRO 30 LEVELLING COMPOUND

An eco-friendly, flexible, single part, self-smoothing levelling compound suitable for use from feather edge to 30mm in one application without the requirement for additional aggregate. Ideal to encapsulate undertile heating mats and cables, protecting the heating elements during the tile fixing process as well as providing a level surface to tile to.



- Feather edge to 30mm in one application
- Tile after 45 minutes
- Receives impervious coverings after 90 minutes
- Good abrasion resistance
- Eco-friendly
- Underfloor/Undertile heating
- Overlaid timber floors
- Flexible

### PRO 50 LEVELLING COMPOUND

A single part, fibre reinforced self smoothing floor underlayment, suitable for use from 3mm to 50mm in one application without the need for additional granite chippings. Ideal for levelling a variety of substrates including concrete, screed, flooring grade asphalt, terrazzo and existing quarry and vinyl tiles.



- Single part
- Fibre-reinforced
- Self levelling
- 3mm to 50mm
- Traffic after 4 hours
- Suitable for heated floors
- Flexible

### 2 PART LEVELLING COMPOUND

A 2-part self smoothing floor underlayment suitable for use from feather edge to 10mm in one application without the need for additional granite chippings. Suitable for levelling a variety of substrates. Ideal for preparing sub floors prior to fixing ceramic, porcelain or natural stone tiles and soft floor coverings.



- Feather edge to 10mm
- Traffic after 3 hours
- For hard and soft floor coverings
- Ideal for plywood overlay
- Ammonia free
- Suitable for heated floors
- CT C40-F10

### PRO GYP-BASE LEVELLING COMPOUND ENHANCER

Specially formulated liquid enhancer which, when mixed with Norcross 2-Part Levelling Compound powder provides a guaranteed floor levelling system for use with Norcross Pro Gyp-Base sealer.



- Feather edge to 10mm
- Traffic after 3 hours
- For hard floor coverings
- Suitable for heated floors
- 5 litre per 20kg bag
- CT C40-F10

## WATERPROOFING ADMIXTURE

A water-based synthetic latex polymer designed to provide a waterproof system when used as a direct replacement for water to mix Norcros flexible cement-based adhesives. Suitable for use both internally and externally.



- Waterproofing System
- Easy to use
- Add to Norcros flexible cement-based adhesives
- Suitable for a variety of substrates
- Interior and exterior use

## ONE PART WATERPROOF SEALING SLURRY

A flexible, fibre reinforced cementitious waterproofing membrane suitable for waterproofing balconies, basements and swimming pools. It is suitable for use on concrete structures, render and cementitious screeds. May also be used to protect render or concrete with shrinkage cracks to block penetration of water and other contaminants.



- Cement-based
- Fibre reinforced
- Flexible
- Swimming pools, balconies and basements
- Blocks water penetration in shrinkage
- Trowel or brush applied

## WET SEAL TANKING KIT

A brush applied, tanking membrane specifically designed for use beneath ceramic, porcelain and natural stone tiles and mosaics on both internal walls and floors in installations subject to intermittent and frequent wetting such as domestic and commercial showers, wet rooms and saunas.



- Brush applied
- Waterproof
- Suitable for all types of background
- Suitable for use with ceramic, porcelain and natural stone tiles and mosaics
- 1 kit covers up to 5m<sup>2</sup>

## PERMLAYER ANTI-FRACTURE MEMBRANE

Permlayer is an anti-fracture underlay designed for use over timber as well as green and cured concrete slabs and screeds. The unique Permlayer system enables fractures up to 3mm wide to be bridged without affecting the tiled finish.



- Removes the need for costly floor build-ups such as plywood overlays
- Enables the substrate beneath to move laterally
- Suitable for use in conjunction with floors incorporating heating pipes

## PRO BOARD

High performance 6mm and 10mm thick construction/tile backer boards, manufactured from high density polystyrene. The rigid insulation core is coated with a specially formulated reinforced cementitious coating that provides a hard wearing robust waterproof surface that is perfect for the application of tiles/plaster and synthetic render.



- Excellent thermal insulation properties
- High compressive strength
- Very low weight
- Excellent impact resistance
- Internal and external walls and floors

## PRO PLY

High performance mineral based, homogenous, environmentally friendly construction/tile backer board with a manufacturing process that produces very little in the way of CO<sub>2</sub> emissions, unlike cement-particle and gypsum boards. The boards are silica and asbestos-free and are non-nutritious to mould, fungus or insects. The board is dimensionally stable when wet and is not affected by changes in temperature making it suitable for both internal & external applications.



- Environmentally friendly
- Non-Flammable (EN 13501 Class A1)
- Lightweight
- Suitable to receive tiles, paint, wallpaper, plaster skim
- Mould resistant
- Impact resistant

## ACOUSTIC MATTING

A resilient layer suitable for use under most floor finishes such as ceramic tiles, natural stone and soft floor coverings such as vinyl, wood and carpet. The matting has been developed for use in both commercial and residential buildings such as apartments, hotels, hospitals etc.



- Document E compliant
- Purpose made resilient matting
- Minimum build height
- Exceptionally good insulating qualities

### ULTIM8

An acrylic based organic dispersion wall tile adhesive for fixing ceramic tiles, including large format up to 400mm x 300mm, to a variety of substrates. It has been specially formulated to have excellent wetting out which gives the adhesive high initial grab and superb non-slip characteristics reducing the need for support battens.

Norcros Ultim8 is suitable for internal wall tiling in areas such as kitchens, bathrooms and domestic showers for bed depths up to 3mm. The adhesive has a long pot life for ease of use and minimal wastage. In normal conditions tiles can be grouted 24 hours after fixing.



- Non-slip
- Kitchens & bathrooms
- Easy to use
- Ready mixed
- BS EN 12004 D1T

### ULTIM8+

An acrylic based organic dispersion water resistant wall tile adhesive for fixing ceramic tiles, including large format up to 400mm x 300mm, to a variety of substrates. It has been specially formulated to have excellent wetting out characteristics which gives the adhesive high initial grab and superb non-slip characteristics, reducing the need for support battens.

Norcros Ultim8+ is suitable for internal wall tiling in areas such as kitchens, bathrooms as well as domestic and commercial showers including power showers. It may be used at bed depths up to 3mm. The adhesive has a long pot life for ease of use and minimal wastage. In normal conditions tiles can be grouted 24 hours after fixing.



- High-grab
- Easy to use
- For power showers
- Non-slip
- Ready mixed
- BS EN 12004 D2T

### ULTIM8 B+

A water-based, ready mixed, synthetic latex polymer contact adhesive which, when used with Norcross Pro Board, provides a system solution for fixing ceramic, porcelain and natural stone tiles to bituminous surfaces such as bitumen paint, damp proof membranes, external roofing grade asphalt and bitumen/contact adhesive residues.

Until now, these surfaces have been precluded from the use of rigid tile finishes. The adhesive allows Norcross Pro Board to be fixed directly to the bitumen surface/coating without the need for priming, providing a surface to which tiles may be fixed using Norcross flexible cement-based adhesives.



