ULTRA TILE ®

TILE ADHESIVES & GROUTS

PRODUCT RANGE & INSTALLATION GUIDES

With award-winning personal service, a tried and trusted reputation, and the support of a British company built on expertise; UltraTile quality products deliver the performance your business needs - every time.

Instarmac has been manufacturing in the Midlands since 1977. We are a privately owned business offering financial stability and trading security. Our working culture, engagement techniques and strong employer values have been recognised by Best Companies for 15 years, earning 4th place in Manufacturing's 15 Best Companies to Work For 2024. Instarmac supply the tiling market with a comprehensive range of adhesives, grouts, silicones, primers, levelling compounds and tanking kit with over 4 million units sold annually.

Committed to Quality, Committed to Service, Committed to You.

We have spent years perfecting the performance of our products, giving you complete confidence that UltraTile materials are designed to last. We are so confident that our adhesives, grouts, and levellers will outlive the life of your job, that every product in the UltraTile range boasts a 25-year guarantee. Please refer to our Terms and Conditions of Sale for more information on the UltraTile 25-year Guarantee.

OUR
PROMISE

COMMITTED TO QUALITY

We are committed to providing quality products, our founder Charlie Hudson's philosophy, "Product performance is key, it is this that people remember long after price has been forgotten", drives our organisation.

We maintain an automated manufacturing facility specifically designed for your business needs, and which utilises the latest technology ensuring consistent and reliable product production. An ISO approved process of testing in-house and through certified external bodies, offers the reassurance of a quality guarantee and secures worldwide recognised product performance.

What's more, investing in our research and development laboratory has allowed us to be innovative and continuously explore changing market demands, new emerging technologies, alternative materials and environmental impacts. Our product range evolves to meet your needs without any compromise to its quality.

COMMITTED TO SERVICE

We are committed to providing service time and time again which exceeds your expectations. Our team of fully trained staff are just a phone call away to provide all the technical and practical support needed to complete a successful tiling contract. We utilise the latest technology helping to ensure a seamless ordering process, including automatic order confirmations.

We pride ourselves on offering a second-to-none delivery service, paralleled with a commitment to protecting vulnerable road users. Our privately owned FORS Silver accredited fleet of 40 vehicles is managed and fully tracked in-house. Getting product on our customers' shelves or to site is key. By operating a fleet with employed drivers, live tracking technology, text notification software and tail lifts on all vehicles, you will experience first-class service, accurate deliveries and reduced damages.

COMMITTED TO YOU

You can trust us to be by your side and fully committed to you. Our aim is to provide quality products efficiently and without complications every time you place an order. We will always be on hand whenever you need support and are happy to conduct free bespoke training or site visits on your behalf. Marketing materials in the form of collateral and POS are readily available when required. By understanding your business needs, a successful partnership will be forged.

We continue to implement our comprehensive environmental initiatives as laid out in our ISO 14001 action plan, and often re-evaluate our position with a truly sustainable future in mind for our business and yours.

Our loyal customer base and extensive back catalogue of project successes demonstrate our trusted reputation. Using UltraTile as your preferred supplier will help establish a secure and long-term future for your business.

TO TAKE A LOOK AT OUR FACTORY TOUR, SCAN QR CODE.

WALL
ADHESIVES

READY MIXED PASTES

ProSuper Grip

High Grab Acrylic Wall Tile Adhesive

Size: 15kg

Pallet Quantity: 44

Colour: Off-white

CE UKCA

- Designed for ceramic tiles or natural stone and porcelain mosaics
- Exceptional grip
- Shower proof
- Easy ready-mix formulation, covering up to 6m^2

D1 TE EN 12004 classification

mould resistant

18 hrs grout after

ProSuper White

Highly Flexible Acrylic Wall Tile Adhesive

Size: 15kg

Pallet Quantity: 44

Colour: Brilliant White

CE UKCA

- Designed for ceramic tiles or natural stone and porcelain mosaics
- Water resistant for showers and wetrooms
- Ideal for white grout projects
- Easy ready-mix formulation, covering up to 6m^2

D2 TE EN 12004 classification

mould resistant

18 hrs grout after

WALL & FLOOR ADHESIVES

CEMENTITIOUS POWDERS

ProSS Flex

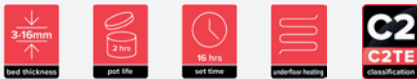Flexible Standard Set Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UKCA

- Designed for use with ceramic, porcelain and mosaics
- Formulated for use on wall and floor applications
- Flexible properties for use for areas of vibration
- Can be used on timber and concrete floors

| 3-16mm bed thickness | 2 hrs pot life | 16 hrs set time | underfloor heating | C2 C2TE classification |

ProFlex SPES

Standard Set Flexible Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UKCA

- S1 flexibility for timber floors, swimming pools and underfloor heating systems
- Ideal for use with porcelain, mosaic, natural stone, and glass tiles
- Suitable for large format tiling with an extended open time

| 3-20mm bed thickness | 2 hrs pot life | 16 hrs set time | underfloor heating | S1 C2TE classification |
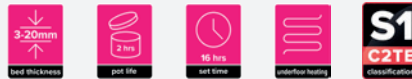
ProGrip FX

Fibre Reinforced Semi-rapid Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UKCA

- Formulated with **Fibre Bond** technology for added strength and durability
- Exceptional grab and enhanced body for large format tiles
- Designed for use with porcelain, mosaic, and natural stone tiles
- Extended pot life for greater fixing time

| 3-20mm bed thickness | 2.5 hrs pot life | 7 hrs set time | underfloor heating | S1 C2TE classification |

ProRapid RS

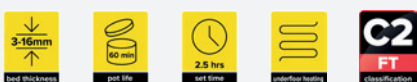Flexible Rapid Set Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UKCA

- Flexible properties for use in wet areas and with underfloor heating
- Rapid set properties for fast-track installation
- Suitable for use on timber and concrete substrates
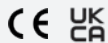- Ideal for use with porcelain, mosaic and natural stone tiles

| 3-16mm bed thickness | 60 min pot life | 2.5 hrs set time | underfloor heating | C2 FT classification |

ProFlex SP
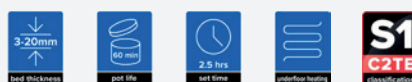
Rapid Set Flexible Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UKCA

- S1 flexibility for timber floors, swimming pools and underfloor heating systems
- Ideal for use with porcelain, mosaic, natural stone, and glass tiles
- Rapid set properties for fast track installation

| 3-20mm bed thickness | 60 min pot life | 2.5 hrs set time | underfloor heating | S1 C2TE classification |

### ProEco Gel

Thixotropic Flexible Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colour: White

CE UKCA

- Environmentally friendly, containing 30% recycled material
- Specially formulated with extended workability, enhanced adhesion and flexibility
- Enhanced bond for areas of movement or vibration
- Polymer modified which provides enhanced performance with thixotropic and gel-like properties

| 3-20mm bed thickness | 4 hrs pot life | 18 hrs set time | underfloor heating | S1 C2TE classification |
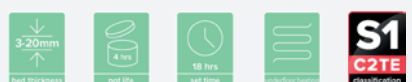
Fibre Bond

Formulated with added fibre particles for superior non-slip properties and thixotropic behaviour.

S2

ProFlex S2

Fibre Reinforced Flexible Tile Adhesive

Size: 20kg

Pallet Quantity: 54

Colours: White & Grey

CE UK CA

- Ultimate S2 flexibility for timber floors including plywood and chipboard overlays, swimming pools and underfloor heating systems
- Formulated with **Fibre Bond** technology for added strength and durability
- Designed for use with all tile types including brick slips, resin backed and quartz

| 3-20mm bed thickness | 60 min pot life | 3.5 hrs set time | underfloor heating | S2 C2F classification |

FLOORING ADHESIVES

UltraFloor's Stick IT range of exclusively manufactured flooring adhesives are suitable for all types of floor coverings. Speak to your Area Sales Manager for more information.

TILE
ADHESIVE

PRODUCT SELECTOR

	ProSuper Grip	ProSuper White

PRODUCT FEATURES		High Grab Acrylic Wall Tile Adhesive	Highly Flexible Acrylic Wall Tile Adhesive
SPECIFICATION	Wall & Floor	Wall	Wall
	Bed Thickness	1-3mm	1-3mm
	Open Time*	20 Minutes	20 Minutes
	Pot Life*	N/A	N/A
	Set Time*	N/A	N/A
	Grout After*	18 Hours	18 Hours
	Conforms to	EN12004 D1 TE	EN12004 D2 TE
	Colour	Off-white	Brilliant White
	Pack Size	15kg	15kg
	Pallet Quantity	44	44
KEY AREAS OF USE	General Wall Installations	✓	✓
	General Floor Installations	✗	✗
	Interior Installations	✓	✓
	Exterior Installations	✗	✗
	Wet Rooms	✗	✓
	Domestic Showers with Tray	✓	✓
	Communal Showers	✗	✓
	Swimming Pools	✗	✗
	Electric Matting Underfloor Heating	✗	✗
	Piped Water Underfloor Heating	✗	✗
	Conservatories	✓	✓
SUITABLE TILES	Ceramic	✓	✓
	Porcelain	✓***	✓***
	Glass	✗	✗
	Mosaics	✓	✓
	Marble	✓***	✓***
	Travertine	✓	✓
	Granite	✓***	✓***
	Limestone	✓	✓
	Terracotta	✓***	✓***
	Quarry	✓***	✓***
	Slate	✓***	✓***
	Resin Backed	✗	✗
	Quartz	✗	✗
	Brick Slips	✗	✗
SUITABLE SURFACES & SUBSTRATES	Concrete	✗	✗
	Sand/cement Screed	✗	✗
	Tile Backer Boards	✓	✓
	Cement Faced Fibre Boards	✓	✓
	Anhydrite/Calcium Sulphate/ Gypsum Based Screeds	✗	✗
	Tile on Tile**	✗	✗
	Firm & Stable Plaster	✓	✓
	Plasterboard	✓	✓
	Sand/cement Render	✓	✓
	Concrete Brick/Block	✓	✓
	Hard Vinyl Tiles	✗	✗
	Flooring Grade Asphalt	✗	✗

* Depending on temperatures, substrates and site conditions.

** Existing ceramic, porcelain and natural stone tiles (overlay) known as "Tile on Tile".

*** With ready mixed tile adhesives it is important to ensure that at least one of the surfaces is porous to allow drying of the adhesive. When using non-porous tiles like porcelain and glass, drying times will be substantially increased. In these instances we would recommend the use of a cementitious adhesive.

D Prime first with UltraTile ProPrimer diluted as per installation guides.

N Prime first with UltraTile ProPrimer neat as per installation guides.

Suitable = ✓ Not suitable = ✗

For full application instructions, please refer to the relevant product's datasheet or call the **UltraTile Technical Department 01827 254402**.

ProSet SS	ProRapid RS	ProFlex SP	ProFlex SPES	ProGrip FX	ProEco Gel	ProFlex S2
Flexible Standard Set Tile Adhesive	Flexible Rapid Set Tile Adhesive	Rapid Set Flexible Tile Adhesive	Standard Set Flexible Tile Adhesive	Fibre Reinforced Semi-rapid Tile Adhesive	Thixotropic Flexible Tile Adhesive	Fibre Reinforced Flexible Tile Adhesive
Wall & Floor	Wall & Floor	Wall & Floor	Wall & Floor	Wall & Floor	Wall & Floor	Wall & Floor
3-16mm	3-16mm	3-20mm	3-20mm	3-20mm	3-20mm	3-20mm
30 Minutes+	20-30 Minutes	20-30 Minutes	30 Minutes+	30 Minutes+	30 Minutes+	20-30 Minutes
2 Hours	60 Minutes	60 Minutes	2 Hours	2.5 Hours	4 Hours	60 Minutes
16 Hours	2.5 Hours	2.5 Hours	16 Hours	7 Hours	18 Hours	3.5 Hours
18 Hours	4 Hours	4 Hours	18 Hours	7 Hours	18 Hours	4 Hours
EN12004 C2 TE	EN12004 C2 FT	EN12004 C2FT EN12002 S1	EN12004 C2TE EN12002 S1	EN12004 C2TE EN12002 S1	EN12004 C2TE EN12002 S1	EN12004 C2F EN12002 S2
White & Grey	White & Grey	White & Grey	White & Grey	White & Grey	White	White & Grey
20kg	20kg	20kg	20kg	20kg	20kg	20kg
54	54	54	54	54	54	54
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✗	✗	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✓	✓	✓	✓	✓	✓
✗	✗	✗	✗	✗	✗	✓
✗	✗	✗	✗	✗	✗	✓
✗	✗	✓	✓	✓	✓	✓
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓	✓ N	✓ N	✓ N	✓ N	✓ N	✓ N
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
✗	✗	✓ N	✓ N	✓ N	✓ N	✓ N
✗	✗	✓ N	✓ N	✓ N	✓ N	✓ N

GROUTS & SILICONES

ProGrout Flexible

Sizes: 3kg and 10kg

Pallet Quantity: Denominations of 4

Colours: Brilliant White, Vintage White, Ivory, Almond, Jasmine, Limestone, Taupe, Mocha, Silver Grey, Mid-Grey, Grey, Dark Grey, Charcoal and Black.

- **Colour Shield** technology for vibrant, durable finishes
- Designed for use with all tile types
- Ideal for wetrooms, swimming pools and underfloor heating systems
- Wash down with minimal effort
- 1-20mm joint thickness
- 30 – 60 minutes pot life
- 12 hours hard set
- Mould resistant

1-20mm joint thickness | **30-60mins** pot life | **12 hrs** hard set | **mould resistant** grout & guard | **CG2 WA** classification

ProSealer

Size: 310ml

Pallet Quantity: Boxes of 12

Colours: Clear, White, Ivory, Jasmine, Limestone, Taupe, Silver Grey, Mid-Grey, Grey, Dark Grey, Charcoal & Black

- Resistant to UV due to **Colour Shield** technology
- Colour match finishing for tiling installations
- Enhanced bond and elasticity
- Ideal for all kitchen and bathroom applications
- Neutral cure product
- 24 hour set time
- Low odour, no slump formulation

CE UKCA

high humidity areas | **mould resistant** | **fully ISO compliant** | **internal & external use**

ProGrout Flowable

Size: 15kg

Pallet Quantity: 54

Colours: Limestone, Silver Grey, Grey, Charcoal

- Designed for areas where movement or vibration is likely
- Increased flexibility that provides a virtually impermeable set
- Suitable for joint widths up to 20mm and depths of 30mm
- Suitable for use on almost all tile types

2-20mm joint width | **40-50mins** working time | **3-4 hrs** light foot traffic | **internal & external** | **CG2 WA** classification

| Limestone | Silver Grey | Grey | Charcoal |

ProGrout Epoxy

Size: 3kg

Pallet Quantity: 120

Colours: White, Jasmine, Grey, Silver Grey, and Charcoal

- Water-based epoxy resin grout for waterproof, stain resistant grouting of porcelain tiles, ceramics, natural stone, and glass mosaics
- Suitable for wall and floor tiling and for use in aggressive environments
- Ideal for use in wet areas and swimming pools
- For internal and external installations

2-12mm joint width | **30-40 mins** pot life | **24 hrs** light foot traffic | **resistant** | **CG2 RG EN 13888** classification

| White | Jasmine | Grey | Silver Grey | Charcoal |

ProPave Grout

Size: 15kg

Pallet Quantity: 65

Colours: Pebble Grey, Storm Grey, Natural Cashmere, Cosmic Black

- Ideal for use with 20mm porcelain tiles
- **Colour Shield** technology for a vibrant finish
- Can be used in all weather
- Walk on in 24-48 hours
- No waste, left over material can be re-used
- Fills joints from 3-20mm
- Part of the ProPave External Tiling System

3-20mm joint thickness | **24-48 hrs** walk on time | **35-45mins** working time

| Pebble Grey | Storm Grey | Natural Cashmere | Cosmic Black |
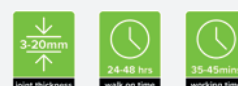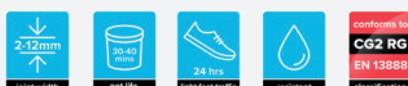
Witness the exceptional performance of ProGrout Flowable by scanning this QR Code.

PRODUCT FEATURES		ProGrout Flexible	ProGrout Epoxy	ProGrout Flowable	ProPave Grout
SPECIFICATION	Wall & Floor	Wall & Floor	Wall & Floor	Floor	Floor
	Joint Thickness	1-20mm	1-12mm	1-20mm	3-20mm
	Pot Life*	30-60 minutes	30-40 Minutes	30-60 Minutes	N/A
	Hard Set*	12 hours	24 Hours	12 Hours	24-48 hours
	Conforms to	EN13888 CG2 WA	EN13888 RG	EN13888 CG2 WA	N/A
	Pack Size	3kg & 10kg	3kg	15kg	15kg
	Pallet Quantity	Denominations of 4	Boxes of 2	54	65
KEY AREAS OF USE	General Wall Installations	✓	✓	✗	✗
	General Floor Installations	✓	✓	✓	✓
	Interior Installations	✓	✓	✓	✓
	Exterior Installations	✓	✓	✓	✓
	Wet Rooms	✓	✓	✓	✗
	Domestic Showers with Tray	✓	✓	✓	✗
	Communal Showers	✓	✓	✗	✗
	Swimming Pools	✓	✓	✗	✗
	Electric Matting Underfloor Heating	✓	✓	✓	✗
	Piped Water Underfloor Heating	✓	✓	✓	✗
	Conservatories	✓	✓	✓	✓
SUITABLE TILES	Ceramic	✓	✓	✓	✓
	Porcelain	✓	✓	✓	✓
	Glass	✓	✓	✗	✓
	Mosaics	✓	✓	✗	✓
	Marble	✓	✓	✓	✓
	Travertine	✓	✓	✓	✓
	Granite	✓	✓	✓	✓
	Limestone	✓	✓	✓	✓
	Terracotta	✓	✓	✓	✓
	Quarry	✓	✓	✓	✓
	Slate	✓	✓	✓	✓
	Resin Backed	✓	✓	✗	✓
	Quartz	✓	✓	✗	✓
	Brick Slips	✓	✓	✗	✗

* Depending on temperatures, substrates and site conditions.   ** When using with natural stone tiles, please try an inconspicuous area first to ensure suitable before use.   Suitable = ✓ Not suitable = ✗

GROUT COLOURS

Brilliant White	Vintage White (X)	Ivory	Almond	Jasmine (X)
Limestone (X)	Taupe	Mocha	Silver Grey (X)	Mid-Grey (X)
Grey (X)	Dark Grey (X)	Charcoal (X)	Black	

SILICONE COLOURS

Clear	White	Ivory	Jasmine	Limestone
Taupe	Silver Grey	Mid-Grey	Grey	Dark Grey
Charcoal	Black			

X's denote which grouts are available in 10kg for ProGrout Flexible

Colours depicted in the charts (above) should be used as a guide only, as print process shades may vary from samples. We would always recommend that a small trial area be completed to check for the desired shade as applications can vary depending upon substrate and site conditions.

PROCLEAN RANGE

Easy Clean Tile Protector

- Water-based temporary protection for all types of porcelain and natural stone
- 100% protection against cement residues
- Protects surface against discolouration when using pigmented grouts, brush in sands and pointing mortars
- Sealer is removed during the washing off process after grouting

Grout Aid

- Final rinse additive for easy wash-down
- Helps eliminate grout haze
- Suitable for use with natural stone, ceramic and porcelain tiles
- Simply add to clean water

Epoxy Resin-Off

- Designed to remove polymer hazes, films and residues from jointing mortars, resins and surface sealants
- Ready to use, gel-like formula
- Suitable for porcelain tiles and other porous natural and artificial stones
- Highly effective remover - works in less than 20 minutes

Porcelain Tile and Stone Cleaner

- Everyday cleaner suitable for all hard surfaces
- Contains no acids, alkalis or bleaches
- Leaves surfaces clean & germ-free
- Environmentally friendly
- Kills 99.9% of bacteria

Grout Haze Remover

- Effortlessly removes cement, efflorescence & grouting residues
- Suitable to use on non-acid sensitive surfaces
- Fast-acting formula
- Internal & external use
- Removes pointing mortar residue

FOC stand available - minimum order quantities apply. Contact your Area Sales Manager for more information.

Xtreme Clean

- Dissolves and removes ingrained dirt, wax films, grease and oil
- Acid free formula
- Suitable for use with natural stone, ceramic and porcelain tiles

Tile and Grout Sealer

- Protects tiles and grout against oil & water stains
- Professional natural matte stain protection
- Suitable for interior & exterior use
- Low odour non-flammable formula
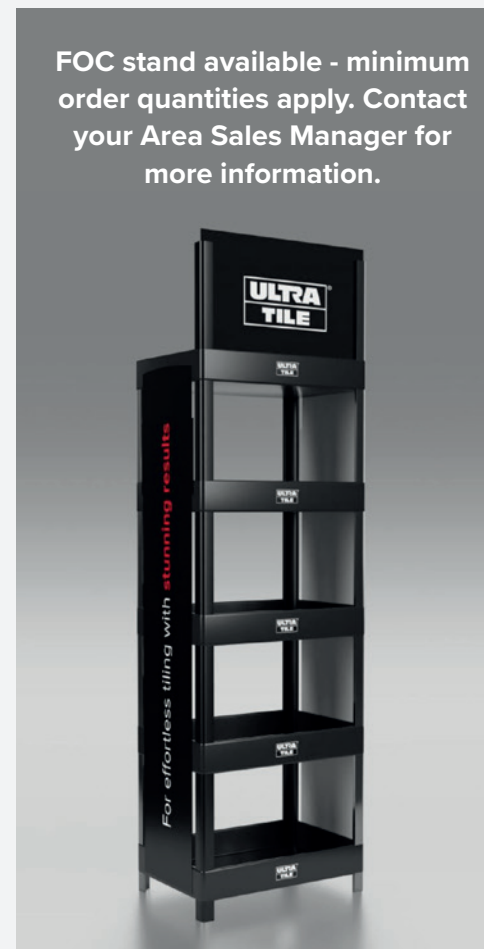
Please refer to page 32 for guidance on substrate preparation.

TILING ANCILLARIES

ProPrimer

Advanced Polymer Primer for Exceptional Bond and Multiple Substrates

Size: 1L & 5L

Box Quantity: 10 & 4

- Enhances adhesion and reduces substrate prosperity
- Designed for both porosity and non-porous substrates
- Can be used on walls and floors
- Internal and external use

Coverage Guide	
1:1 Dilution	14-20m^2
3:1 Dilution	28-40m^2
Neat	5-10m^2

ProAqua Shield

Tanking Kit

Size: 8kg (includes flexible waterproof coating and membrane tape)

Pallet Quantity: 48

- A flexible waterproof and crack bridging coating system
- Provides complete protection from moisture
- Easy to use components and no priming required
- For use on all water sensitive backgrounds
- Designed for wet rooms, showers, bathrooms, and kitchens
- Suitable for underfloor heating
- 8m^2 coverage per unit
- 10m tape available to buy seperately

Mixing Bucket

25L Mixing Bucket

- Transparent
- Complete with litre scale
- Metal handle

Grip & Grab IT

Multi-purpose adhesive

Size: 290ml tube

12 per box

- Exceptional grab
- High strength
- No need to prime
- Wet and Damp conditions
- Adheres perfectly on porous and non-porous surfaces

Please refer to page 32 for guidance on substrate preparation.

EXTERNAL TILING

PROPAVE EXTERNAL TILING SYSTEM

ProPave Primer

Slurry Primer

Size: 17kg

Pallet Quantity: 52

- Specifically formulated for porcelain and natural stone
- Provides exceptional bond and durability
- Simply mix with water
- Quick and easy roller brush application
- Enhances lifetime performance of paved area

ProPave Mortar

Fibre Modified Cement Binder

Size: 20kg
Pallet Quantity: 48

- For use with type 1 hardcore
- Fast track installation
- Fibre reinforced for added strength and durability
- Simply mix with sharp sand and water
- Dual-mix ratio for heavy or light trafficked areas
- Maintains porosity to facilitate drainage
- Approved for use with porcelain and natural stone
- Depth: 30-100mm
- Internal and external use

ProPave Grout

External Tiling Grout

Size: 15kg

Pallet Quantity: 65

Colours: Pebble Grey, Storm Grey, Natural Cashmere and Cosmic Black

- Ideal for use with 20mm porcelain tiles
- Colour Shield technology for a vibrant finish
- Can be used in all weather
- Walk on in 24-48 hours
- No waste, left over material can be re-used
- Fills joints from 3-20mm

GROUTING SOLUTIONS

ProGrout Flexible

Sizes: 3kg and 10kg
Pallet Quantity: Denominations of 4
Colours: Vintage White, Brilliant White, Ivory, Almond, Jasmine, Limestone, Taupe, Mocha, Silver Grey, Mid-Grey, Grey, Dark Grey, Charcoal and Black.

- Colour Shield technology for vibrant, durable finishes
- Designed for use with all tile types
- Ideal for wetrooms, swimming pools and underfloor heating systems
- Wash down with minimal effort
- 1-20mm joint thickness
- 30 – 60 minutes pot life
- 12 hours hard set
- Mould resistant

| 1-20mm joint thickness | 30-60mins pot life | 12 hrs hard set | mould resistant grout & guard | CG2 WA classification |

ProGrout Flowable

Size: 15kg

Pallet Quantity: 54

Colours: Limestone, Silver Grey, Grey, Charcoal

- Designed for areas where movement or vibration is likely
- Increased flexibility that provides a virtually impermeable set
- Suitable for joint widths up to 20mm and depths of 30mm
- Suitable for use on almost all tile types

| 2-20mm joint width | 40-50mins working time | 3-4 hrs light foot traffic | internal & external | CG2 WA classification |

ProGrout Epoxy

Size: 3kg
Pallet Quantity: 120

Colours: White, Jasmine, Grey, Silver Grey, and Charcoal

- Water-based epoxy resin grout for waterproof, stain resistant grouting of porcelain tiles, ceramics, natural stone, and glass mosaics*
- Suitable for wall and floor tiling and for use in aggressive environments
- Ideal for use in wet areas and swimming pools

| 2-12mm joint width | 30-40 mins pot life | 24 hrs light foot traffic | resistant | conforms to CG2 RG EN 13888 classification |

LEVELLER

Level IT Renovate

Size: 20kg
Pallet Quantity: 48

- For internal and external floors
- Can be used as a light duty wearing course
- Foot traffic in as little as 2-2.5 hours
- Ready to receive floor coverings after 4 hours
- Use over most strong and stable subfloors
- Fibre reinforced with flexible properties
- UFH compatible
- Low odour
- Protein free

ULTRASCAPE

flowpoint

Rapid Setting Flowable Grout
Size: 25kg
Colours: Natural Grey and Charcoal
Varients: Regular, ECO, Smooth, Fine

- Mixes quickly and easily on-site with water
- Economical to use
- Can be used in the rain and is frost-resistant
- Exceptional bond strength
- Fast setting - walk on in an hour
- Suitable for large scale projects
- Perfect stain free finish
- Suitable for sandstone, limestone, concrete and granite paving types
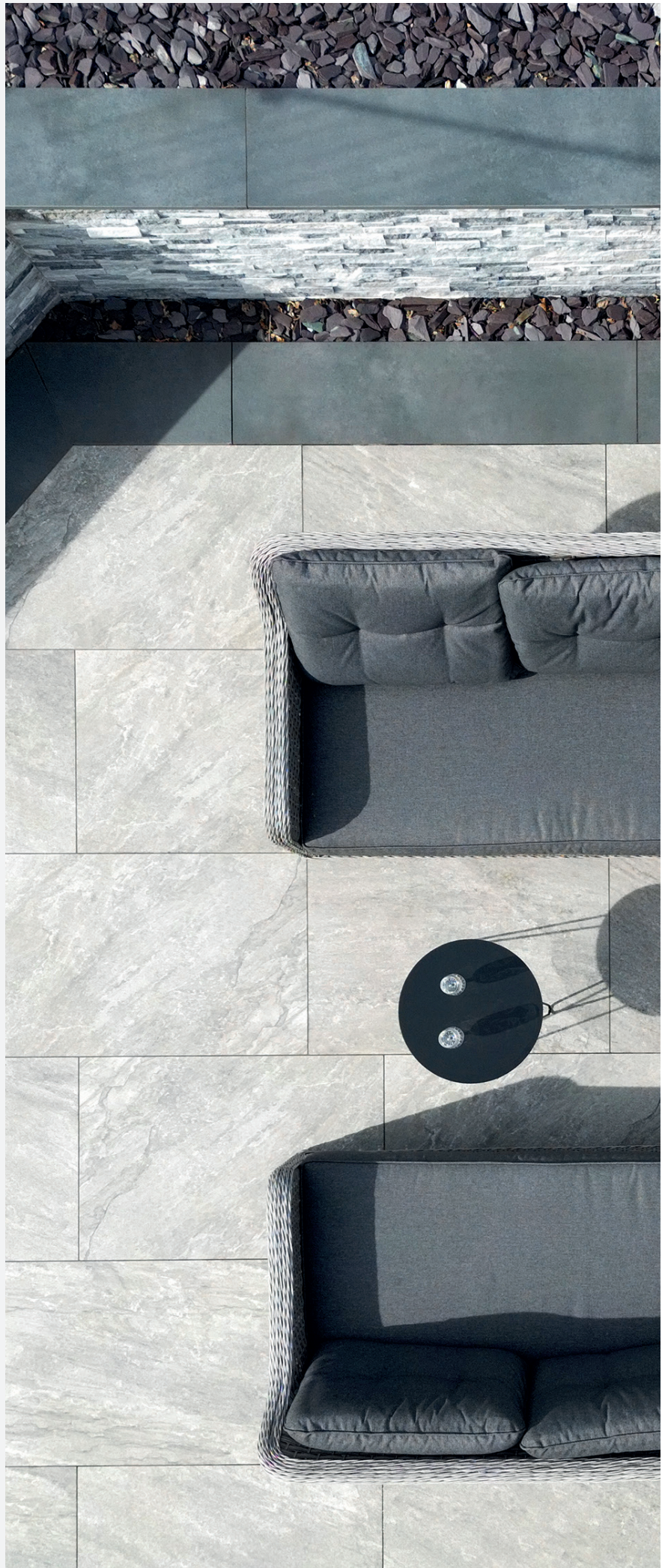
LEVELLING COMPOUNDS

ProLevel One

Deep Fill Floor Leveller

Size: 20kg

Pallet Quantity: 54

- Deep fill formulation for internal applications
- Formulated for depths up to 60mm in one application
- Flexible properties for use with Underfloor Heating Systems
- Free flowing formulation, shrinkage compensated and protein free

| 3-60mm depth | 3 hrs foot traffic | 8 hrs tile after | underfloor heating | C35 CT F6 classification |
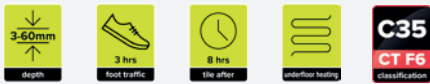
ProLevel Two

Flexible Two Part Floor Leveller

Size: 20kg bag and 4L bottle

Pallet Quantity: 48

- Exceptional high performance, multi functional internal leveller
- Easy to mix, two part bag and bottle formulation
- Moisture tolerant properties for use with liquid DPMs
- Excellent flow and flexibility for timber floors and underfloor heating systems

| 2-15mm depth | 3 hrs foot traffic | 24 hrs tile after | underfloor heating | C25 CT F5 classification |
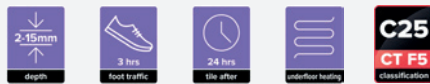
ProLevel Ultimate

High Performance Smoothing Underlayment

Size: 20kg

Pallet Quantity: 48

- Designed for Underfloor Heating Systems
- Apply floor coverings after 4 hours
- Suitable for use over old adhesive residues
- Contains 20% recycled material
- Excellent adhesion to almost all substrates
- No need to prime

| 2-30mm depth | 3 hrs set time | 4 hrs floor after | ENVIROBEAD TECHNOLOGY | C12 CT F5 classification |
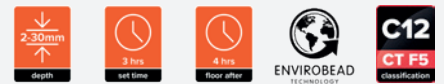
ProLevel Fibre

Reinforced Flexible Floor Leveller

Size: 20kg

Pallet Quantity: 54

- Formulated with **Fibre Bond** technology
- Superior deep fill formula for internal applications
- Excellent flow and flexibility for timber floors and Underfloor Heating Systems
- High strength, shrinkage compensated and protein free

| 3-75mm depth | 3 hrs foot traffic | 8 hrs tile after | underfloor heating | C35 CT F6 classification |
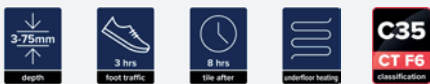
ProLevel Rapid

Fibre Reinforced Flexible Floor Leveller

Size: 20kg

Pallet Quantity: 54

- Specialist rapid, high strength formulation for internal applications
- Designed for fast track projects with same day tiling
- Exceptional flow and flexibility for timber floors and Underfloor Heating Systems
- Free flowing formulation, shrinkage compensated and protein free

| 2-15mm depth | 30 min foot traffic | 45 min tile after | underfloor heating | C35 CT F7 classification |
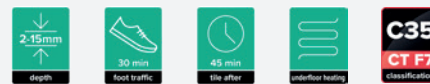
Fibre Bond

Formulated with added fibre particles
for superior strength.