- Fixes Norcross Pro Board to bitumen surfaces
- Interior & exterior
- Minimal preparation required
- Eco friendly
- Suitable for use on roofing grade asphalt

### ULTIM8 M+

A water-based ready mixed synthetic latex polymer adhesive designed to fix Norcross Acoustic Matting and fleece backed polyethylene type decoupling membranes to a variety of surfaces, including plywood and raised access flooring, with minimal surface preparation. The open time of the adhesive is approximately 20 to 40 minutes, with a setting time of approximately 24 hours at 20°C.



- Use to fix suitable decoupling membranes
- Interior
- Fixes Norcross Acoustic Matting to a variety of surfaces
- Minimal preparation required
- Eco friendly

### SHOWER WHITE

A bright white, flexible, ready mixed dispersion thin bed wall tile adhesive designed for fixing ceramic and porcelain wall tiles to a variety of substrates. It is highly water resistant and is suitable for internal wall tiling in dry, intermittent and frequently wet areas such as domestic and commercial showers including power showers. It has a long pot life for ease of use and minimal wastage. In normal conditions tiles can be grouted 24 hours after fixing.



- Bright white
- Non-slip
- For power showers
- Flexible
- Ready mixed
- BS EN 12004 D2

### RAPID PORCELAIN & STONE

A highly polymer modified, fast setting, white cement-based powder adhesive designed with increased flexural strength and extended open time for fixing all types of tiles, including light coloured and translucent natural stone 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 crack bridging properties up to 3mm. 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.



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

### RAPID PORCELAIN

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 crack bridging properties up to 3mm.

The adhesive has excellent thermal ageing properties and is particularly suitable for heated floors and strengthened timber floors. When fixing light coloured or translucent stone, a white adhesive such as Norcross Rapid Porcelain & Stone White S1 should be used to avoid staining. A further benefit of the adhesive is its anti-shrinkage properties, making it suitable for a bed thickness up to 10mm.



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

### STANDARD SET PORCELAIN & STONE

A highly polymer fortified, fibre reinforced adhesive mortar designed with increased flexural strength for fixing all types of tiles, including light coloured and translucent natural stone to a variety of building surfaces in internal, external and total immersion locations. Setting time is 16 to 24 hours at 20°C.



- Increased flexural strength
- Improved bed thickness of 2-10mm
- Limestone & marble
- Crack bridging
- Improved coverage
- Underfloor heating & plywood overlay
- BS EN 12004 C2TE S1

### STANDARD SET FLEXIBLE

A highly polymer fortified, fibre reinforced adhesive mortar designed with increased flexural strength for fixing all types of tiles including dark natural stone 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. It is ideal for use in heavy duty areas and locations where thermal variation may occur such as heated floors. Setting time is 16 to 24 hours at 20°C.



- Increased flexural strength
- Improved bed thickness of 2-10mm
- Limestone & marble
- Crack bridging
- Improved coverage
- Wall & floors
- Underfloor heating & plywood overlay
- BS EN 12004 C2TE S1

### TILE TO GYPSUM ADHESIVE

A fibre reinforced, anhydrite-based thin bed adhesive designed for the internal fixing of fully vitrified porcelain, ceramic and natural stone tiles directly to gyvlon/gypsum/anhydrite/calcium sulphate based screeds and gypsum plaster walls with a Relative Humidity (RH) of up to 85%. Surfaces do not require sealing, however highly absorbent surfaces should be primed using Norcross Prime Bond diluted 1:4 with water and allowed to dry before fixing commences. The adhesive has a setting time of 2 hours at 20°C permitting early trafficking of the tiled installation. When cured, the adhesive achieves comparative strengths to a conventional C2 cement-based adhesive.



- Gypsum based
- Fixes tiles onto anhydrite/gypsum based screeds
- Fibre reinforced
- No sealing required
- Fast setting & flexible
- Underfloor heating
- Walls & floors

## WALL & FLOOR TILE ADHESIVE

Cement-based thin bed adhesives designed for fixing ceramic, porcelain and natural stone tiles to a variety of building surfaces. A long pot life for ease of use and minimal wastage. In normal conditions tiles can be grouted 24 hours after fixing.



- Internal & external
- Non-slip
- High adhesion strength
- Ceramic, porcelain and light natural stone (white) and dark natural stone (grey)
- Long pot life - minimal waste
- BS EN 12004 C1

## ONE PART FLEXIBLE ADHESIVE

A polymer modified, cement-based, thin bed adhesive available in both grey and white. Designed for fixing ceramic, porcelain and mosaics to a variety of building surfaces. Water and weather resistant and suitable for both internal and external use, it is also ideal for total immersion installations such as swimming pools. With a long pot life for ease of use and a set time of 16 to 24 hours.



- Built-in flexibility
- Non-slip
- Internal & external
- Water resistant
- Ideal for fully vitrified tiles
- BS EN 12004 C2T

## FAST SET TILE ADHESIVE with ROCK-TITE™

A grey, cement-based adhesive designed for fixing fully vitrified porcelain, ceramic and stone tiles to a variety of building surfaces. 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 installation.



- 3 hour set
- Internal & external
- Walls & floors
- High bond strength
- Fixes porcelain to substrates
- Not susceptible to movement
- BS EN 12004 C1F

## RAPID PORCELAIN TILE ADHESIVE

A grey, cement-based, thin bed adhesive designed for fixing fully vitrified porcelain, ceramic and stone tiles to a variety of building surfaces. Water and weather resistant and suitable for both internal and external locations with setting time of 3 hours at 20°C.



- Flexible
- Internal & external
- Non-slip
- High adhesion strength
- Suitable for ceramic, porcelain & natural stone
- BS EN 12004 C2F

### RAPID PORCELAIN & STONE ADHESIVE

A white, cement-based, thin bed adhesive designed for fixing fully vitrified porcelain, ceramic and stone tiles to a variety of building surfaces. It is water and weather resistant and is suitable for both internal and external locations. It has a setting time of 3 hours at 20°C.



- Internal & external
- Non-slip
- High adhesion strength
- Suitable for ceramic, porcelain & natural stone
- BS EN 12004 C2F

### THICK BED PORCELAIN & STONE ADHESIVE

Cement-based, thick bed floor adhesives 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.



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

### ONE PART DIRECT TO WOOD

A single-part, highly flexible, rubberised thin bed wall and floor tile adhesive specifically designed for fixing fully vitrified porcelain, ceramic and dark natural stone tiles to substrates where background movement, vibration or thermal movement precludes the use of conventional polymer modified, cement-based adhesives.



- Highly flexible
- Wall & floor tiles
- Suitable for ceramic, porcelain and dark coloured natural stone tiles
- Fixes to timber and steel

### PRO GYP-BASE ADHESIVE

Norcross Pro Gyp-Base Fast Track Adhesive is a white cement-based, flexible, fibre reinforced, thin bed adhesive specially formulated for fixing fully vitrified porcelain, ceramic and stone tiles to Norcross Pro Gyp-Base Fast Track Anhydrite Screed Sealer. It has a setting time of 3 hours at 20°C permitting early trafficking of the tiled installation. The adhesive has excellent thermal ageing properties making it suitable for use on heated floors.