CONTRACT FLOORING SOLUTIONS

PRODUCT SELECTOR

	LEVELLING COMPOUNDS						
PRODUCT FEATURES	ProLevel One	ProLevel Two	ProLevel Fibre	ProLevel Rapid	ProLevel Ultimate	Level IT Renovate	Level IT Super 30
	Deep Fill Floor Leveller	Flexible Two Part Floor Leveller	Reinforced Flexible Floor Leveller	Fibre Reinforced Flexible Floor Leveller	High Performance Smoothing Underlayment	Semi-rapid, Fibre Reinforced Single-part Smoothing Underlayment	Rapid Setting, Rapid Drying Smoothing Underlayment
Working Time at 20°C	20-30 Minutes*	20-30 Minutes*	20-30 Minutes*	10-15 Minutes*	45 mins	20-30 Minutes*	10 Minutes*
Set Time at 20°C	3 Hours*	2.5 Hours*	3 Hours*	30 Minutes*	2.5 hours	2-2.5 Hours*	30 Minutes*
Commence the Tiling Process	8 Hours *	24 Hours *	8 Hours*	45 Minutes* (natural stone & ceramic tiles)	4 hours	4 Hours*	3 Hours*
Application Thickness	3-60mm	2-15mm	3-75mm	2-15mm	2-30mm	3-40mm	2-15mm
Protein Free	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coverage**	Approx. 4m² at 3mm	Approx. 6m² at 2mm	Approx. 4m² at 3mm	Approx. 5m² at 3mm	Approx 4m² at 3mm	Approx. 5.0m² at 3mm	Approx. 6m² at 2mm
Suitable for Pump Action	Yes	No	Yes	No	Yes	Yes	No
Compressive Strength (minimum) 28 Days to BS EN 13892-2	35.0 N/mm²	25.84 N/mm²	35.0 N/mm²	35.0 N/mm²	15 N/mm²	25.0 N/mm²	35.0 N/mm²
Flexural Strength (minimum) 28 Days to BS EN 13892-2	8.50 N/mm²	5.82 N/mm²	8.50 N/mm²	7.0 N/mm²	5 N/mm²	5.0 N/mm²	7.0 N/mm²
Pack Size	20kg	20kg & 4L	20kg	20kg	20kg	20kg	20kg & 4L
Pallet Quantity	54	48	54	54	48	48	48
Concrete Subfloors	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
Tamped or Pan Floated Concrete	✓ N	✓ N	✓ N	✓ N	✓ D	✓ D	✓ N
Sand/Cement Screeds	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D	✓ D
Existing Smoothing Underlayments	✓ D	✓ D	✓ D	✓ D	✓ D	✓ N	✓ D
Terrazzo/Granolithic/ Ceramic Tiles	✓ N	✓ N	✓ N	✓N	✓ N	✓ D Ⓒ	✓ N
Anhydrite/Calcium Sulphate/Gypsum Based Screeds	✓ D Ⓒ	✓ D Ⓒ	✓ D Ⓒ	✓ D Ⓒ	✓ D*	Ⓒ	✓ D Ⓒ
Plywood/Tile Backer Board****	✓ D Ⓒ	✓ D Ⓒ	✓ D Ⓒ	✓ D Ⓒ	✓ D*	✓ D Ⓒ	✓ D Ⓒ
Warm Water Underfloor Heating	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43 *****
Radiant Electrical Underfloor Heating System	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43	✓ Refer to pages 41, 42 & 43
Vinyl Tiles	✗	✓ N	✗	✓ N	✓ N	✗	✓ N
UltraFloor DPM IT	✓ N	✓ N	✓ N	✓ N	✓ N	✓ N	✓ N
Pre-smoothing prior to DPM or MVS	✗	✓ D	✗	✗	✓	✓ D	✗
Old Adhesive Residues	✗	✗	✗	✗	✓	✗	✗

SPECIFICATION

SUITABLE SURFACES & SUBSTRATES

Suitable = ✓ Not suitable = ✗

* Based on 3mm applications and depending on substrate porosity, nature of flooring and good site drying conditions.

** Coverage details should be used as a guide but may vary depending on substrate and site conditions. DPM coverage and consumption based on application to clean smooth surfaces at 20 degrees Celsius. These may vary depending on temperature and surface evenness.

*** Priming not required

**** Plywood is not suitable for use in damp or frequently wet areas. In these cases use tile backer board.

***** For solid floors only, consult the Underfloor Heating manufacturer for guidance .

D Prime first with UltraTile ProPrimer diluted as per installation guides

N Prime first with UltraTile ProPrimer neat as per installation guides.

For full application instructions, please refer to the relevant product's datasheet or call the **UltraTile Technical Department 01827 254402**.

LEVELLING COMPOUNDS			REPAIR & FINISHING COMPOUNDS		MOISTURE PROTECTION		PRIMING
Level IT Multi-Pro	Level IT Super Flex 30	Level IT Smooth	Patch IT	Feather IT	DPM IT	Suppress IT	Primer MSP
Semi-rapid, moisture tolerant multi-purpose Smoothing Underlayment	Rapid Setting & Rapid Drying Fibre Reinforced, Flexible Smoothing Finishing Compound	High Performance, Fine Flow Smoothing Underlayment	Rapid Drying Repair Mortar	Rapid Drying Finishing Compound	Rapid Curing Primer Membrane	Single Component, Two-coat Moisture Vapour Suppressant	Multi-surface Primer
45 mins	10 Minutes*	20-30 Minutes*	10-15 Minutes	10-20 Minutes	45-75 Minutes Pot Life	N/A	N/A
90-120 mins	30 Minutes*	2-3 Hours*	30 Minutes	30 Minutes*	16 Hours	2 Hours	N/A
4 hours	1 Hour*	12 Hours*	90 Minutes	4 Hours*	N/A	N/A	N/A
2-15 mins	2-10mm	2-30mm	20mm	Feather Edge to 3mm	2.75m²/kg at 345 Microns	N/A	N/A
Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Approx 5m² at 2-3mm	Approx. 6.5m² at 2mm	Approx. 6.6m² at 2mm	6.5m² at 1mm / 3.2m² at 2mm	6m² at 1mm	Power Floated Concrete 13.75m² (98%RH) 15m² (90%RH) Cementitious Screed 9m² (98%RH) 12m² (90%RH)	Approx. 16.5m² (based on two coats)	Approx. 200m2 at 3:1 dilution
No	No	Yes	N/A	N/A	N/A	N/A	N/A
13 N/mm²	32.45 N/mm²	35.0 N/mm²	40.0 N/mm²	7.0 N/mm²	N/A	N/A	N/A
3 N/mm²	7.68 N/mm²	6.0 N/mm²	4.5 N/mm²	3.0 N/mm²	N/A	N/A	N/A
20kg & 5L	20kg & 5.0L	20kg	10kg	5kg	5kg	5L	5L
48	48	48	48	100	80	4 Per Box	4 Per Box
✓ D	✓ D	✓ D	✓	✓	✓	✓	✓ D
✓ D	✓ N	✓ N	✓ N	✗	✗	✗	✓ N
✓ D	✓ D	✓ D	✓	✓	✓	✓	✓ D
✓ D	✓ D	✓ D	✓	✓	✓	✓	✓ N
✓ N	✓ N	✓ N	✓ N	✗	✗	✗	✓ N
✓ D*	✓ D 🕓	✓ D 🕓	✓ D 🕓	✗	✗	✗	✓ D*
✓ D*	✓ D 🕓	✓ D 🕓	✓ D 🕓	✗	✗	✗	✓ D*
✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43 *****	✗	✗	✗	✗	✓ Refer to pages 41, 42 & 43 *****
✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43 *****	✓ Refer to pages 41, 42 & 43 *****	✗	✗	✗	✗	✓ Refer to pages 41, 42 & 43 *****
✓ N	✓ N	✗	✗	✗	✗	✗	✓ N
✓ N	✓ N	✓ N	✓ N	✗	N/A	N/A	✓ N
✓	✗	✗	✗	✗	N/A	N/A	✓ N
✓	✗	✗	✗	✗	✗	✗	✓

Suitable = ✓ Not suitable = ✗

PRODECK WETROOM SYSTEMS

Wet rooms have been steadily gaining popularity in modern home design, emerging as a sought-after feature that blends style and functionality.

Unlike traditional bathrooms with enclosed showers, wet rooms embrace a more open, spa-like concept where the entire room serves as the shower space. This seamless integration of the shower area eliminates the need for bulky shower enclosures, creating a sleek, minimalist aesthetic that appeals to homeowners drawn to contemporary, high-end aesthetics.

This open-concept design not only enhances the visual appeal of the bathroom but also promotes a more efficient use of space, making it an increasingly attractive choice for homeowners looking to elevate the functionality and style of their living spaces.

UltraTile is proud to present the ProDeck complete Wetroom Systems, which are available in both standard and linear.

ProDeck is a blue coloured self-supporting shower deck with a pre-formed minimum fall of 2% that can be used with tiles, resin, vinyl and micro-cement floor coverings.

At 22 or 24mm at the outer edges, ProDeck allows barrier-free installation with most timber and cement board substrates, it is self-supporting and can span joists with a load baring capacity of 470kg.

ProDeck is manufactured using a resin gel and reinforced fibre glass process and includes 50% recycled materials, allowing for it to be fully recycled after use, which makes it perfect for environmental projects.

The square or linear drain options can deal with 47 litres per minute allowing for flexible shower specifications and with a wide choice of on trend drain covers, ProDeck is the perfect option for Wetroom applications.

ProDeck completes the full Wetroom system from UltraTile, including primers, levellers, epoxy grouts, tanking kit and adhesives.

HOW TO ORDER ULTRATILE'S PRODECK WETROOM SYSTEM:

1. Simply choose an UltraTile ProDeck size.
2. Select grid options.

COMPLETE WETROOM SYSTEM

FOR TILE FLOORS

The UltraTile ProDeck Square Complete Wetroom System Includes:

ProAqua Shield Tanking Kit

- Easy to use paint on tanking system.
- Covers up to 8m².
- Quick curing time.
- Dries into a flexible waterproof membrane.

For the install of ProDeck, the kit is upgraded as below:
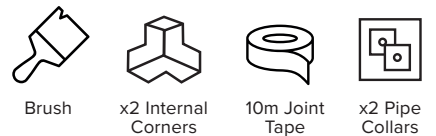
Brush   x2 Internal Corners   10m Joint Tape   x2 Pipe Collars
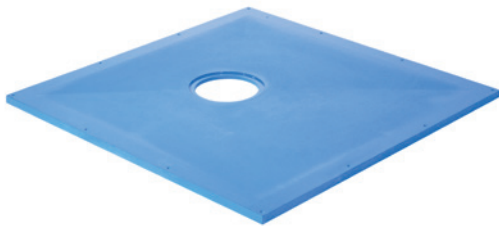
UltraTile ProDeck Square

- Structural load-bearing wetroom tray, accepts 470kgs loading over 400mm joist centres without deflection
- Self supporting, no under-boarding required over 400mm joist centres.

See page 23 for codes and sizes.

- Can be trimmed to size using a diamond saw.
- Composed of resin gel & reinforced fibre glass.
- Manufactured using 50% recycled material & is 100% recyclable.
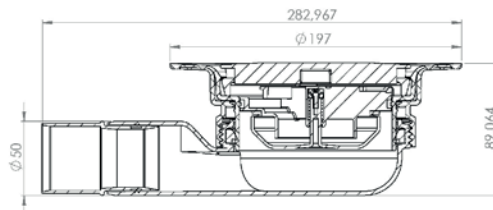
Drain

- Two part design for easy installation.
- High flow rate 47 litres/minute.
- Removable mechanical water trap, prevents foul air from escaping the drain.
- 40mm solvent weld connection.

Grid Insert
UT PDeck Grid SS SQ
155 x 155mm

Tile Insert
UT PDeck Insert SQ
130 x 130mm

Standard Grids

- **Choice of two standard grids,** Grid or Tile Insert.
- Suitable for tiles up to 15mm thick.
- Option to upgrade to premium finishes.

Premium Grids

To choose a premium finish, there will be an extra cost. Please see the codes below.

Brushed Brass
UT PDeck Grid BB SQ

Copper
UT PDeck Grid COPP SQ

Bronze
UT PDeck Grid BNZE SQ

Black
UT PDeck Grid BLK SQ

- Plated 304 stainless steel grid.
- 155 x 155mm.
- Suitable for tiles up to 15mm thick.

ULTRATILE PRODECK SQUARE
CODES AND SIZES AVAILABLE

UT PDeck 101 SQ
900 x 900 x 22mm
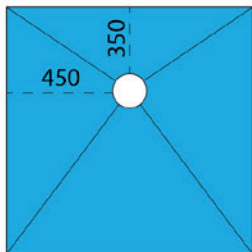
UT PDeck 102 SQ
1200 x 900 x 22mm
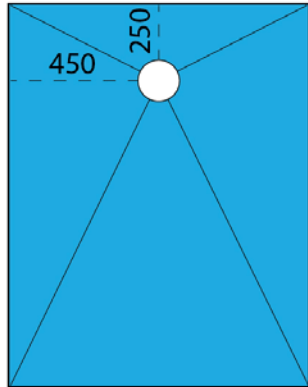
UT PDeck 103 SQ
1200 x 1200 x 22mm
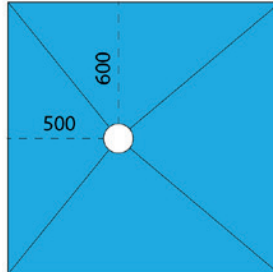
UT PDeck 104 SQ
1000 x 1000 x 22mm
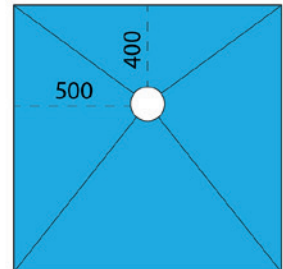
UT PDeck 105 SQ
1300 x 800 x 22mm
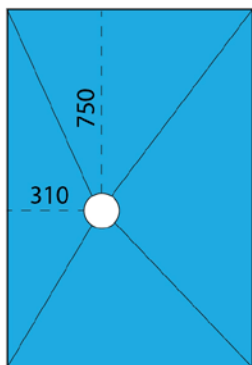
UT PDeck 106 SQ
1450 x 1150 x 22mm
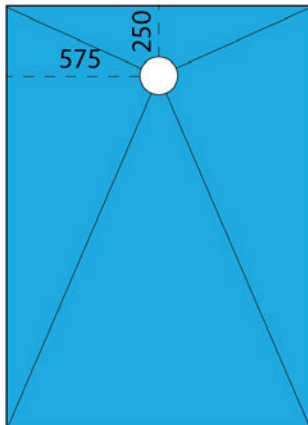
UT PDeck 107 SQ
1135 x 770 x 22mm
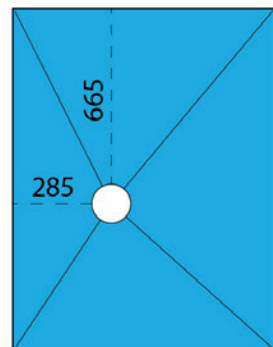
UT PDeck 108 SQ
1400 x 900 x 22mm
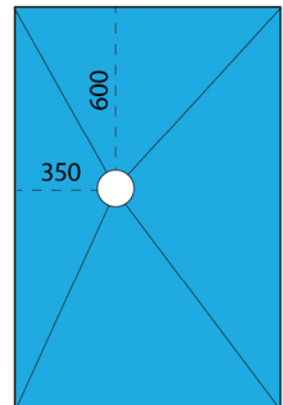
UT PDeck 109 SQ
1650 x 900 x 22mm
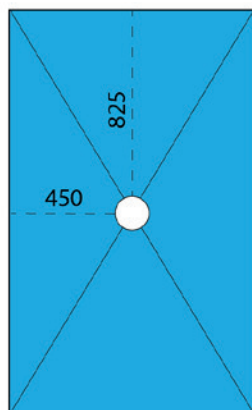
UT PDeck 110 SQ
1200 x 800 x 22mm
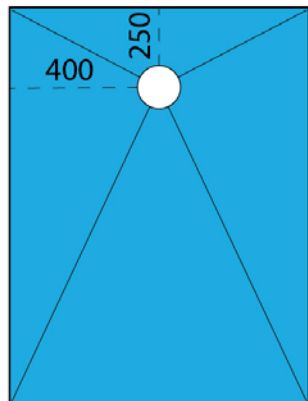
UT PDeck 111 SQ
1500 x 800 x 22mm
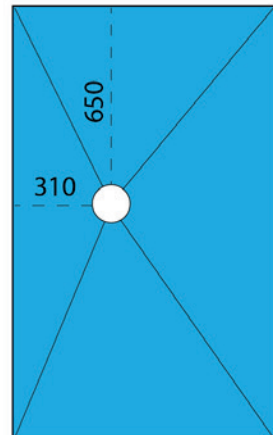
UT PDeck 112 SQ
1800 x 800 x 22mm
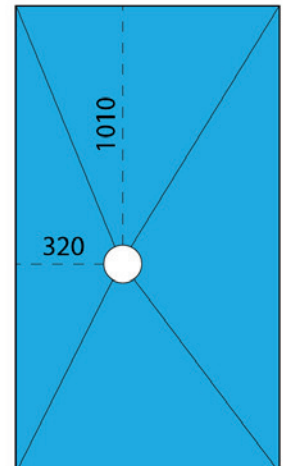
COMPLETE WETROOM SYSTEM
FOR TILE FLOORS
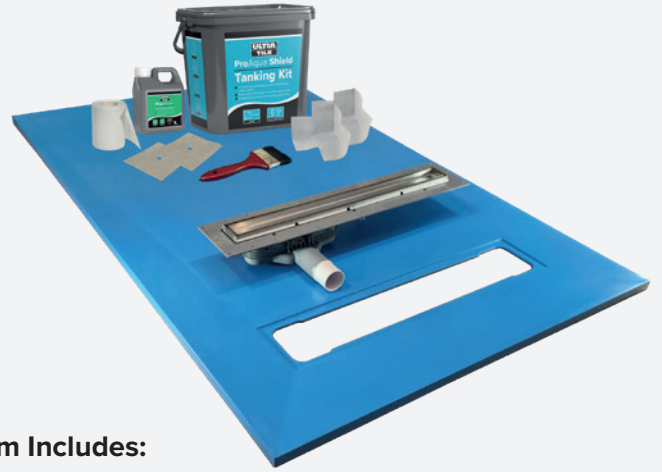
The UltraTile ProDeck Linear Complete Wetroom System Includes:

ProAqua Shield Tanking Kit

- Easy to use paint on tanking system.
- Covers up to 8m².
- Quick curing time.
- Dries into a flexible waterproof membrane.

For the install of ProDeck, the kit is upgraded as below:

Brush | x2 Internal Corners | 10m Joint Tape | x2 Pipe Collars
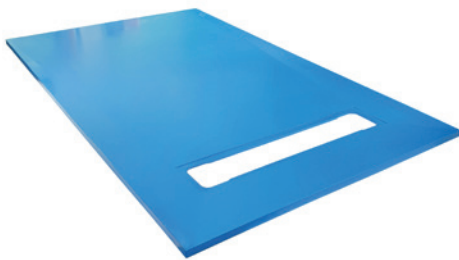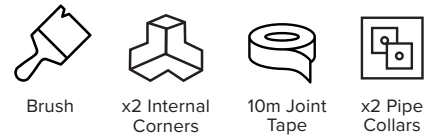
UltraTile ProDeck Linear

- Structural load-bearing wetroom tray, accepts 470kgs loading over 400mm joist centres without deflection
- Self supporting, no under-boarding required over 400mm joist centres.

See page 25 for codes and sizes.

- Can be trimmed to size using a diamond saw.
- Composed of resin gel & reinforced fibre glass.
- Manufactured using 50% recycled material & is 100% recyclable.

Linear Drain

- Stainless Tile Insert grid, **supplied as standard.**
- Suitable for tile up to 10mm thick.
- High flow rate 32 litres/minute.
- Shallow gulley, projects only 74mm below the ProDeck.

- Removable mechanical water trap, prevents foul air from escaping the drain.
- 40mm solvent weld connection.
- Option to upgrade to premium finishes.

Premium Inserts and Grids

To choose a premium finish, there will be an extra cost. Please see the codes below.

UT PDeck Grid BB LIN

Brushed Brass Tile Insert
- 304 Stainless steel grid.
- Suitable for tiles 10-26mm thick

UT PDeck Grid BNZE LIN

Bronze Tile Insert
- 304 Stainless steel grid.
- Suitable for tiles 10-26mm thick

UT PDeck Grid BLK LIN

Black Tile Insert
- 304 Stainless steel grid.
- Suitable for tiles 10-26mm thick
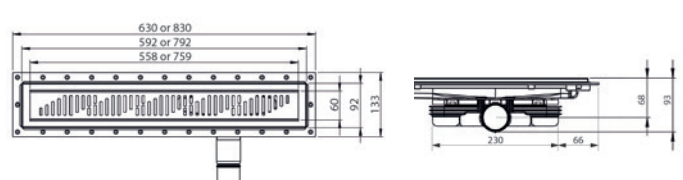
UT PDeck Grid SS LIN

Stainless Twist Grid
- 304 Stainless steel grid.
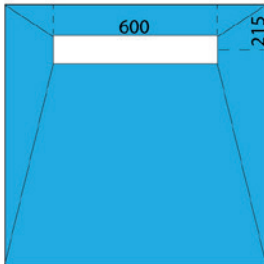- Suitable for tiles 10-26mm thick

Tile Insert

630 or 830
555 or 757
540 or 740
43 | 58 | 133
230 | 66 | 72 | 97

Twist

630 or 830
592 or 792
558 or 759
60 | 92 | 133
230 | 66 | 68 | 93
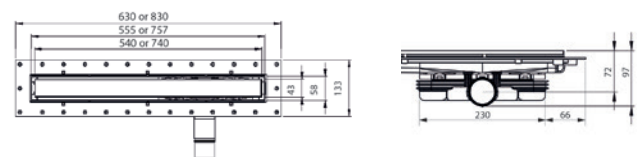
ULTRATILE PRODECK LINEAR
CODES AND SIZES AVAILABLE

UT PDeck 201 LIN
1000 x 1000 x 22mm

600 · 215

UT PDeck 202 LIN
1200 x 900 x 22mm

600 · 300
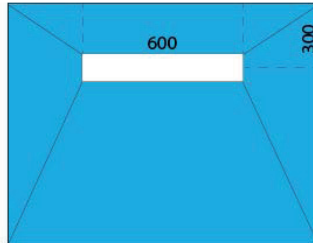
UT PDeck 203 LIN
1200 x 900 x 22mm

600 · 215
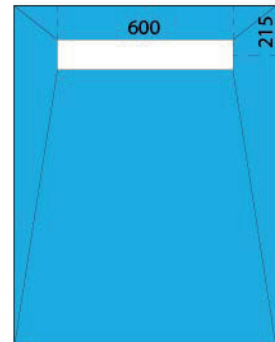
UT PDeck 204 LIN
1200 x 1200 x 22mm

600 · 300
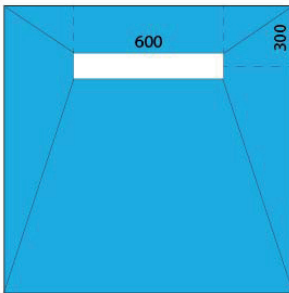
UT PDeck 205 LIN
1400 x 900 x 22mm

450 · 800
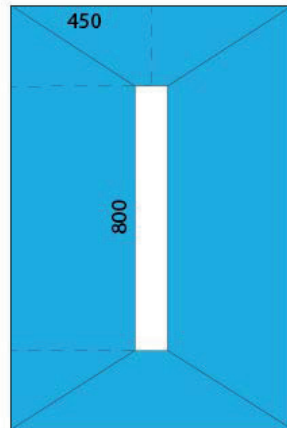
UT PDeck 206 LIN
1500 x 900 x 22mm

600 · 215
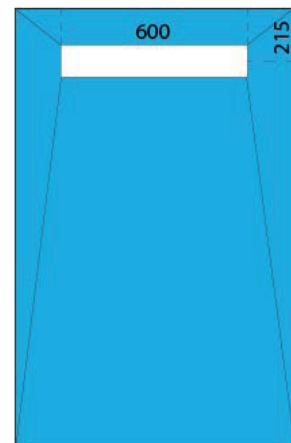
UT PDeck 207 LIN
1500 x 1200 x 24mm

800 · 300
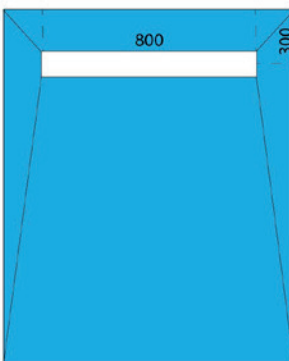
UT PDeck 208 LIN
1600 x 900 x 22mm

450 · 800

UT PDeck 209 LIN
1800 x 900 x 24mm

600 · 300

INSTALLATION GUIDES

CONTENTS

Tile Adhesives & Grout Classifications

All UltraTile adhesives and grouts are fully CE classified, their 'Declaration of Performance' certificates can be downloaded at the click of a button from ultratileadhesives.co.uk.

The European Standards explained:

EN 12004:2007

Adhesives for tiles- requirements, evaluation of conformity, classification, and designation regarding ceramic tile adhesives for internal and external tile installations for floors and walls.

C   Cementitious adhesive

D   Dispersion adhesive (ready mixed paste)

Tile Adhesive Classes

1   Normal adhesive

2   Improved adhesive (meets the requirements for additional characteristics)

F   Fast setting adhesive (cementitious only) that adhesives $0.5N/mm^2$ in 6 hours

T   Non-slip adhesive (for walls)

E   Extended open time adhesive, i.e. > 30 minutes (for cementitious dispersion adhesives only)

EN 12002:2008

Determination of the transverse deformation for cementitious adhesives and grout.

S1 Deformable adhesive with a transverse deformation of between 2.5mm and 5mm

S2 Highly deformable adhesive with a transverse deformation of over 5mm

EN 13888:2009

Grouts for tiles - definitions and specifications for ceramic tile grouts for internal and external tile installations for walls and floors.

CG1 Normal cementitious grouts with fundamental characteristics such as abrasion resistance, flexural and compressive strengths when subjected to dry storage/freeze-thaw cycles as well as water absorption measured over time.

CG2 Improved cementitious grout, typically highly polymer modified cementitious grouts with additional characteristics such as reduced water absorption and higher abrasion resistance.

CG2 WA Improved cementitious grout (CG2) with additional characteristics of reduced water absorption (W) and high abrasion resistance (A).

MATERIAL CALCULATIONS

How much material will I need?

Ready Mixed Tile Adhesive (Paste)

1 x 15kg plastic bucket, when using a recommended 3mm notched trowel, should cover approximately 6m².

Cementitious Powder Tile Adhesive

1 x 20kg bag, when using a recommended 6mm notched trowel (3mm bed thickness), should cover approximately 4 - 5m².

Silicones

1 x 310ml tube, when using a 6mm diameter bead, should cover approx. 11 linear metres.

Grouts

Grout usage will also vary to a far greater extent depending on the style and size of tiles used, as well as the final appearance required.
A 3kg bag will cover approximately 10 - 12m² when using 150 x 150mm tiles and 3mm joints.

For a guide calculation for all other installations, please use the formula below or visit **ultratileadhesives.co.uk.**
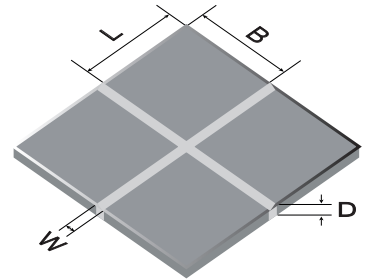
Product	Coverage Ratio
UltraTile ProGrout Flowable	1.6
UltraTile ProGrout Epoxy	1.38
UltraTile ProGrout Flexible	1.2

Formula & Calculation

UltraTile ProGrout Flexible

Coverage Ratio 1.2

Step by step guide

1. Add together the length and breadth of the tile in mm.
2. Multiply this result by the joint width multiplied by the joint depth in mm.
3. Multiply this result by the coverage ratio
4. Divide the result by the length multiplied by the breadth of the tile in mm. The result is the material requirement in kg/m²

Example

(Length + Breadth of Tile) x (Width x Depth of Joint) x Coverage Ratio

Divided by

(Length x Breadth of Tile) =   **Kg/m²**

Therefore

Tile Size: 150mm x 150mm
Joint Size: 6mm x 3mm
Product: UltraTile ProGrout Flexible
Coverage ratio: 1.2

(150 + 150) x (3 x 6) x 1.2

Divided by (150 x 150) =   **0.288kg**

Formula & Calculation

UltraTile ProGrout Epoxy

Coverage Ratio 1.38

Step by step guide

1. Add together the length and breadth of the tile in mm.
2. Multiply this result by the joint width multiplied by the joint depth in mm.
3. Multiply this result by the coverage ratio
4. Divide the result by the length multiplied by the breadth of the tile in mm. The result is the material requirement in kg/m²

Example

(Length + Breadth of Tile) x (Width x Depth of Joint) x Coverage Ratio

Divided by

(Length x Breadth of Tile) =   **Kg/m²**

Therefore

Tile Size: 150mm x 150mm
Joint Size: 6mm x 3mm
Product: UltraTile ProGrout Epoxy
Coverage ratio: 1.38

(150 + 150) x (3 x 6) x 1.38

Divided by (150 x 150) =   **0.331kg**

Formula & Calculation

UltraTile ProGrout Flowable

Coverage Ratio 1.6

Step by step guide

1. Add together the length and breadth of the tile in mm.
2. Multiply this result by the joint width multiplied by the joint depth in mm.
3. Multiply this result by the coverage ratio
4. Divide the result by the length multiplied by the breadth of the tile in mm. The result is the material requirement in kg/m²

Example

(Length + Breadth of Tile) x (Width x Depth of Joint) x Coverage Ratio

Divided by

(Length x Breadth of Tile) =   **Kg/m²**

Therefore

Tile Size: 150mm x 150mm
Joint Size: 6mm x 3mm
Product: UltraTile ProGrout Flowable
Coverage ratio: 1.6

(150 + 150) x (3 x 6) x 1.6

Divided by (150 x 150) =   **0.384kg**

UltraTile Technical
Department **01827 254402**

Note: The above coverage is provided as a guide only and reflects typical tiling applications without any waste. Therefore, it should not be used as an exact material requirement calculation. Please note that the actual coverage may vary depending on substrate, tile size (width, length, and thickness), desired effect and size of joints. For further help and technical support, please call the UltraTile team on +44 (0)18274402 or email ultratile@instarmac.co.uk.

COMMON TERMS

There is a great deal of terminology used within the tiling industry. The following is a collection of the most common terms and their meanings.

Common Terms

Additive: Generally refers to a liquid polymer that can be added to a grout or adhesive to improve its adhesion and flexibility.

Adjusting time: The length of time after fixing a tile that it can still be adjusted without detriment to the adhesive bond strength.

Buttering: The process of spreading a thin layer of adhesive on the underside of textured tiles directly before bedding. This ensures a full bed adhesive is achieved.

Calibrated/Un-calibrated: A reference to the thickness of tiles. Calibrated tiles are manufactured to give a uniform depth so can be bedded onto the adhesive using the same bed depth. Un-calibrated tiles are typically natural stone of varying thickness and require thicker bed types.

Efflorescence: The appearance of light deposits of salts on cementitious materials, occasionally visible in grout lines. It is the result of moisture bringing salts to the surface that when dry, leave a white powdery deposit showing light and dark variations within the grout. It occurs due to moisture migration from the background substrate, by watering or premature cleaning off the grout. It is not detrimental to grout performance.

Epoxy: Epoxy resins, also known as poly epoxides, are a class of reactive prepolymers and polymers, which contain epoxide groups. When used within a grout, they create a strong and waterproof finish.

Finished walls and floors: Prior to any tiling it is important that walls and floors are finished providing the level of smoothness and regularity required. This may be by means of rendering or plastering on walls or by use of a suitable smoothing compound on floors. A wall classed as finished and ready for tiling will have no greater than 2mm deviation under a 2mm straight edge. A finished floor, a 3mm deviation under a 3mm straight edge.