- Flexible cementitious adhesive
- Fibre reinforced
- Specially formulated for use with Pro Gyp-Base Fast Track Sealer
- System guarantee

### 4 INTO 1 SILICONE SEALANT

A high quality, flexible, low modulus sealant, which bonds well to most building materials and ceramic and porcelain tiles. Its antibacterial action makes it ideal to seal around baths, sinks and showers. The sealant colours available are designed to match the best selling colours in the Norcross 4 into 1 grout range.



- Flexible
- UV resistant
- Low modulus
- Antibacterial
- Interior/exterior
- Available in Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Steel Grey, Slate Grey, Midnight Coal, & Coffee Bean.

### WALL TILE GROUT

A fine textured, water resistant, tiling grout for use in up to 3mm wide joints in ceramic, stone, vitrified tiles and mosaics. The fine texture of the grout is designed to prevent scratching of tile surfaces during the grouting process and it is easy to use.



- 1mm to 3mm joints
- Internal & external
- Fine texture
- Water resistant
- BS EN 13888 CG1
- Available in Arctic White & Cornish Cream

### STOP MOULD FLEXIBLE WALL TILE GROUT

A fine textured, water resistant, polymer modified grout for use in up to 5mm wide joints in ceramic, stone, vitrified tiles and mosaics. It contains anti-bacterial fortification to protect against the build-up of mould and discolouration typically found in areas of frequent wetting and condensation. The fine texture of the grout is designed to prevent scratching of tiles during the grouting process and is easy to use.



- Anti-bacterial & fungal resistant
- 1mm to 5mm joints
- Ideal for glass & mosaic tiles
- Water resistant
- BS EN 13888 CG2
- Available in Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Sandy Beach, Silver Grey, Steel Grey, Slate Grey, Midnight Coal & Coffee Bean

### FLOOR & WALL TILE GROUT

A water and weather resistant tiling grout for use in grout joints from 2 to 12mm wide between ceramic, natural stone, vitrified tile and mosaics on both walls and floors. Can be used in both internal and external conditions and in fully immersed conditions such as pools.



- Wide joint
- Internal & external
- 2mm to 12mm joints
- Ideal for porcelain tiles
- BS EN 13888 CG1
- Available in Blanched Almond & Steel Grey

### FLEXIBLE WIDE JOINT TILE GROUT

A hard wearing, water and weather resistant tiling grout. Suitable for joint widths of 2 to 20mm and for grouting between all types of wall and floor tiles including porcelain. Containing unique Rock-Tite™ polymeric binders, the enhanced flexibility of the grout allows a greater range of fixing possibilities without the addition of admixtures.



- Wide joint
- Internal & external
- 2mm to 20mm joints
- Ideal for porcelain tiles
- Suitable for heated floors
- BS EN 13888 CG2
- Available in Arctic White, Cornish Cream, Blanched Almond, Sandy Beach, Steel Grey & Slate Grey

### SUPER EPOXY

A hard wearing, two-part, waterproof epoxy grout for use in joint widths of 2mm to 6mm between all types of tiles including ceramic, porcelain, glass and natural stone in internal, external and fully immersed situations. Designed for use on both walls and floors. It is quick to apply and cleans off tile surfaces easily making it economical to use.



- Joint widths 2mm to 6mm
- Impervious, waterproof & hygienic
- Fast application
- BS EN 13888 RG1
- Available in Arctic White, Cornish Cream, Steel Grey & Slate Grey

### 4 INTO 1 WALL & FLOOR TILE GROUT

A fine textured, polymer modified, anti-bacterial, rapid setting wall & floor tile grout for use in joints from 1mm to 12mm. Designed for use with all types of wall and floor tiles including natural stone, particularly where a narrow, fine textured joint is required.



- Rapid setting & flexible
- Anti-bacterial
- 1mm to 12mm joints
- Suitable for all tile types
- Smooth, water repellent surface
- BS EN 13888 CG2
- Available in Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Sandy Beach, Silver Grey, Steel Grey, Slate Grey, Tropical Ebony, Midnight Coal, Autumn Chestnut, Forest Acorn, Coffee Bean & Rustic Cedar.

PREPARATION / REPAIR / WATERPROOFING / ADMIXTURES



SUITABLE FOR USE WITH:

	Prime Bond	Pro Gyp-Base Fast Track Sealer	Adi Flex	Pro DPM	Rapid Repair Mortar	Pro FE	2 Part	Pro Gyp-Base Leveling Compound Enhancer	Pro 10	Pro 10+	Pro 30	Pro 50
	PRIMER/ADMIXTURE			DAMP PROOF MEMBRANE	REPAIR MORTAR	LEVELLING COMPOUNDS						
Setting Time	60 Minutes Approx.	-	-	90 Minutes	90 Minutes	30 to 45 Minutes	3 Hours	-	3 Hours	3 Hours	45 Minutes	4 Hours
Internal Use	●	●	●	●	●	●	●	●	●	●	●	●
External Use	●	-	●	●	●	●	-	-	-	-	-	●
Concrete	● 1:4	-	● a	●	●	●	●	-	●	●	●	●
Cement : Sand Screed	● 1:4	-	● a	●	●	●	●	-	●	●	●	●
Cement : Sand Render	● 1:4	-	● a	●	●	-	-	-	-	-	-	-
Vinyl	● 2	-	● a	-	-	● 2	● 2	-	● 2	● 2	● 2	● 2
Flooring Grade Asphalt	● 2	-	● a	●	-	●	●	-	●	●	●	●
Gypsum Plaster	● 2a	-	● a	-	-	-	-	-	-	-	-	-
Gypsum Plasterboard	● a	-	● a	-	-	-	-	-	-	-	-	-
Anhydrite Screed	●	●	● a	●	-	● 1	● 1	●	● 1	● 1	● 1	● 1
Flooring Grade Chipboard	-	-	● a	-	-	● P or B	● P or B	-	-	-	● P or B	● P or B
T & G Floorboards	● u	-	● a	-	-	● P or B	● P or B	-	-	-	● P or B	● P or B
Plywood	● u	-	● a	-	-	● 2u	● P or B	-	-	-	● P or B	● P or B
Plywood Overlaying Existing Timber Floor	● u	-	● a	-	-	● 2u	● 2u	-	-	-	● 2u	● 2u
Floating Timber Floor	● u	-	● a	-	-	● P or B	● P or B	-	-	-	● P or B	● P or B
Existing Tiles	● 2:1	-	● a	-	-	● 3	● 3	-	● 3	● 3	● 3	● 3
Heated Floors	●	-	● a	●	●	●	●	-	●	●	●	●
Painted Surfaces	● 2:1	-	● a	-	-	-	-	-	-	-	-	-
Steel	● 2:1	-	● a	-	-	-	-	-	-	-	● 3, P or B	● 3, P or B
Total Immersion / Swimming Pools	●	-	● a	●	●	-	-	-	-	-	-	-
EN Classification	N/A	N/A	N/A	N/A	N/A	EN 13813	EN 13813	N/A	EN 13813	EN 13813	EN 13813	EN 13813

a = Dependent on adhesive  
b = Dependent on background  
u = Seal underside and edges with neat Prime Bond  
2c = Two coats of Prime Bond

t = Can extend the drying time of adhesive  
1:4 = 1 part Prime Bond to 4 parts water  
2:1 = Slurry bonding coat: 2 parts Norcros cement based adhesive to 1 part Norcros Prime Bond