Fixing time: The length of time after applying an adhesive, that the tiles can be fixed.

Frost resistant: The ability of a tile adhesive or grout to perform even when the external conditions can result in frost formation. The tiles usually must have very low water absorption to ensure cracking does not occur.

Grout after: The period after which the tiles are firmly set into the adhesive and will allow grouting to begin without disturbing the bond of the tile.

Internal/external: Products that are suitable for both internal and external use without affecting their performance parameters.

Laitance: A term used to describe a fine particle material deposit (often referred to as 'fines' or 'fat') found on the surface of cementitious or calcium sulphate subfloors. The deposit is a weak interface and should be removed to ensure the tile adhesive has a sound, strong surface to bond to. Laitance should be mechanically removed (often followed by vacuuming) and is caused by too much water when installing a screed. It can also be found when a levelling compound has been incorrectly used.

Movement joints: Gaps left in tiled floor designs and filled with a flexible material to enable the substrates and/or building to move independently of the tiling. Typically between different substrates, where tiles abut upright, at corners and where expansion joints are essential design features.

Mould resistant: The ability of a product, usually grout, to resist the growth of mould.

Open time: The time, usually in minutes, after application of an adhesive within which it will still bond and secure the tile. This can be influenced by the nature of the substrate (with absorbent substrates reducing open time) and the ambient conditions where warm, dry conditions reduce the open time.

Polymer modified: This term refers to adhesive and grout formulations that include added polymer for increased adhesion and flexibility. Polymer modified products are common due to the increased use of vitrified and porcelain tiles, which have low absorbency and require a 'better' adhesive to adhere them.

Pot life: The length of time after mixing a grout or adhesive that you must use it. After the pot life has been reached, the mixed product should be discarded. Water should not be added to try and regain its characteristics.

Primer: A liquid applied to a substrate prior to tiling. Used either to enhance adhesion or to reduce porosity providing a longer open time for the adhesive.

Rapid setting: An adhesive modified so it sets rapidly, by utilising different cements and technologies. It enables tiling and grouting to be carried out in a shorter time frame.

Ready mixed: Adhesives that are supplied ready for use, without the requirement to add any water or liquid polymer. Usually acrylic based and generally only used for wall tile installations where set time is not so critical.

Hard/Set time or 'Walkability': The time, usually in hours, after which a bonded tile can be grouted and/or walked upon without affecting the bond. The set time for ready mixed adhesives is greatly dependent on the type of tiles and substrate.

Slump or Slip: The vertical movement of a wall tile after it has been bedded into an adhesive. Traditionally, battens have been used to prevent slump, but modern adhesives are modified with anti-slump or anti-slip characteristics.

Solid bed fixing: A term used to describe a bed of adhesive of greater than 95% contact between tile back and adhesive, and between adhesive and substrate. This is recommended on all floor and large formal wall installations.

Tanking: Applying a liquid waterproof membrane, usually incorporating a mesh in areas such as showers to protect moisture sensitive background substrates from water impregnation.

Tensile adhesion strength: A standard test used to determine adhesion strength of tiles and adhesive. Usually quoted in N/mm2 and the higher the number the greater the bond between the materials.

Thixotropic: A material that becomes less viscous when subjected to an applied sress.

Tile after: This is the time after which the tiling process can start. Depending on the type of application being used, priming is generally the first stage.

Tile backer boards: These boards can be constructed from a variety of materials including cement, insulation or resin-based compounds reinforced to give added strength. These boards usually offer waterproofing and/or insulation properties.

Uncoupling membranes: These are membranes used below new tiling installations and generally fixed direct to the floor screed for the purpose of preventing known problems in the subfloor affecting the new tiling installation. Creating a separation layer between the tiles and the screed can effectively overcome substrate movement tensions, and stress crack issues. They can also be used to provide waterproof protection neutralising vapour pressure build up in problematic, as well as damp screeds. They can be used above underfloor heating systems.

Underfloor heating: There are two basic types of underfloor heating systems. The first uses warm water pipes either encased within the floor screed or fixed into pre-formed insulation panels. Once positioned, installed, and commissioned the floor covering can be installed. Hot water piped through the system provides the heating. The second system uses electrical heating mats placed on to the prepared floor and connected to wall mounted thermostatic controls. Once commissioned the floor covering is installed.

Waterproof: The ability of an adhesive or grout to prevent the passage of water. Normally epoxy or resin materials, which are often also chemically resistant.

Water repellent: Used usually when referring to grout, it's the ability of the product to repel water from its surface. Does not imply a waterproof grout.

Water resistant: The ability of an adhesive or grout to still retain its performance even when subject to full immersion in water.

Water staining: A situation where moisture from adhesives or grouts gets into natural stone and dissolves existing materials resulting in discolouration, usually of the edges, but sometimes the faces

Working time or 'Workability': The time, usually in minutes, after mixing an adhesive or grout that will still retain its characteristics to enable it to be applied, bedded onto, and finished. With rapid set products the working time will be reduced the longer the material is left in the mixed container. Also, warmer temperatures will reduce the working time.

UltraTile Technical Department **01827 254402**

TILE
TYPES

The range of tiles available today is almost endless, and will continue to develop.

Opposite is a summary of the most common types and a description of their properties and make up.

Those most traditionally used are manufactured from raw materials to create a 'tile' with a variety of performance and decorative characteristics.

UltraTile Technical
Department **01827 254402**

Tile Types

Ceramic: A tile consisting of mixtures of clay, which are pressed, and kiln fired at high temperatures, to give a hard 'bisque or biscuit.' The 'biscuit' has a relatively high degree of absorbency enabling the adhesive to bond easily. Ceramics may be left unglazed but are more often glazed to give more decorative options as well as physical benefits. This includes terracotta and quarry tiles. Ceramictiles are generally not considered suitable for external use.

Vitreous (fully vitrified and semi-vitrified): Similar in manufacture to ceramic tiles but incorporating different clays to provide tiles that are harder, denser, and less absorbent. They may be fired for longer and at higher temperatures than ceramics. The term vitreous simply means 'glass like.' The classification for 'fully vitrified' is a tile with less than 3% water absorption. Fully vitrified tiles require the use of a polymer modified adhesive and may be used externally in areas for spas and swimming pools. Semi-vitreous tiles have a water absorption between 3-7%.

Porcelain: Porcelain tiles are made from a different blend of clay, and a manufacturing process similar to ceramics. This controls shrinkage and water use and results in a very dense, hard-wearing tile with an absorbency of less than 0.5%, suitable externally for commercial projects as well as for swimming pools and areas subject to frost. 'Full bodied' porcelain doesn't show wear as there is no upper glaze. They are much more affordable and are nowadays also used in domestic installations.

Terrazzo: Either pre-manufactured or laid in-situ, terrazzo consists of granite and marble chips in a Portland cement, or sometimes epoxy resin binder. They can be polished to give a low absorbent and high strength tile suitable for commercial use.

Agglomerate (quartz): This type of tile is manufactured by mixing graded pieces of granite and marble with cement and resins to give a pre-formed tile. They generally have low absorption. These tiles are sometimes referred to as quartz. For use of these type of tiles with underfloor heating always consult the manufacturer for guidance.

Glass: Manufactured from glass, and available in many striking opaque colours. Traditionally manufactured in small sizes and often on mosaic backings, they are now available in much larger formats. They are very hard and offer extremely low porosity. There are presently no British or European standards covering glass tiles, so it is always worthwhile contacting the manufacturer for adhesive recommendations. Typically a minimum of a C2 classification is required but some decorative tiles may require resin-based adhesives.

Natural Stones: There is a wide variety of natural stones available today; all are cut from larger stones to make varied sizes and shapes with a host of characteristics. Always check with the supplier regarding a sealing product for use before and after grouting. Special care should be taken when dealing with resin backed stone.

Travertine: A form of limestone, travertine is very popular. It is a porous material and can be supplied with a good surface texture but can also be filled or honed to provide a smooth surface. Travertine should always be sealed before grouting. It is recommended to use a rapid set adhesive to minimise water absorption and potential staining.

Limestone: Available in a coarse or fine texture, and of varying strength, it is a porous material and should be sealed prior to grouting. It is recommended that a rapid set adhesive is used to minimise water absorption and potential staining.

Marble: Very durable and strong, available in a vast array of colours, due to impurities when being formed. Stronger than limestone and travertine, it is often supplied polished and sometimes cut down for mosaics. Although not as porous as limestone and travertine it is still recommended to seal prior to grouting.

Granite: Very strong stone suitable for heavy wear situations, which is resistant to most domestic use acids. It is porous and requires sealing before grouting. We recommend that a rapid set adhesive is used.

Slate: Highly durable natural stone found in slabs that are split and then cut to size. Very hardwearing and offers a textured surface with a degree of anti-slip, making it ideal for external use. Slate, often supplied un-calibrated, should be sealed before grouting.

See Product Selector on pages **8 & 9** for correct choice of adhesives.

Tile Dimensions

The dimensions of any tile can play an important part in selecting the correct adhesive for use. Smaller tiles are generally easier to fix. The following common descriptions are used for different tile dimensions.

Mosaic: Typically glass or marble of small dimensions (less than 50mm x 50mm) mounted onto backing paper. Supplied in 300mm x 300mm sheets, they can be cut down to smaller bands, enabling feature strips to be created. Mosaics do not require special adhesives, but extended set products may be beneficial to allow a longer working time for intricate designs.

Large format: There is no official definition for the dimensions of a tile classed as large format. For this guide, any tile that has a perimeter measurement more than 1.6m is classed as large format i.e. 400mm x 400mm or 600mm x 200mm. Large format tiles require the use of higher strength polymer modified adhesives with improved slip and slump characteristics.

Uncalibrated: This is a term used for natural stone tiles that are not cut to give tiles of the same thickness. Unlike manufactured tiles, un-calibrated tiles will require an adhesive capable of being used at thicker bed depths to ensure a consistent finished surface level is achieved.

SUBSTRATE PREPARATION

The suitability of a substrate should always be fully assessed before carrying out any tiling.

Is the substrate porous or non-porous?

General priming guidance is to use UltraTile ProPrimer when tiling onto a porous substrate such as sand/cement. Whereas UltraTile ProPrimer neat should be used on non-porous substrates such as ceramic, terrazzo, asphalt and epoxy based damp proof membranes. We do not recommend the use of PVA for priming and have produced an article to explain this.

For underfloor heating systems in terms of priming please see specific advice on pages **41 - 43**.

2. Article:
In-depth guide to using UltraTile grouts article available online visit **ultratileadhesives.co.uk.**

Substrate preparation

The main criteria to be assessed is:

- Is the substrate strong and stable?
- Has the substrate dried/cured completely?
- Is the substrate smooth and reasonably level?
- Is the substrate porous or non-porous? A test area should be used.

If the answer to any of these is 'no,' then the substrate is not suitable to be tiled onto and further preparation is required before priming and fixing.

Why should you prime?

Priming of substrates is key to ensuring the selected adhesive can perform to its optimum. There are three basic reasons why priming is important. UltraTile provides the perfect solutions.

1. The sealing of substrates to reduce moisture absorption from cementitious adhesives enabling them to hydrate and cure properly. We recommend the use of UltraTile ProPrimer.

2. On dense and impervious substrates it is beneficial to use a bonding primer to enhance the adhesion of the tile to the substrate. Such substrates would include epoxy damp proof membranes, tile on tile, asphalt, and painted surfaces. For this we recommend the use of UltraTile ProPrimer neat.

3. On some substrates it may be necessary to create a barrier between the substrate and adhesive to ensure compatibility. This may be when applying cement adhesive to calcium sulphates or when bonding onto substrates affected by high alkali adhesives. We recommend that UltraTile ProPrimer is used when a barrier primer is required.

1. Article:
PVA for Priming - Good Practice or Bad Habit? article available online visit **ultratileadhesives.co.uk.**

Grouting Tips

The finished look of a tiling installation is down to the design itself and the tiles selected.

There are, however, a significant number of grout lines also visible which can affect the final appearance. It is therefore important to grout carefully, getting the best result possible. Here are some tips to follow:

- Mix the grout in accordance with the manufacturer's instructions. It is particularly important not to make the grout too fluid as this will cause separation, resulting in a weaker surface of varying colour.

- When mechanically mixing grouts a drill speed of less than 300RPM with the paddle held beneath the grout surface is ideal. Aggressive mixing can pull air into the product which can show as air holes upon curing.

- Be patient and leave the grout to stand for a couple of minutes after mixing, allowing the reaction of all components to begin. A quick stir after a couple of minutes standing is also advised.

- Do not re-mix the grout after this initial period, and do not add extra water to try and retain mobility. If the grout has thickened up too much to apply, then discard it.

- Once in the joint, the grout should be left to firm before cleaning down. This is to ensure it remains in the joint and does not absorb significant levels of moisture when the area is cleaned.

Note: The time to firm is dependent on many parameters. The more porous a tile and/or substrate then the quicker the firming up will happen i.e. ceramic tiles will be able to be cleaned much earlier than porcelain tiles. Joint width will also play a part, with wider joints taking longer to firm. Finally, ambient conditions will have an effect. Cold and damp environments with poor ventilation will result in the grout taking longer to firm.

- When cleaning do not over apply water. We advise using a sponge or squeegee. If using a 'wash boy,' it is important to drain the sponge thoroughly, otherwise this can reintroduce a significant amount of water into the grout, causing separation and surface patchiness when curing.

Site Conditions

The drying characteristics of cementitious smoothing underlayments are directly influenced by ambient air and floor temperatures. Cement within the smoothing underlayment cures through a process of hydration using moisture. Extreme site conditions can affect this process i.e. below 5°C and above 30°C.

Ideal ambient air and floor temperatures for application are between 10°C and 22°C. These temperatures should be maintained throughout application and curing periods. Outside of these temperatures consideration should be given to the following guidelines for good practice. Floor temperatures will be slower to respond to ambient air temperature so should be considered in advance.

High humidity and low temperature prolongs evaporation of moisture from the freshly applied smoothing underlayment and therefore extends drying times. This may ultimately delay installation of floor coverings. In such conditions planned heating (not gas heating) may be required before, during and after application of the product in order to promote ideal site conditions. Heat should be directed into the air not direct to the floor creating hot spots. Good ventilation without direct drafts will also

assist removal of moisture in the air from the building. Failure to adopt such practices in such adverse site conditions may result in damp patches, slow drying and potential surface bleed within the curing smoothing underlayment.

Low humidity and high temperature conditions will speed up drying by fast removal of moisture from freshly applied smoothing underlayment. Such conditions may cause rapid loss of moisture, required for the curing process, leading to irregular structure and strength build up. Such tensions within the drying smoothing underlayment could leave hairline surface defects. Under such conditions, smoothing underlayments should be protected from direct sunlight and drafts across its surface. Good air flow within the build without causing drafts is essential to reduce high temperature build up.

UltraTile Technical
Department **01827 254402**

WALL TILING

For wall tiling applications it is essential that the wall itself has sufficient inherent strength to hold the proposed tile and the adhesive being used.

The following chart lists the accepted maximum loadings for a variety of wall substrates. In all cases, it is advised that where wall boards, of any type, are used that the manufacturer be consulted for further guidance.

Wall Substrate	Maximum tile weight (plus adhesive and grout*)
Gypsum plaster	20kg/m^2
Plasterboard (gypsum) unskimmed	32kg/m^2
Gypsum fibre boards	40kg/m^2
Tile backer boards	40kg/m^2
Glass reinforced cement sheets	50kg/m^2

*Typically the weight of the adhesive and grout is from 2-4kg per m^2.

Wall types vary considerably but all have the same basic need to be structurally sound, strong, smooth, and level.

It is important to understand that tile adhesives are not designed to be a method of overcoming surface undulations and unevenness.

The specifications for various substrates and their suitability are listed opposite. Should any other substrates be encountered, please contact the UltraTile Technical Department.