1 = Sand to remove laitance, Prime with Prime Bond diluted 1:4 with water. Allow to dry. Repeat diluting Prime Bond 1:3 with water. Allow to dry. If screed is still absorbent, prime with Prime Bond at a 1:2 dilution  
2 = Neat Prime Bond  
3 = Slurry Bond Coat - 2 parts cement-based adhesive: 1 part Prime Bond - brush apply to substrate & allow to dry

+ = Mixed with Adi Flex  
P = Overlay with minimum 15mm to 18mm plywood  
B = Overlay with 6mm to 10mm Pro Board, 6mm or 12mm Pro Ply  
X = Drying Time will be extended

MATTING & BOARDS / READY MIXED ADHESIVES



Setting Time	WATERPROOFING / TANKING			MATTING & BOARDS				READY MIXED DISPERSION ADHESIVES					
	24 Hours	16-24 Hours	3 Hours (a)	N/A	N/A	N/A	N/A	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	
Internal Use	●	●	●	●	●	●	●	●	●	●	●	●	●
External Use	-	●	●	●	●	●	-	-	-	●	-	-	-
Concrete	●	●	●	●	●	●	●	-	-	-	●	-	-
Cement : Sand Screed	●	●	●	●	●	●	●	-	-	-	-	-	-
Cement : Sand Render	●	●	●	-	●	●	-	●	●	-	-	-	●
Vinyl	-	●	●	●	●	●	●	-	-	-	●	-	-
Flooring Grade Asphalt	-	●	●	●	●	●	●	-	-	●	●	-	-
Gypsum Plaster	●	-	● 2	-	● 2	● 2	-	●	●	-	-	-	●
Gypsum Plasterboard	●	-	● 2	-	● 2	● 2	-	●	●	-	-	-	●
Anhydrite Screed	●	-	● 1	● 1	● 1	● 1	●	-	-	-	●	-	-
Flooring Grade Chipboard	●	-	●	●	●	●	●	-	-	-	●	-	-
T & G Floorboards	●	-	● 1:4	● 1:4	● 1:4	● 1:4	●	-	-	-	●	-	-
Plywood	●	-	● 2	● 2u	● 2u	● 2u	● u	-	●	-	●	-	●
Plywood Overlaying Existing Timber Floor	●	-	● 2	● 2u	● 2u	● 2u	● u	-	-	-	●	-	-
Floating Timber Floor	●	-	● 2	● 2	● 2	● 2u	●	-	-	-	●	-	-
Existing Tiles	-	-	● 3	● 3	● 3	● 3	●	● X	● X	-	-	-	● X
Heated Floors	●	●	●	●	●	●	●	-	-	-	●	-	-
Painted Surfaces	●	-	-	-	●	●	-	● X	● X	-	-	-	● X
Steel	-	-	● 3	● 3	● 3	● 3	●	-	-	-	-	-	-
Total Immersion / Swimming Pools	-	●	●	-	●	-	-	-	-	-	-	-	-
EN Classification	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1T	D2T	N/A	N/A	N/A	D2T

a = Dependent on adhesive  
b = Dependent on background  
u = Seal underside and edges with neat Prime Bond  
2c = Two coats of Prime Bond

t = Can extend the drying time of adhesive  
1:4 = 1 part Prime Bond to 4 parts water  
2:1 = Slurry bonding coat: 2 parts Norcross cement based adhesive to 1 part Norcross Prime Bond

1 = Sand to remove laitance, Prime with Prime Bond diluted 1:4 with water. Allow to dry. Repeat diluting Prime Bond 1:3 with water. Allow to dry. If screed is still absorbent, prime with Prime Bond at a 1:2 dilution  
2 = Neat Prime Bond  
3 = Slurry Bond Coat - 2 parts cement-based adhesive: 1 part Prime Bond - brush apply to substrate & allow to dry

+ = Mixed with Adi Flex  
P = Overlay with minimum 15mm to 18mm plywood  
B = Overlay with 6mm to 10mm Pro Board, 6mm or 12mm Pro Ply  
X = Drying Time will be extended



Porcelain & Stone Standard Set S1 Adhesive  
 Standard Set Flexible S1 Adhesive  
 Porcelain & Stone Rapid Set S1 Adhesive  
 Porcelain Rapid Set S1 Adhesive  
 Wall & Floor Tile Adhesive (Grey & White)  
 Fast Set Tile Adhesive with Rock-Tite™  
 One Part Flexible Adhesive (Grey & White)  
 Rapid Porcelain Tile Adhesive  
 Rapid Porcelain & Stone Adhesive  
 Thick Bed Porcelain & Stone Adhesive  
 Tile to Gypsum Adhesive  
 One Part Direct to Wood  
 Pro Gyp-Base Fast Track Adhesive

		POWDERED ADHESIVES													
Setting Time		16 - 24 Hours	16 - 24 Hours	3 Hours	3 Hours	24 Hours	3 Hours	16 - 24 Hours	3 Hours	3 Hours	3 Hours	2 Hours	3 Hours	3 Hours	
Internal Use		●	●	●	●	●	●	●	●	●	●	●	●	●	
External Use		●	●	●	●	●	●	●	●	●	●	-	●	-	
SUITABLE FOR USE WITH:	Concrete	●	●	●	●	●	●	●	●	●	●	-	●	-	
	Cement : Sand Screed	●	●	●	●	●	●	●	●	●	●	-	●	-	
	Cement : Sand Render	●	●	●	●	●	●	●	●	●	●	-	●	-	
	Vinyl	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	-	●	-	
	Flooring Grade Asphalt	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	-	●	-	
	Gypsum Plaster	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	● 2	-	●	● 2	-
	Gypsum Plasterboard	● 2	● 2	● 2	● 2	● 2	-	● 2	● 2	● 2	-	●	● 2	-	
	Anhydrite Screed	● 1	● 1	● 1	● 1	-	-	● 1	● 1	● 1	● 1	●	● 1	●	
	Flooring Grade Chipboard	● P or B	● P or B	● P or B	● P or B	● + P or B	● + P or B	● P or B	● P or B	● P or B	● P or B	-	●	-	
	T & G Floorboards	● 1:4, P or B	● 1:4, P or B	● 1:4, P or B	● 1:4, P or B	● 1:4, +, P or B	● 1:4, +, P or B	● 1:4, P or B	-	● 1:4	-				
	Plywood	● 2u, P or B	● 2u, P or B	● 2u, P or B	● 2u, P or B	● 2u, +, P or B	● 2u, +, P or B	● 2u, P or B	-	● 2u	-				
	Plywood Overlaying Existing Timber Floor	● 2u	● 2u	● 2u	● 2u	● +2u	● +2u	● 2u	● 2u	● 2u	● 2u	-	● 2u	-	
	Floating Timber Floor	● P or B	● P or B	● P or B	● P or B	● + P or B	● + P or B	● P or B	● P or B	● P or B	● P or B	-	●	-	
	Existing Tiles	● 3	● 3	● 3	● 3	● 3	● 3	● 3	● 3	● 3	● 3	-	● 3	-	
	Heated Floors	●	●	●	●	● +	● +	●	●	●	●	-	●	-	
	Painted Surfaces	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Steel	● 3, P or B	● 3, P or B	● 3, P or B	● 3, P or B	● 3 + P or B	● 3 + P or B	● 3, P or B	● 3, P or B	● 3, P or B	● 3, P or B	-	● 3	-	
	Total Immersion / Swimming Pools	●	●	●	●	● +	● +	●	●	●	●	-	●	-	
EN Classification	C2TE S1	C2TE S1	C2FE S1	C2FE S1	C1	C1F	C2T	C2F	C2F	C2F	N/A	C1 FS1	N/A		