Plaster/solid walls/ skimmed plasterboard
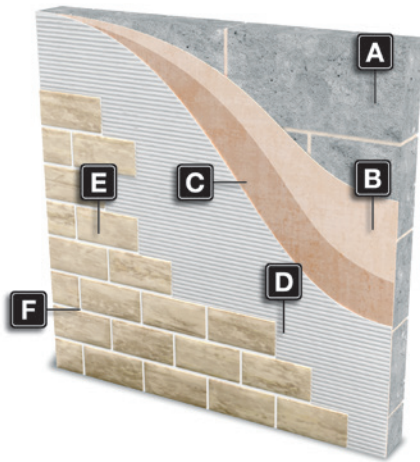
A. Block work wall construction

B. Plaster (do not tile onto bonding/ backing plaster)

C. Prime (if using a ready mixed adhesive priming may not be necessary)

D. Apply adhesive (selected upon tile type)
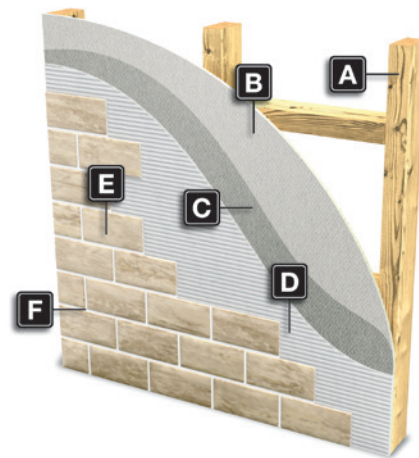
E. Install tiles

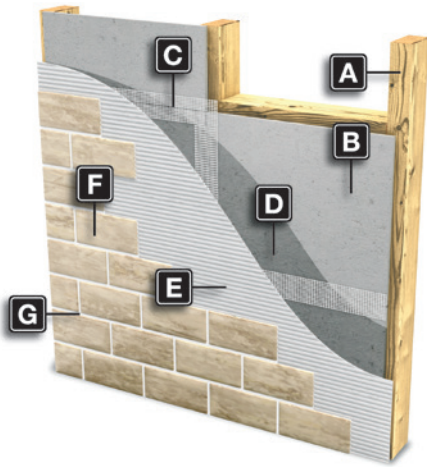**F.** Grout all joints

Instructions:

A plastered wall must be at least sixr weeks old prior to tiling to ensure adequate strength build up and suitable dryness. Prior to tiling ensure the plaster is dust free and is not showing any signs of efflorescence (see Glossary). Weak or friable plaster should not be tiled onto. Densely finished, polished or shiny plaster should be 'roughened' up to provide a good mechanical key. A stiff bristle brush should be used.

Priming:

Class as porous and refer to chart on pages **8 & 9.**

Plasterboard on studwork or solid walls

A. Studwork walls

B. Plasterboard (always fix to the paper faced side of the plasterboard)

C. Prime (if using a ready mixed adhesive priming may not be necessary)

D. Apply adhesive (selected upon tile type)

E. Install tiles

F. Grout all joints

Instructions:

Plasterboards must be securely fixed to the original substrate to ensure they are firm, rigid and dry. Any supporting timber framework must be fully seasoned to ensure no warping or twisting occurs after installation.

Priming:

Class as porous and refer to chart on pages **8 & 9.**

UltraTile Technical
Department **01827 254402**

Backer board

A. Studwork wall

B. Tile backer board

C. Jointing mesh to reinforce the joints

D. Prime (if using a ready mixed adhesive priming may not be necessary)

E. Apply adhesive (selected upon tile type)

F. Install tiles

G. Grout all joints

Instructions:

There are many brands of backer boards which could be porous or non-porous in composition. In all cases, confirm with the manufacturer as to fixing requirements and refer to chart on pages **8 & 9**.

Tiled
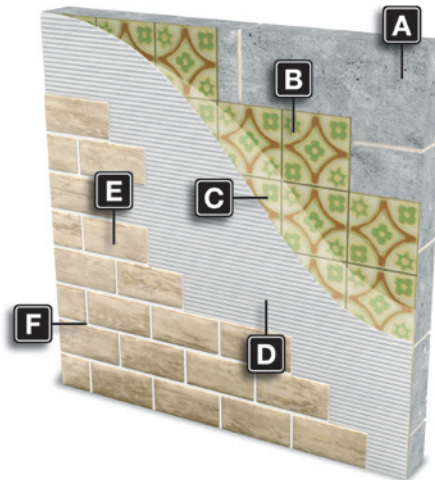
A. Block work wall construction

B. Existing tiles

C. Prime using UltraTile ProPrimer neat

D. Apply adhesive (flexible only should be used)

E. Install tiles

F. Grout all joints

Instructions:

Ideally, existing tiles should be removed and then the substrate can be prepared as required. However. it is accepted that on occasions, removal of existing tiles may not be an appropriate method, so a 'tile on tile' installation is necessary. The existing tiles must be securely bonded to a sound stable background that is capable of accepting the weight of the original tiling plus the new tiles. Tiles that sound hollow or loose should be removed and the exposed area primed prior to applying a cementitious repair mortar. Existing tiles should be degreased and then lightly abraded to provide a clean mechanical key.

Priming:

Class as non-porous and refer to chart on pages **8 & 9**.

Render

Instructions:

Allow a minimum of 4 weeks for the render to dry. Prior to tiling ensure the render is dust free and is not showing any signs of efflorescence. Weak or friable render should not be tiled onto.

Priming:

Is not normally required with highly flexible adhesives. If in doubt please consult the UltraTile Technical Department.

UltraTile Technical
Department **01827 254402**

FLOOR TILING

The main consideration for laying floor tiles is the fact that once in use, they are not just decorative and hygienic but also functional. They will have to perform under daily trafficking, whether this is foot traffic in a domestic installation or heavy wear and tear in a commercial application.

It is therefore critical that full attention to correct preparation and application is paid.

With wall tiling there is not always a need for a full bed bond, but with floor tiles it is essential. The strength build-up of the adhesive is far more important too as the tiles need to be walked upon to grout, and in most cases, the floor needs to get back into service. To enable this we advise the use of powder products rather than ready mixed adhesives.

To ensure full bonding, the substrate should be as even and level as possible. In most cases, rough floors or floors with height variations can be prepared using UltraTile ProLevel One, UltraTile ProLevel Two and UltraTile ProLevel Fibre.

All offer extremely good flow, and a floor level classified as SR2 can easily be achieved (no greater than a 5mm deflection under a 3mm straight edge).

With skill an SR1 floor can be achieved (3mm deflection under a 3mm straight edge). Please turn to page 18 & 19 for information on these products or contact the UltraTile Technical Department.

Specifications for various substrates and their suitability are listed overleaf. Should any others be encountered, please contact the UltraTile Technical Department.
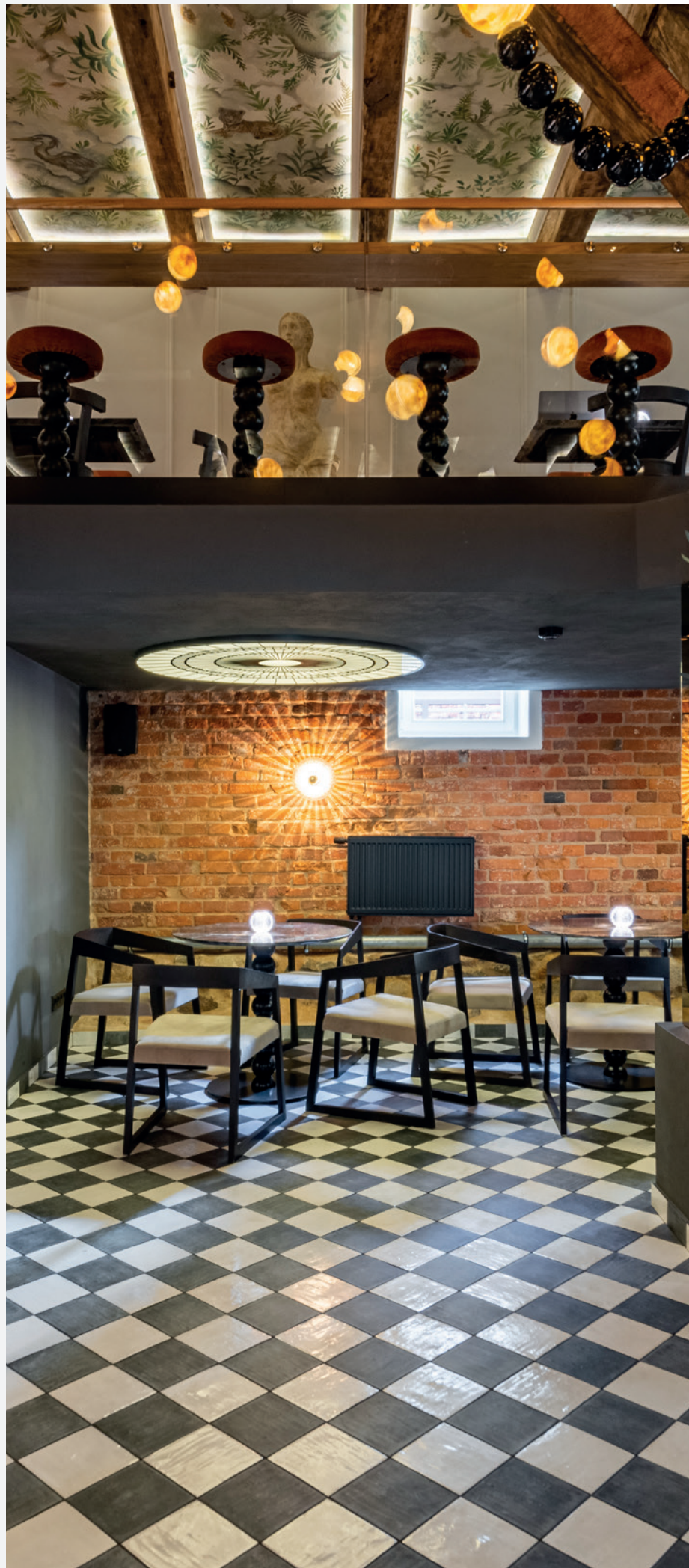
Sand/cement screed
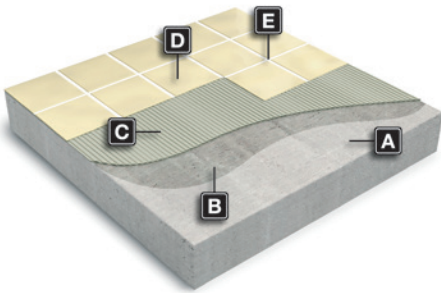
A. Sand/cement screed or concrete floor

B. Prime: if the screed is rough or uneven prepare it to use an UltraTile levelling compound followed by another primer coat

C. Apply adhesive (selected upon tile type)

D. Install tiles

E. Grout all joints

Instructions:

The screed must have cured and dried under good ambient conditions. Any cracks should be repaired with a rapid repair mortar. Any weak or friable screed should be removed and repaired. Movement joints should not be covered with tiles as they are designed to allow for subfloor movement. Follow joints through to the tile surface and use an appropriate expansion material or cover strip. Fully dry rough or uneven screeds can be improved with an application of an UltraTile levelling compound. Before commencing the tiling process, the substrate should be confirmed dry. A moisture test should always be taken to confirm.
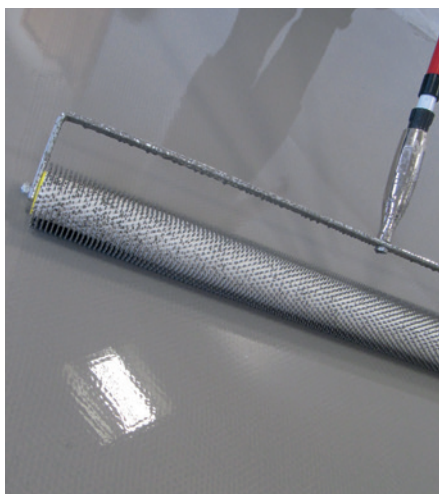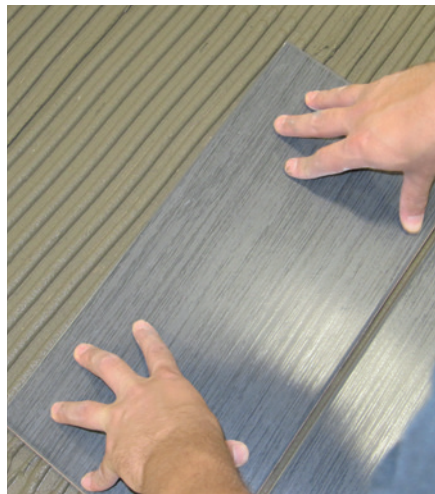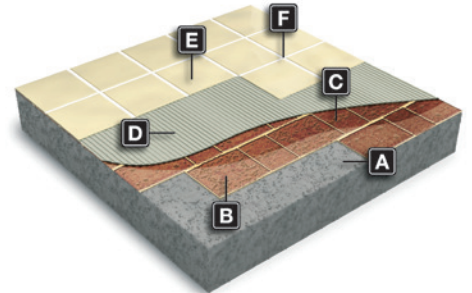
Concrete

Instructions:

Concrete varies significantly in its finish, from tamped to power floated. In all cases, the concrete must be fully cured and have been left to dry. For power-floated concrete it may be necessary to remove surface additives and hardeners by mechanical abrasion. Power-floated concrete should be considered a non-porous surface. Fully dry concrete surfaces can be improved with the application of an UltraTile levelling compound. Before commencing the tiling process, the substrate should be confirmed dry. A moisture reading should always be taken to confirm.

Priming:

Tamped concrete – apply 1 coat of UltraTile ProPrimer (diluted 3 parts water to 1 part primer). Power-floated concrete – apply 1 neat coat of UltraTile ProPrimer neat. Allow the primer coat to dry before continuing.

Tiled

A. Concrete substrate

B. Existing tiles

C. Prime using UltraTile ProPrimer neat

D. Apply adhesive (selected upon tile type)

E. Install tiles

F. Grout all joints

Instructions:

The subfloor should be assessed to ensure that all tiles are fully bonded. A mechanical abrasion of the tiles will clean and prepare the surface, whilst also helping to enhance adhesion. All tiles should be degreased and allowed to dry before proceeding. We recommend priming the tiles using a bonding primer.

Hard vinyl tiles

Instructions:

Not all vinyl tile flooring is suitable to be tiled over. Cushioned or flexible vinyl tiles should not be overlaid and must be removed along with the adhesive residue. Hard vinyl tiles should be lightly abraded (see NB below) and then primed with UltraTile ProPrimer neat (bonding primer).

Note:

Old 'crunchy' tiles should not be abraded as they may have been manufactured using asbestos fibres. Such tiles are typically 225mm (9 inches) square tiles and are often bonded onto a black adhesive. The use of an uncoupling membrane is advisable in such circumstances.

Timber/wood

Plywood overlay

Backer board

Asphalt
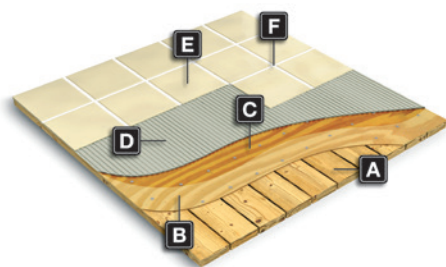
A. Floorboards

B. Plywood overlay

C. Prime (remembering to use UltraTile ProPrimer neat if marine grade is used)

D. Apply adhesive (flexible only should be used)

E. Install tiles

F. Grout all joints

A. Floorboards

B. Adhesive

C. Backer board

D. Apply adhesive (flexible only should be used)

E. Install tiles

F. Grout all joints

A. Flooring grade asphalt substrate

B. Prime using UltraTile ProPrimer neat

C. Apply adhesive (selected upon tile type)

D. Install tiles

E. Grout all joints

Instructions:

Unlike sand/cement screed and concrete, which are inherently strong and stable without any vibration or movement, there are different considerations to be made with timber/wooden subfloors. Existing timber/wooden floors must be strong, rigid, stable and capable of withstanding the load of adhesive and tiles. They should be sufficiently supported to prevent flexing. Additional noggins may be required to stabilise the floor. Timber/wood is prone to movement under varying levels of humidity so adequate ventilation beneath is necessary. Identify if plywood is porous or non-porous prior to priming.

There are 2 options to enable tiling to be carried out on timber/wooden subfloors:

1. The existing timber/wooden subfloor should be overlaid using exterior or Class 3 plywood of a minimum thickness of 15mm. All cut edges and the underside of the plywood should be sealed prior to fixing. The plywood must be screwed, not nailed, at 300mm centres.

Plywood and other wood-based sheets or boards should not be used for direct tiling. For tiling onto plywood and other wood-based sheets or boards, an intermediate layer, such as an uncoupling membrane, reinforced tanking system or tile backer board should be used. If using cement backer board to over-board the timber/wood floor, then it should be of flooring grade and of suitable strength for the application to prevent deflection. It should be 6mm minimum thickness. The backer board should be bonded using a minimum classification of S1 type tile adhesive and the original wooden floor should be thoroughly cleaned and free of any surface coating or wood treatment. It should also be primed using a neat coat of UltraTile ProPrimer.