a = Dependent on adhesive  
 b = Dependent on background  
 u = Seal underside and edges with neat Prime Bond  
 2c = Two coats of Prime Bond

1 = Can extend the drying time of adhesive  
 1:4 = 1 part Prime Bond to 4 parts water  
 2:1 = Slurry bonding coat: 2 parts Norcros cement based adhesive to 1 part Norcros Prime Bond

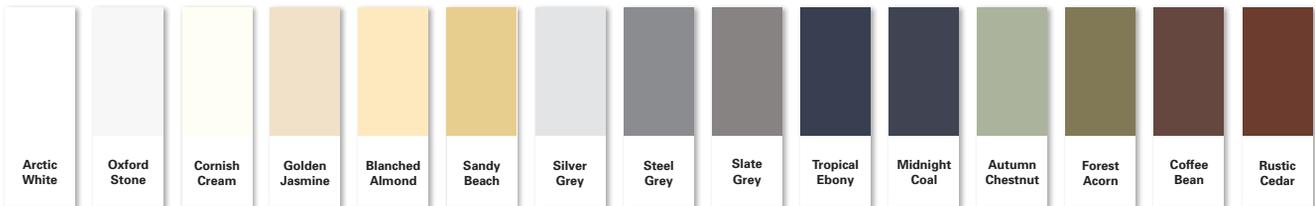
1 = Sand to remove laitance, Prime with Prime Bond diluted 1:4 with water. Allow to dry. Repeat diluting Prime Bond 1:3 with water. Allow to dry. If screed is still absorbent, prime with Prime Bond at a 1:2 dilution  
 2 = Neat Prime Bond  
 3 = Slurry Bond Coat - 2 parts cement-based adhesive: 1 part Prime Bond - brush apply to substrate & allow to dry

+ = Mixed with Adi Flex  
 P = Overlay with minimum 15mm to 18mm plywood  
 B = Overlay with 6mm to 10mm Pro Board, 6mm or 12mm Pro Ply  
 X = Drying Time will be extended



	Wall Tile Grout	Stop Mould Flexible Wall Tile Grout	Floor & Wall Tile Grout	Flexible Wide Joint Grout	Super Epoxy Grout	4 into 1 Floor & Wall Tile Grout	4 into 1 Silicone Sealant
	GROUTS						SILICONE SEALANT
Wall	●	●	●	●	●	●	●
Floor	-	● L	●	●	●	●	●
Internal Use	●	●	●	●	●	●	●
External Use	●	●	●	●	●	●	●
Joint Width	1mm to 3mm	1mm to 5mm	2mm to 12mm	2mm to 20mm	2mm to 6mm	1mm to 12mm	-
Setting Time	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	5 Hours	20 Minutes
Antibacterial	-	●	-	-	-	●	●
EN Classification	BS EN 13888 CG1	BS EN 13888 CG2	BS EN 13888 CG1	BS EN 13888 CG2	BS EN 13888 RG1	BS EN 13888 CG2	BS 5889 Type A
Pack Sizes	3.5kg & 10kg	5kg & 10kg	5kg & 10kg	5kg & 10kg	2kg	5kg & 10kg	310ml
Colours	Arctic White, Cornish Cream	Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Sandy Beach, Silver Grey, Steel Grey, Slate Grey, Midnight Coal, Coffee Bean	Blanched Almond, Steel Grey	Arctic White, Cornish Cream, Blanched Almond, Sandy Beach, Steel Grey, Slate Grey	Arctic White, Cornish Cream, Steel Grey, Slate Grey	Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Sandy Beach, Silver Grey, Steel Grey, Slate Grey, Tropical Ebony, Midnight Coal, Autumn Chestnut, Forest Acorn, Coffee Bean, Rustic Cedar	Arctic White, Oxford Stone, Golden Jasmine, Cornish Cream, Blanched Almond, Steel Grey, Slate Grey, Coffee Bean, Midnight Coal

L = Light trafficked areas



Every care has been taken to ensure true colour representation though printing limitations can cause colour variation. You can order samples of any of the Norcross grouts by calling + 44 (0) 1782 524140

## EN CLASSIFICATIONS

### BS EN 12004

Type	Class	Description
C	1	Normal cementitious adhesive
C	1 F	Fast-setting cementitious adhesive
C	1 T	Normal cementitious adhesive with reduced slip
C	1 F T	Fast-setting cementitious adhesive with reduced slip
C	2	Improved cementitious adhesive with additional characteristics
C	2 E	Cementitious adhesive with additional characteristics and extended open time
C	2 F	Improved fast-setting cementitious adhesive with additional characteristics
C	2 T	Improved cementitious adhesive with additional characteristics and reduced slip
C	2 T E	Improved cementitious adhesive with additional characteristics, reduced slip and extended open time
C	2 F T	Fast-setting cementitious adhesive with additional characteristics and reduced slip
D	1	Normal dispersion adhesive
D	1 T	Normal dispersion adhesive with reduced slip
D	2	Improved dispersion adhesive with additional characteristics
D	2 T	Improved dispersion adhesive with additional characteristics and reduced slip
D	2 T E	Improved dispersion adhesive with additional characteristics, reduced slip and extended open time
R	1	Normal reaction resin adhesive
R	1 T	Normal reaction resin adhesive with reduced slip
R	2	Improved reaction resin adhesive with additional characteristics
R	2 T	Improved reaction resin adhesive with additional characteristics and reduced slip

### EN 12002

C	S 1	Deformable adhesive
C	S 2	Highly deformable adhesive

### EN 13888

C	G 1	Normal cementitious grout
C	G 2	Improved cementitious grout with additional characteristics
R	G 1	Reaction resin grout

## MOVEMENT JOINTS



### WALLS

Movement joints should be used as follows:

- Continuous with any existing structural movement joints.
- Where tiling abuts other materials.
- At junctions between different substrates.
- At vertical corners and at 3m to 4.5m centres, both horizontally and vertically, in large areas.
- In areas where stresses are likely to be concentrated such as at changes of alignment.
- An increase in the frequency of movement joints should be considered if large degrees of thermal movement or vibration are expected within an installation.

### FLOORS

Movement joints should be used as follows:

- Movement joints should extend through the tiling and its bed and coincide with any structural movement joints.
- Around the perimeter of the tiled installation (including door thresholds) with intermediate movement joints being provided in larger areas at 8m to 10m intervals.
- At junctions between different substrates, door thresholds and between existing substrates and new heated screeds.
- On suspended floors stress-relieving joints should be provided over supporting walls or beams where there is a risk of flexing.

## HEATED FLOORS

Movement joints should be used as follows:

- Movement joints should extend through the tiling and its bed and coincide with any structural movement joints.
- Around the perimeter of the tiled installation (including door thresholds).
- In larger areas, intermediate movement joints should be provided at 5m intervals in both horizontal directions to provide 25m<sup>2</sup> bays. These bay sizes may be increased to 40m<sup>2</sup> when Norcross Permalayer anti-fracture matting is used.
- On suspended floors, stress-relieving joints should be provided over supporting walls or beams where there is a risk of flexing.

## HEATED ANHYDRITE/ CALCIUM SULPHATE SCREEDS

Movement joints should be used as follows:

- Over structural joints in the underlying construction. These movement joints through the screed and tile bed should coincide with and be designed to accommodate the same movement of the underlying structural joints.
- At perimeters of floors where the screed abuts walls and upstands and at door thresholds.
- As a movement joint through both the screed and tile bed dividing the tiling into areas not greater than 40m<sup>2</sup>, or in accordance with the screed suppliers or screed manufacturers' instructions. The areas bounded by movement joints should be square or rectangular with the width to length ratio not exceeding 5 to 8.
- As movement joints at significant changes of width of the screed surface and in doorways (ground plan length over 5m) with several rooms arranged one after another within a floor plan.
- As a boundary joint isolating areas of screed with separately controlled heating circuits.
- At doorway thresholds between separate areas of use.
- At junctions between heated and unheated sections of the screed.

Note that, though pumped calcium sulphate based screeds can be laid in large areas without joints, where joints are required in heated screed they will have to be formed during the application of the calcium sulphate screed. This will require the use of formwork or the use of proprietary pre-formed movement joint profiles designed for this purpose.

## SWIMMING POOLS

Movement joints should be used as follows:

- In the pool lining around the perimeter at the junction of the bottom and sides.
- At vertical corners and at any change of plane in the bottom.
- If joints between tiles are less than 6mm, it is advisable to insert additional movement joints down the pool sides and across the bottom in a continuous loop at 6m intervals or less to suit design considerations.
- Movement joints should coincide with the structural junction of the pool shell and the surround slab and where pool surround tiling abuts walls, drainage channels and other features.
- Intermediate movement joints should be inserted at intervals of 6m or less.

## EXTERNAL WALL TILING

Movement joints should be used as follows:

- To coincide and be continuous with any existing structural movement joints.
- Over existing and/or structural movement joints and where tiling abuts other materials.
- At junctions between different substrates.
- At storey heights horizontally and approximately 3m to 4.5m apart vertically; ideally, they should be located over movement joints in the structural background and at structural material changes; for example, horizontal joint at top and bottom of floor slab, vertical joint at internal corners and at junctions with columns.
- At external angles, vertically between 0.25m and 1m from the angle and symmetrically wherever possible.

## BEFORE TILING

Before commencement of fixing, ensure that backgrounds are:

- Free from dirt, dust/debris and laitance.
- Clean & sound.
- Sufficiently flat to achieve the specified flatness/regularity of finished surfaces given the permissible minimum and maximum thickness of bedding in accordance with British Standard BS5385-3: 7.1.4 'Tolerances on finished floor level', e.g. when checked with a 2m straightedge with 3mm thick feet at each end, the straightedge should not be obstructed by the tiles and no gap should be greater than 6mm.
- Sufficiently strong to receive and support the tiled finish.
- Suitable for the conditions to which they will be exposed.

## INSTALLATION CONSIDERATIONS

Selecting the correct adhesive and grout is essential to ensure the success of every tiled installation. The factors to consider when deciding on what products should be used are:

- **Project environment**
- **Adhesive/grout**
- **Background**
- **Tile**

## WALLS: WEIGHT RECOMMENDATIONS

Wall Substrates	Maximum Weight of Tiling per m <sup>2</sup> †
Gypsum Plaster	20kg/m <sup>2</sup>
Gypsum Plasterboard Direct* (without plaster skim)	32kg/m <sup>2</sup>
Plywood (WPB) ‡	Up to 30kg/m <sup>2</sup>
Lightweight Tilebacking Boards	Up to 40kg/m <sup>2</sup> dependent on the type & thickness of the board
Glass Reinforced Cement Sheets	Up to 50kg/m <sup>2</sup> dependent on the type & thickness of the board
Gypsum Fibre Boards †	Approximately 35 - 40kg/m <sup>2</sup>

† Includes the weight of tiles and adhesives. ‡ Not appropriate for use in wet or humid conditions.

## WALL TILING TO PLASTER/PLASTERBOARD

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout	
Glazed Biscuit Body	10%	Up to 400 x 400	Dry Areas	Ultim8 (D1)	Wall Tile Grout	
Vitrified	3-6%	Up to 200 x 200			Stop Mould Grout	
Porcelain	<0.5%	Up to 200 x 200			4 into 1 Grout	
Glazed Biscuit Body	10%	Up to 400 x 400	Wet Areas (Communal /Power Showers /Pool Halls etc.)	Ultim8+ (D2) Additional tanking will be necessary.	Stop Mould Grout	
Vitrified	3-6%	Up to 200 x 200			4 into 1 Grout	
Porcelain	<0.5%	Up to 200 x 200			Super Epoxy if an impervious grout is required.	
Glazed Biscuit Body	10%	Up to 400 x 400	Dry Areas and Wet Areas (Communal Power Showers/ Pool Halls etc.)	Wall & Floor Adhesive (C1T) One Part Flexible (C2T) In wet areas, additional tanking will be necessary.	Stop Mould Grout	
Vitrified	3-6%	Various				4 into 1 Grout
Porcelain	<0.5%	Various				Super Epoxy if an impervious grout is required.
Mosaics	Various	Various				
Natural Stone	Various	Various				

# WALL TILING TO WPB MARINE GRADE PLYWOOD

NB. Minimum 12.5mm thick WPB/Marine Grade Plywood (additional tanking will be necessary in wet areas).