2. Option 2 is to overlay timber/wooden subfloors using a proprietary tile backer board. The backer board must be a floor grade product.

Follow the manufacturer's guidelines regarding fixing it to the floor. This may include both mechanical fixing with screws and bonding with adhesive. Regardless of which option above is selected, we always advise to use a flexible adhesive and grout when installing on timber/wooden subfloors. They need not be problematic if the correct approach is carried out. If in doubt, contact the UltraTile Technical Department.
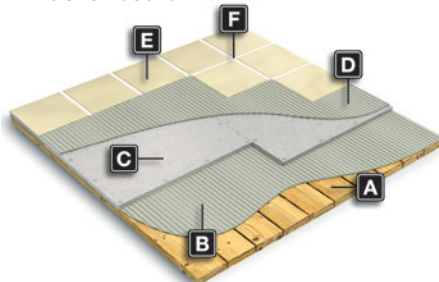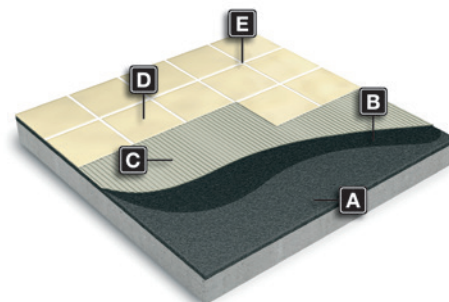
Instructions:

Used on floors and roofs due to its ability to prevent moisture passing through. It varies in strength and flexibility depending on the desired end use. Flooring grade asphalt is the only material suitable for tiling onto. Do not lay onto roofing grade asphalt. It should be a minimum of 15mm thick throughout the entire area. The surface should be crack free. Newly laid asphalt must be fully degreased to ensure surface bloom does not hinder adhesion. The asphalt must be primed to enhance adhesion. The use of a flexible tile adhesive and grout is recommended.

UltraTile Technical Department **01827 254402**

Tiling onto Calcium Sulphate Screeds

Flowable calcium sulphate screeds, also known as anhydrite, hemi-hydrite and gypsum, have many advantages over traditional sand/cement screeds such as:

- Can be laid thinner, reducing loadings
- Can be manufactured using industrial by-products, so an environmentally friendly alternative
- Increased speed of installation as they can be pumped

It is important that calcium sulphate screeds are identified before any tiling installations are carried out because they have different requirements. They may not be visually different from traditional screeds so always enquire, particularly if the screed contains underfloor heating. We recommend the use of a barrier primer on calcium sulphate screeds to avoid migration of moisture between adhesive and subfloor.

Unlike sand/cement and cementitious products, which can still have extremely high tensile and compressive strength whilst retaining a high level of moisture, calcium sulphate screeds need to reach a level of dryness to enable them to perform correctly underneath the tiling. The approved standard moisture test method is to use a surface hygrometer. This is an insulated box, fixed to the unheated floor for typically 3 days, after which the moisture in the air trapped in the box reaches equilibrium. This air is then tested using either an analogue or digital hygrometer. If the reading is less than 75%RH (residual humidity) then the screed is dry enough.

Other indicative test methods may be used to help identify if moisture is a concern or if the screed is close to dry. A simple test is to tape a piece of plastic to the floor for 48 hours. Moisture condensing on the underside of the plastic or a darkening of the screed indicates moisture levels are still significant.

The recommended drying times of calcium sulphate screeds, as quoted by the manufacturers, are usually based on drying conditions at 20°C, low air humidity and an open surface with no materials overlaid.

This does not represent a typical site scenario so they should not be relied upon. It is also important to remember that underfloor heating must have been fully commissioned. This does not mean a simple air pressure test but means a full cycle through the heating range. This is necessary to:

A. Identify if any weaknesses are in the screed by showing likely points of cracking and spalling (typically due to poor installation of the screed with heating)

B. Assist the drying of the screed

Preparation

1. Once the above criteria has been met the screed is ready to receive this. To ensure consistency it is advisable that all screeds are mechanically prepared using a rotary disc to remove any laitance and weak upper surface (consult the screed manufacturer for their specific requirements). The screed must also then be made dust free.

2. Ensure that the calcium sulphate screed is fully dry (less than 75% humidity). If in doubt then the supplier or installer of the screed must be contacted to confirm that the drying period has been observed and gain their assurance that the screed is dry. The manufacturer of the screed will know better than anyone how long their own screed will take to dry out at certain depths.

3. In general calcium sulphate screeds take 1mm/day for the first 40mm to dry out and a further 0.5mm a day for anything thicker, so a 50mm screed will need a minimum of 60 days before being anywhere near dry. 80mm would be as long as 40 days plus a further 80 days giving 120 days minimum. Calcium sulphate can be force dried, but check with the manufacturer/installer of the screed on how to do this.

Priming:

We recommend applying 2 coats of primer, ensuring consolidation and isolation of the calcium sulphate. This allows the standard classified cementitious tile adhesives to be utilised in the normal manner.

Coat 1

4. Prime the floor with a coat of UltraTile ProPrimer. The primer should be diluted with 3 parts water and thoroughly scrubbed into the floor. Apply thinly and do not leave pools or puddles of primer. Leave to dry thoroughly, typically overnight.

Coat 2

4A. UltraTile ProPrimer should be diluted with 1 part water to 1 part primer. Brush or roller onto the floor applying thinly, avoiding pooling. Allow to dry to a tacky clear film, typically 1 - 2 hours.

5. If underfloor heating is present there should be expansion strips between the different heating zone areas to enable the screed to move independently, around any perimeters, and at upstands and door thresholds. In all cases these strips should not be tiled over but should be carried through to the upper tiled floor, using a silicone sealant or similar to enable a continuous floor to be achieved. When underfloor heating is present we advise that a polymer modified adhesive is used. It is always beneficial to use a rapid set product on these screeds to minimise the migration of moisture between screed and adhesive during curing.
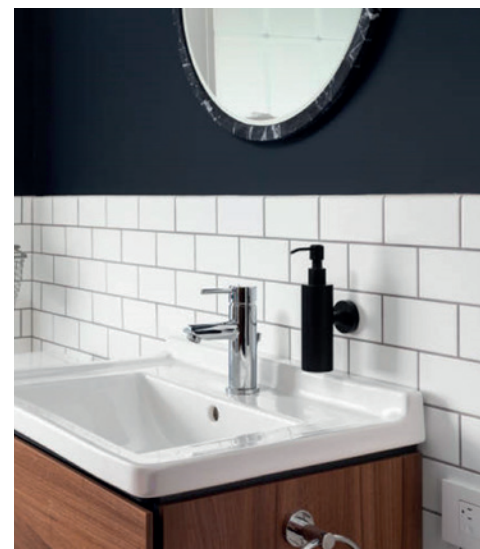
Tiling onto Floors with Underfloor Heating

There are two basic types of underfloor heating:

1. Warm water pipe systems either
(a) encased within the floor screed or
(b) fixed within pre-formed panels
(lightweight)

2. Electrical cable mats applied above the
screed surface (often on backer boards
and insulating systems)

Various underfloor heating manufacturers exist
including Warmup who offer a range of systems
across the different types, including Sticky Mat
and Total-16. We recommend that you always
refer to the manufacturer's instructions when
installing underfloor heating.
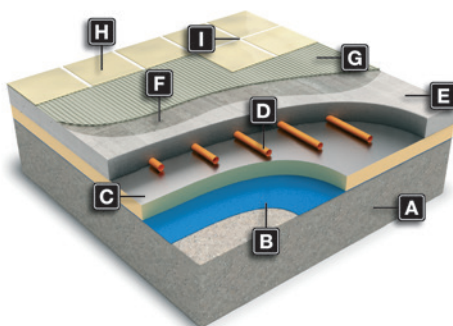
A. Concrete substrate

B. DPM

C. Insulation

D. Heating pipes

E. Screeds

F. Prime appropriately for the type of
screed used

G. Apply adhesive (selected upon tile type)

H. Install tiles

I. Grout all joints

1a. Warm water systems - encased in screed

These consist of a run of pipes embedded within a pre-laid screed, often calcium sulphate based
due to its flowing characteristics. The surface preparation and priming required before laying tiles
is the same as for screeds without underfloor heating. Before any tiling is carried out, the following
criteria must be met:

I. The screed must have been left for the minimum cure time before the heating is switched on
(this is generally 21 days for sand / cement screeds, and 7 days for calcium sulphate screeds).

II. The underfloor heating must have been fully commissioned and tested. This is not a simple
pressure test but must be a full heat up and cool down of the system. This is normally a 7 day
cycle. Only by doing this can any screed weaknesses be identified.

III. All movement joints must be identified and followed through in the tiling. Screed movement
under temperature change is a major cause of tiled floor failure so the need for movement
joints is extremely important. Movement joints should be present between all different heating
zones, door thresholds, upstands and perimeters.

IV. Traditional cement based subfloors and calcium sulphate screeds must be tested for moisture
levels and confirmed to be 75% RH or less using a hair hygrometer. Proprietary cement based
screeds may cure and dry at different rates so always check with the manufacturer.

V. The adhesives and grouts selected must be flexible.

VI. Do not run the heating at high temperatures as this will force dry the adhesive and grout,
causing cracking and lifting. Have the heating on at a 'cutback' temperature whilst tiling -
this means a floor temperature of max 15°C.

VII. Once the tiling and grouting has been carried out the temperature must remain the same
for a minimum of 7 days. After this time, the underfloor heating can be brought up to full
working temperature slowly. A maximum water temperature increase of 5°C per day is advised.

UltraTile Technical
Department **01827 254402**

Tiling onto Floors with Underfloor Heating

1b. Warm water systems - fixed within pre-formed insulation panels

This popular alternative system removes the need for a screed by using pre-cut channels in the insulation panel to house the warm water pipes. This system provides a lightweight base option, which can be tiled onto directly. Often the surface of the insulation panel can be faced with an aluminium foil to help spread the heat. Prior to commencing tiling the following must be met:

I.   All underfloor pre-formed panels must be secured firmly to the substrate and be sound, solid and free from movement. Always consult the manufacturer's installation instructions.

II.   The underfloor heating must be fully commissioned and pressure tested before tiles are installed to ensure there are no leaks.

III.   Once water pipes have been positioned and within 24 hours prior to applying the tiles, it is advised that all panels are cleaned and dust free. We recommend priming the entire surface of the panels with a neat coat of UltraTile ProPrimer including the installed heating pipes and cavities that do not have pipe work in them.

IV.   Once the primer has fully cured, tiling can commence using either an S1 or an S2 adhesive. Ensure all cavities within the panels are first filled with the adhesive using a smooth edged trowel. This will provide a level surface to the panel before finally applying the same chosen adhesive with a notched trowel to the bed thickness required.

V.   Follow the same guidelines as in 1a. VI. and VII. to curing of adhesives and grouts and operating the underfloor heating.
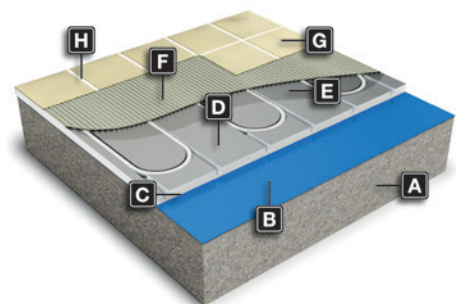
A. Substrate

B. Apply DPM if required on newly laid screeds

C. Adhesive as specified by underfloor heating manufacturer

D. Pre-formed underfloor heating panels

E. Prime using UltraTile ProPrimer

F. Apply S1 or S2 adhesive

G. Install tiles

H. ProGrout Flexible, ProGrout Flowable or ProGrout Epoxy.

2. Electrical cable mats

There are numerous manufacturers of 'radiant mat' electric underfloor heating so always contact them directly for specific advice. The systems consist of electric cables or mats which need to be fixed to the substrate in a prescribed pattern to ensure even heat throughout the floor.

Care should be taken to avoid snagging (therefore damaging the cables when applying adhesive) and thermal shocks when the heating is utilised. There are two options which can be used when installing tiles onto these systems:

1. Applying a smoothing compound to embed the cables

2. Applying a smoothing compound to bring to cable height and avoid snagging when applying the tile adhesive

In both cases, the following criteria apply:

1. The subfloor must be sound, strong, stable and suitable to receive a cementitious smoothing compound.

2. Any expansion joints in the floor design must be followed through into the finished tile installation and must not be covered over. This is most often between different heated areas and/or substrates.

3. We recommend that timber substrates should have a suitable backer board mechanically and/or physically bonded prior to installing the electric underfloor heating systems to minimise thermal substrate movement as heating is switched on and off.

4. Before any preparation or tiling work is carried out the system must be tested to confirm it is fitted correctly and functioning. This should also be done during and after installation to ensure no damage has occurred.

5. Substrates must be primed with UltraTile ProPrimer. The priming will usually improve the adhesion of the tape utilised in fixing the cables but if they were already present it is important not to flood the floor with primer. Apply only a thin film.

6. Select the most appropriate smoothing compound for the substrate. Generally UltraTile ProLevel One or UltraTile ProLevel Fibre is preferred for solid, strong substrates such as concrete or sand/cement. UltraTile ProLevel Two for difficult to bond to, dense surfaces such as ceramic tiles or where the substrate is mechanically fixed only e.g. backer boards. Check with the UltraTile Technical Department for the most suitable product.

7. Apply the selected compound by pouring onto the floor and gently smooth with a straight edge metal trowel. Either cover the highest point of the cables by a minimum 3mm or fill in between the cables without applying compound over the surface (this will enable the tile adhesive to be applied without snagging the cables). Allow the smoothing compound to cure. Time for this will depend on thickness, substrate and conditions.

8. Apply either (as per instructions for an absorbent cement based floor) and allow to dry. Fix the tiles using a flexible cementitious adhesive. Allow to cure as per datasheet instructions, before grouting with a flexible cementitious grout. Both products should be left to cure for a minimum of 14 days, before gradually bringing up the temperature of the floor in accordance with the manufacturer's instructions.
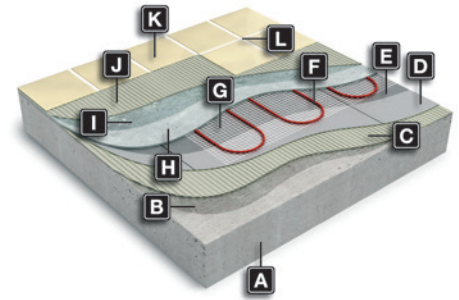

A. Concrete substrate

B. Prime

C. Adhesive

D. Thermal tile backer board

E. Prime

F. Under tile heating mat

G. Prime

H. Level to embed or cable height

I. Prime

J. Apply adhesive (select upon tile type)

K. Install tiles

L. Grout all joints

UltraTile Technical
Department **01827 254402**

Tiling onto Floors using an Uncoupling System

Uncoupling systems are an excellent method of fixing tiles in very testing environments. The science behind uncoupling can be summarised as: "A system used to isolate the finished tiled floor from the subfloor to prevent damage from lateral movement, subfloor cracking and water penetration." Systems generally involve the use of a profiled polyethylene mat with a fleece underside which is bonded to the substrate using a flexible adhesive. Tiles are then bonded to the mat using a flexible tile adhesive and grout, such as ProGrout Flexible, ProGrout Flowable or ProGrout Epoxy. For full information on how these systems work and the installation methods required, please refer to the manufacturer's instructions. However, the following general criteria should always be met:

1. The substrate must be even, rigid and load bearing.

2. Boarded floors (timber or backer boards) must be screwed down as per instruction, and replace any boards that are damaged. Uncoupling mats will accommodate lateral movement but are not designed to withstand vertical movement, so subfloors must be braced to make them sound and strong. All timber floors must have adequate under floor ventilation to prevent the timber from moving, post installation, due to humidity changes.

3. Tile selection should be made on the basis of the likely load that the flooring will be subjected to i.e. thickness and strength in accordance with end use expectations.

4. Prime the subfloor, if required, with UltraTile ProPrimer.

5. The anchoring fleece should be bonded using adhesive. The adhesive must bond to the substrate and mechanically anchor the fleece to the underside of the mat. We would recommend using a 4mm notched trowel with flexible adhesive.

6. Once the mat is secure the tiles can be fixed using an UltraTile flexible adhesive. It is advised that the cavities in the matting are first filled with adhesive using a smooth edge trowel before finally applying with a notched trowel to achieve the bed thickness required.