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Up to 400 x 400	Dry & Wet Areas (Communal /Power Showers/ Pool Halls etc.)	Ultim8+ (D2) In wet areas additional tanking will be required.	Stop Mould Grout
Vitrified	3-6%	Up to 200 x 200			4 into 1 Grout
Porcelain	<0.5%	Up to 200 x 200			Super Epoxy if an impervious grout is required.
Glazed Biscuit Body	10%	Up to 400 x 400	Dry & Wet Areas (Communal /Power Showers/ Pool Halls etc.)	One Part Flexible (C2T) In wet areas additional tanking will be required.	Stop Mould Grout
Vitrified	3-6%	Various			4 into 1 Grout
Porcelain	<0.5%	Various			Super Epoxy if an impervious grout is required.
Mosaics	Various	Various			
Natural Stone	Various	Various			

# WALL TILING TO CEMENT:SAND RENDER

NB. Additional tanking may be necessary.

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Up to 400 x 400	Dry Areas	Ultim8 (D1) Wall & Floor Adhesive (C1T)	Wall Tile Grout
Vitrified	3-6%	Up to 200 x 200		4 into 1 Grout	
Porcelain	<0.5%	Up to 200 x 200		One Part Flexible (C2T)	
Glazed Biscuit Body	10%	Up to 400 x 400	Wet Areas (Communal /Power Showers /Pool Halls etc.)	Ultim8+ (D2) Wall & Floor Adhesive (C1T) One Part Flexible (C2T) Additional tanking may be required.	Stop Mould Grout
Vitrified	3-6%	Up to 200 x 200			4 into 1 Grout
Porcelain	<0.5%	Up to 200 x 200			Super Epoxy if an impervious grout is required.
Glazed Biscuit Body	10%	Up to 400 x 400	Dry Areas and Wet Areas (Communal /Power Showers/ Pool Halls etc.)	Wall & Floor Adhesive (C1T) One Part Flexible (C2T) Additional tanking may be required.	Stop Mould Grout
Vitrified	3-6%	Various			4 into 1 Grout
Porcelain	<0.5%	Various			Super Epoxy if an impervious grout is required.
Mosaics	Various	Various			
Natural Stone	Various	Various			

## WALL TILING TO EXISTING GLAZED TILES

NB. A slurry bonding coat is required.

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Various	Dry & Wet Areas (Communal /Power Showers/ Pool Halls etc.)	Apply slurry bonding coat.  One Part Flexible Adhesive  In wet areas additional tanking may be required.	Wall Tile Grout (in dry areas)  Stop Mould Grout  4 into 1 Grout  Super Epoxy if an impervious grout is required.
Vitrified	3-6%	Various			
Porcelain	<0.5%	Various			
Mosaics	Various	Various			
Natural Stone	Various	Various			

## FLOOR TILING TO CONCRETE/CEMENT: SAND SCREED

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Up to 330 x 330	Domestic Floors	Fast Set Rock-Tite™ (C1F)  Rapid Porcelain Grey or White (C2F)  In wet areas additional tanking may be required.	Flexible Floor & Wall Grout  4 into 1 Grout  Super Epoxy if an impervious grout is required.
Vitrified	3-6%	Up to 330 x 330			
Porcelain	<0.5%	Up to 330 x 330			
Mosaics	Various	Various			
Natural Stone	Various	Up to 330 x 330			
Glazed Biscuit Body	10%	Up to 330 x 330	Commercial Floors	Rapid Porcelain Grey or White (CF2)  In wet areas additional tanking may be required.	Flexible Floor & Wall Grout  4 into 1 Grout  Super Epoxy if an impervious grout is required.
Vitrified	3-6%	Up to 330 x 330			
Porcelain	<0.5%	Up to 330 x 330			
Natural Stone	Various	Up to 330 x 330			
Glazed Biscuit Body	10%	Up to 330 x 330			
Vitrified	3-6%	Up to 330 x 330			
Porcelain	<0.5%	Up to 330 x 330			
Natural Stone	Various	Up to 330 x 330			

## FLOOR TILING TO ANHYDRITE SCREEDS

Anhydrite/Calcium Sulphate/Gypsum Sulphate.

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Various	Domestic and Commercial Floors	Tile to Gypsum	Flexible Floor & Wall Grout
Vitrified	3-6%	Various			4 into 1 Grout
Porcelain	<0.5%	Various			Super Epoxy if an impervious grout is required
Natural Stone	Various	Various			

## FLOOR TILING TO TIMBER BOARDS

Timber boards overlaid with a minimum of 15mm to 18mm plywood or an anti-fracture membrane/decoupling membrane.

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Glazed Biscuit Body	10%	Up to 330 x 330	Timber	Rapid Porcelain Grey or White (C2F)	Flexible Floor & Wall Grout
Vitrified	3-6%	Up to 330 x 330			4 into 1 Grout
Porcelain	<0.5%	Up to 330 x 330			Super Epoxy if an impervious grout is required.
Mosaics	Various	Various			
Natural Stone	Various	Up to 330 x 330			
Glazed Biscuit Body	10%	Up to 330 x 330	Timber	Thick Bed Stone & Porcelain (C2F)	Flexible Floor & Wall Grout
Vitrified	3-6%	Various			4 into 1 Grout
Porcelain	<0.5%	Various			Super Epoxy if an impervious grout is required.
Natural Stone	Various	Various			

## TILING TO CEMENT:SAND RENDER (SWIMMING POOL TANK)

Tile	Water Absorption	Tile Size (mm)	Installation	Norcros Adhesive	Norcros Grout
Porcelain	<0.5%	Various	Swimming Pool Tank	One Part Flexible (C2T)	Hard water areas (>200mg/ICaCO3):
Vitrified	3-6%	Various			Flexible Floor & Wall Grout
Porcelain	<0.5%	Various			4 into 1 Grout
Natural Stone	Various	Various			Soft water areas (<200mg/ICaCO3): Super Epoxy

## MOSAIC TILES

Mosaics are small individual pieces of ceramic, porcelain, glass or natural stone (tesserae) that are glued onto a mesh backing and sold as a sheet (referred to as mesh backed mosaics). An alternative method is for the face of each of the individual tile pieces (tesserae) to be glued to a paper or plastic sheet (referred to as paper faced mosaics).

When fixing mesh-backed mosaics, it must be ensured that the backing material is synthetic (not natural) and that it does not cover more than 25% of each of the individual tesserae. It is also essential that the backing material and the body of the mosaics themselves are compatible with the adhesive and suitable for the conditions in which they are to be used. Mesh backed mosaics are laid with the mesh facing down into the adhesive bed.

Paper or plastic faced mosaics are laid into the adhesive bed with the paper or plastic layer covering the top surface of each sheet of mosaics. There is no backing layer used with this type of mosaic. It is essential that once laid in the adhesive bed, the adhesive is allowed to cure before the paper or plastic is removed from the surface of the mosaics by damping the covering layer with clean water and gently peeling away, ensuring that the mosaics are not disturbed.

It is essential that mosaics are fixed so that no voids are present in the adhesive bed.

## NATURAL STONE TILES

Natural stone tiles include Limestone, Travertine, Sandstone, Marble, Slate, Serpentine, Granite and Basalt.

To prevent staining of the stone products rapid setting C2 adhesives are recommended. Care must be taken when fixing to ensure a solid bed of adhesive is achieved beneath the tiles and that the correct colour adhesive is used, i.e. white adhesives must be used when fixing light coloured or translucent stone tiles. It must also be ensured that the stone tiles are not sealed until the adhesive and grout have fully dried to prevent any moisture from being sealed and trapped in the body of the stone.

For large format natural stone products, Norcros Thick Bed external adhesive is recommended to enable solid bed fixing to be achieved.

## LARGE FORMAT TILES (>330mm x 330mm)

It is essential that floor tiles are fixed in a solid bed of adhesive.

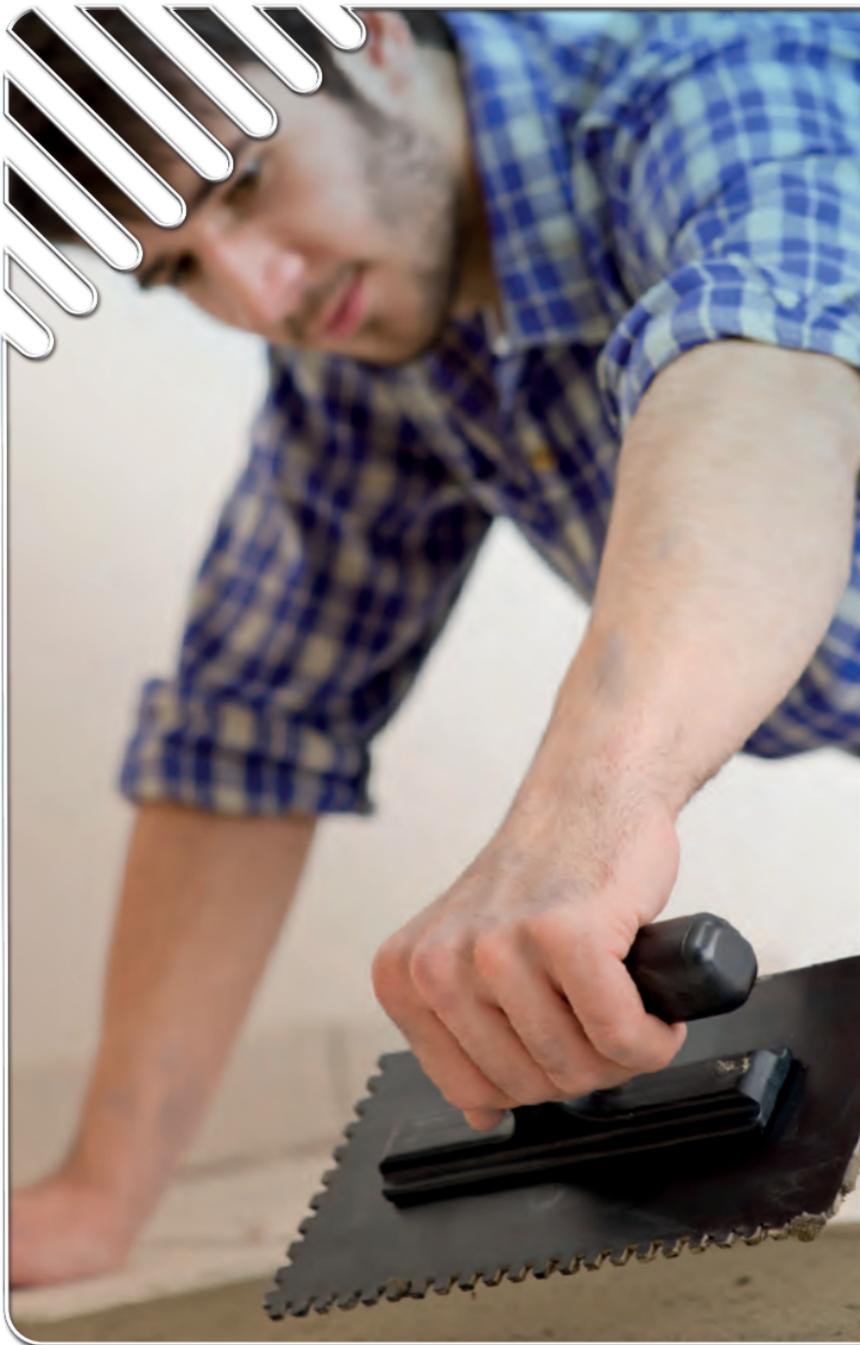
To ensure a successful installation and solid bed fixing the following guidelines should be followed:

- Consideration should be given at all stages including setting out, as there will be increased wastage and therefore more tiles will be required for the installation.
- Health and safety should be considered due to the increased weight of the tiles and a risk assessment should be undertaken.
- When fixing to walls, ensure that the background is able to support the weight of the tiles.
- It is vital that the background or sub-floor is completely flat to ensure tiles can be solidly bedded.
- A cement-based adhesive should be used.
- Ensure the appropriate size notched trowel is used as recommended by the manufacturer.
- Ideally, tiles should be bedded in Norcros Thick Bed Porcelain & Stone adhesive, a pourable cement-based adhesive which will make solid bed fixing easier to achieve.
- It may be necessary to back butter the tiles with adhesive.

## BACKGROUNDS/BASE PREPARATION

Background/Base	Drying Time	Suitability	Preparation	Special Considerations
Concrete	Minimum 6 weeks (48 hours if Norcros Permalayer is used)	-	Remove all traces of dust/laitance. Prime with Norcros Prime Bond diluted 1:4 with water and allow to dry.	May require levelling with either Norcros Pro 10, Pro 10+ or Pro 50.
Power Floated Concrete	Minimum 6 weeks (48 hours if Norcros Permalayer is used)	-	Remove all traces of dust/laitance. Brush apply a slurry bonding coat made up of 2 parts cement-based adhesive: 1 part Norcros Prime Bond and allow to dry.	May require levelling with either Norcros Pro 10, Pro 10+ or Pro 50.
Cement:Sand Screed	Minimum 3 weeks (48 hours if Norcros Permalayer is used)	-	Remove all traces of dust/laitance. Prime with Norcros Prime Bond diluted 1:4 with water and allow to dry.	May require levelling with either Norcros Pro 10, Pro 10+ or Pro 50.
Anhydrite/ Calcium Sulphate/ Gypsum Screed	A minimum of 1 day per mm screed depth up to 40mm. An additional 2 days per mm above 40mm.	Not suitable for use externally or in wet areas.	Mechanically remove all traces of dust/laitance.	If using a cement-based adhesive seal using Norcros Prime Bond diluted 1:4 with water.

For large format natural stone products, Norcros Thick Bed Porcelain & Stone adhesive is recommended to enable solid bed fixing to be achieved.



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