7. Grouting should be carried out using UltraTile ProGrout Flexible, ProGrout Flowable, or ProGrout Epoxy.
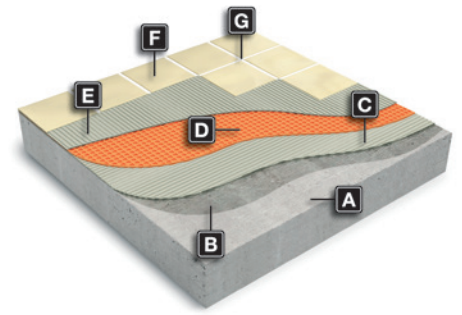
A. Load bearing substrate
B. Prime
C. Adhesive
D. Uncoupling membrane
E. Apply adhesive (flexible only should be used)
F. Install tiles
G. Grout all joints

Movement Joints in a Tiling Installation

The inclusion of movement joints in a tiling installation is something that should be incorporated at the design stage by the specifier or architect. However, it is beneficial to have a basic understanding of where, when and why movements joints should be used.

Background to movement joints

Regardless of the type of tile being used, they must all be considered as 'solid' materials with very little dimensional change despite conditions. Building movement may occur due to changes in conditions, physical movement due to size, settling or drying out of the building, weight loading, level of trafficking, thermal changes or simply due to the construction design itself. Floor construction in particular needs careful consideration as the functionality of a floor is such that its stability and integrity must be maintained to enable the building to be utilised.

Walls

All junctions between walls and floors should have a movement joint included. However, walls themselves are under continual stress and have the potential for movement, so consideration of movement joints should be made. Consider the use of a movement joint in all of the following areas:

- They must be incorporated where there are any existing movement joints within the wall structure. They should be aligned directly over the existing structure joint and be at least as wide.

- At internal corners between walls to relieve stress under thermal, vibration or any other movement. This includes where internal walls meet ceilings; a suitable silicone sealant may be used.

- Where the wall tiling meets a different substrate – the tiles should be left short and a movement joint utilised. A suitable silicone sealant should be used.

- Where tiling bridges are used across different substrates a movement joint should be created at the junction.

- On large walls movement joints should be included both horizontally and vertically. Subject to the building design, the joints may need to be incorporated anywhere between 3m and 10m.

- External wall joints (close to external angles) and all internal angles. The inclusion of a movement joint will prevent fracture and bulging of tiles with building, thermal and/or vibration movement.

- Movement joints must be incorporated at more frequent positions, should the walls be subject to significant thermal or vibration movement.

Movement joints can be incorporated into the design to minimise aesthetic concerns.
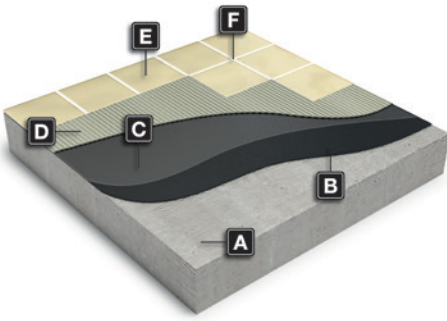
Floors

Including movement joints in floors enables the tile bed to move in unison with the individual substrates. Selection of movement joint type will depend on joint width requirement, finished floor use and movement capability. The range of materials available and their typical area of use include; aluminium for general commercial installation, brass and stainless steel for heavy commercial and factory use, and PVC for most other applications. Always consult with the manufacturer as to the most suitable joint for your application. Consideration to the use of a tiling movement joint must be given in all of the following areas:

- They must be incorporated and aligned with any movement joints within the floor's construction. The joints should be continued through the entire depth of the tiles and adhesive.

- At specified distances across a floor to create individual tile beds (general consensus is that movement joints should be utilised at distances between 5m and 8m).

- Floors with underfloor heating systems should incorporate movement joints with a limited bay size of a maximum of 25m^2.

- At day joints or stress induced saw cuts in subfloors. The level of movement at these joints is often unknown and is usually dependant on the age of the building and whether the subfloor is fully dry. If in doubt, incorporate a movement joint.

- All perimeters and any fixed features which interrupt the floor, such as pillars or aisles, should have an allowance for movement. Sometimes this can be a suitable silicone sealant, or if underneath skirting it may simply be a gap. In areas of high thermal change, such as conservatories this is extremely important.

- Movement joints should be included between any underfloor heating zones to enable each to perform independently.

- Wherever there is a change in substrate a movement joint should be included. This will enable each substrate to behave independently.

- Movement joints should be placed directly above any supporting walls or structural beams as they will add rigidity to the floor. The remaining floor area may be prone to a degree of flex or vibration.

- Junctions between floors and walls.

Movement joints can often be incorporated into the floor design to minimise aesthetic concerns whilst ensuring integrity of the tiled floor.

UltraTile Technical
Department **01827 254402**

Using a Damp Proof Membrane

A. Sand/cement screed or concrete floor

B. Damp proof membrane

C. Prime using UltraTile ProPrimer neat

D. Apply adhesive (select upon tile type)

E. Install tiles

F. Grout all joints

A surface damp proof membrane (DPM) is a liquid system that when applied to a damp substrate:

a)   bonds strongly to the surface.

b)   cures to form a hard layer that controls moisture vapour permeability to the surface.

UltraFloor DPM IT rapid curing primer membrane is a two component, solvent free epoxy resin system for use as a surface DPM and as a screed bonding aid (primer) for industrial flooring applications. The product performs by a reaction between the resin and hardener components to give a durable continuous membrane. When mixed the product is a black colour enabling easy identification of the applied areas.

It is suitable for use as a single coat DPM to suppress residual moisture in concrete and sand/cement screed where the moisture levels are 98% RH or less (when tested with a properly calibrated surface hygrometer in accordance with BS 8203). It may be used as a two-coat application on subfloors where there is an absence of a constructional base DPM provided there is no hydrostatic pressure.

UltraFloor DPM IT should not be used in projects where hydrostatic pressure is a concern. In such cases the use of pressure relief drainage and/or external tanking systems must be the primary method of protection against moisture.

Application steps:

1. All substrates must be prepared to leave a sound, clean and surface dry subfloor. Oils, grease and other contaminants that may hinder adhesion must be removed. This includes release agents used in concrete curing processes as well as laitance, contamination and any weak surface materials. Substrates should be of a minimum 25N/mm^2.

2. Apply UltraFloor DPM IT to the substrate by pouring it onto the floor area to be treated. For use as a DPM the product should be spread using a suitable notched trowel to determine the correct coverage rate. Over roll the serrations using a short pile roller pre-wetted in UltraFloor DPM IT to ensure a uniform coating is achieved. This should be done immediately following trowelling.

3. UltraTile ProPrimer should be applied neat as a single coat, using a brush or roller. Apply to give a thin uniform coverage with no pooling of the primer. Ensure a complete overall application is achieved. Once dry, the primer will exhibit a light tack and is ready to receive smoothing underlayments and tiling adhesives.

UltraTile Technical
Department **01827 254402**

Waterproof/Tanking Systems
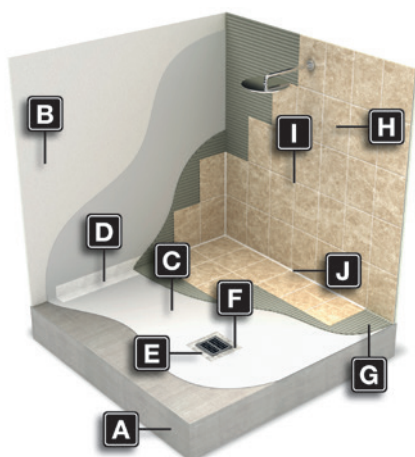
A. Concrete substrate

B. Plasterboard

C. D. E. F. Apply tanking system according to application method

G. Apply adhesive (selected upon tile type)

H. Install tiles

I. Grout all joints

J. Seal with silicone

There is a need to waterproof or 'tank' a tiling installation when the substrate to which the tiles are to be fixed will either be affected by contact with water or will allow moisture to pass through it. The prerequisite of a tanking system is to waterproof, together with providing strength and flexibility, whilst still enabling tiles to adhere.

Tanking systems are designed for use on internal applications where intermittent and frequent wetting occurs, such as showers, wetrooms and saunas. Different waterproofing requirements are needed for areas of permanent or prolonged immersion in water such as swimming pools and Jacuzzis.

Tanking systems are suitable for application to most wall and floor substrates, provided they are mechanically secure and stable. If significant flexing or deflection occurs this should be remedied before tanking application.

Select a flexible adhesive, such as UltraTile ProFlex SP or ProFlex S2, and grout that are suitable for the chosen tile type and size.

To view the Application Method for UltraTile ProShield please visit **ultratileadhesives.co.uk.**

Tiling Swimming Pools/Permanently Wet Areas

Swimming pool construction is governed by the BS 8007: Code of Practice for Design of Concrete Structures for Retaining Liquids. The standard clarifies how such constructions must be carried out and how to test for water tightness. As far as fixing tiles is concerned, it needs to be confirmed that the construction has been carried out correctly and tested before tiling commences. There are also some basic timeframe principles:

- The construction itself must have had a minimum 6 weeks to cure and harden.

- Any further renders or screeds used must have had a minimum of 3 weeks to cure.

- Tiles should be fixed and allowed to fully cure before grouting, usually a minimum of 3 days.

- The construction must then be left for a minimum of 3 weeks before water is introduced (no greater than a depth of 750mm per day).

The methods used to create watertight construction can differ. Ensure that the surface to be tiled is suitable to receive a cementitious tile adhesive and is prepared correctly. Preparation must include removal of any laitance from the renders or screeds and cleaning off any mould release agents that may have been used when constructing the shell. Power washing is often sufficient to prepare the surface. Although the adhesives and grouts normally used are classified as water-resistant this does not imply that they will prevent water passing through. This only confirms that they retain their strength and adhesion even when fully immersed. It is critical that the construction is inherently watertight. If a waterproof grout is required, or it is known that aggressive chemicals are to be used for cleaning, or if power wave machines are incorporated then consider using ProGrout Epoxy.

Low absorbency tiles should be selected, ideally less than 0.5% absorption. Absorbent surfaces should be allowed to dry and then primed with UltraTile ProPrimer. Dilute the primer 1 part to 3 parts water and then allow to dry. Tiles should be fixed using a highly modified cementitious adhesive, in accordance with EN 12004 – capable of withstanding continual immersion. UltraTile recommend ProFlex SP, ProFlex SPES, ProFlex S2, or ProEco Gel. It is critical that a full bed adhesion without any voids is created and to ensure this, a minimum 3mm bed depth is recommended.

There will be a requirement for movement joints (please see BS 5385) which should be considered before tiling commences. A suitable sealant should be selected and used on all wall and floor junctions at least.

A GUIDE TO EXTERNAL TILING

External tiling is becoming more and more popular. This is partly due to the increase in availability and popularity of 20mm porcelain tiles. Over recent years, homeowners have become inspired by seamless indoor outdoor living spaces and by using 10mm internal and 20mm external tiles, this beautiful design trend is now very achievable.

Types Of Suitable Bases For Tiling

Traditionally, when tiling externally a concrete base is required. A typical concrete base is made up of 100mm of type one compacted stone. Once the stone has been compacted, a 200mm concrete screed should be poured over the base. It is extremely important that the screed is left to fully cure - we recommend leaving a concrete screed to cure for at least 6 weeks in dry conditions, prior to applying an adhesive bed).

A level, fully cured screed will not only provide a solid base, but it will also provide a foundation to create 'falls' - a slight gradient in the adhesive bed that will allow water to run off.

An alternative method for external tiling would be a sub-base of 100mm of type one compacted stone. This is made up of one 50mm layer of compacted stone, followed by a second 50mm layer. Once this has been achieved, 20mm porcelain tiles can be applied onto a bedding mortar.

Methods Of Fixing 20mm Porcelain Tiles

Fixing 20mm porcelain external tiles depends on the type of sub-base.

For further advice on external tiling, or for more information on any of the products mentioned, please contact our Technical Team by calling +44 (0) 1827 254402 or emailing enquiries@instarmac.co.uk.

Option One - Concrete Base

Fixing using an adhesive

1. Ensure that the concrete is dry.
2. Clean the base, removing any loose and weak areas.
3. Prime the area with two coats of UltraTile ProPrimer (first at 1:3 followed by a second coat at 1:1).
4. Apply the adhesive to the floor using UltraTile ProFlex SP, ProFlex SPES, ProFlex S2, ProEco Gel or any of our S1 adhesives.
5. Once the adhesive is set, the area can be grouted using UltraTile ProGrout Flexible, ProGrout Epoxy, or ProGrout Flowable.

Option Two - Compacted Stone

Fixing using a bedding mortar

1. Mix and apply a minimum 30mm bed of UltraTile ProPave Mortar with Sharp Sand at a 1:6 Ratio
2. Prime the back of the 20mm porcelain tile using UltraTile ProPave slurry primer then bed into the wet bedding mortar.
3. Once the mortar is set, the area can be grouted using UltraTile ProPave or ProGrout Flowable.

HELPFUL HINTS
AND TIPS FOR USING
FLOWABLE GROUTS

Tip One

If you are using ProGrout Flowable for the first time, it is always recommended to read and fully understand the Technical and Safety Datasheets. These documents provide a wealth of information on substrate preparation, mixing advice, application tips as well as storage, shelf life and any health & safety implications you should consider.

Tip Two

If your installation has movement joints, ensure they are all dammed and blocked prior to applying ProGrout Flowable.

Tip Three

ProGrout Flowable is suitable for use on hardcore and concrete base applications. If you are working with a different type of subfloor, please speak to UltraTile's Technical Team before commencing any work.

Tip Four

ProGrout Flowable has been designed for both internal and external applications. The superior flowable properties of ProGrout Flowable make it the ideal grouting choice for larger projects.

Tip Five

ProGrout Flowable should be added slowly to 2.7 litres of clean water. Mix until a smooth consistency is achieved and leave to stand for 2 minutes. Mixing with too much water will weaken the grout causing the cured product to crumble.

Tip Six

If you are using ProGrout Flowable for an external application, you should only use in dry conditions. Applying ProGrout Flowable in the rain or wet conditions will wash the grout from the joints and prevent it from setting.

Tip Seven

ProGrout Flowable should be applied to the surface using a rubber backed trowel or squeegee. Work the mixed material thoroughly into the joints a small area at a time. After at least 40 to 50 minutes, any residue left on the face of the tiles can be removed using a wash boy or pedalo.

For further advice on using ProGrout Flowable, please contact UltraTile's Technical Team by calling 01827 254402.

TRAINING

To support our retail network and the tiling contractors, we operate the Instarmac Training Academy, which is a calendar of in-person and online training events.

The academy has its own website where all events are loaded to a calendar with full session details provided and an online form included for you to register to attend. All of our events are free of charge- to find out more, please scan the QR code.

In 2024, 9 different topics were covered, and most sessions included another industry partner, such as Dural, Bihui, BEWI and Protimeter. Our events also sometimes feature a co-host of standing within the industry. To name a few, TTA Heritage Project award winner, Isa Celik; industry influencer, Sam Hoffman and Lighthouse The Construction Charity.

ON TOUR

To ensure our training is as accessible as possible, not only do we run online sessions, but we also take our academy days on tour around the country.

"Maximising the training day with the inclusion of the other companies is fantastic. Lots of information to take in and hands on training. It's also great to make connections with the companies and network with other tilers."

"Really enjoyable and educational day with great people. Thank you all very much appreciated."

"I've learnt a lot of new things. Knowledge that I will take into future projects is priceless!"

"...every single person that attended has been so impressed with not just the training and hospitality but also the quality and organisation Instarmac provide...."

"Another fantastic webinar! Light-hearted approach, packed with technical information and handy tips."

"What a fantastic and informative day, if you ever get the opportunity to attend a course at Instarmac Group plc get on it, you won't be disappointed."

"I just want to say thank you for letting me join your webinar...was really appreciated and it was really helpful 10/10 thank you."

"Very handy, as I am new to the industry, so all information provided was good and practical."

Site Support

Whether at specification, contractor or early planning stage, our Site Support Team is always available for one-to-one dedicated assistance tailored to suit your needs. Our help with problem solving, practical installations and product performance, ensures that you have the ability to experience our products at your convenience, and guarantees confidence of application throughout your project.

Marketing Support

Our team of in-house marketers can help support you with a wide range of marketing activities such as packaging design, technical documents, point of sale, social media collaborations and resources as well as image and video assets. All of our customers also have access to the Instarmac InstaHub – a bespoke portal where you can download product imagery, videos, social media assets and more to help you market your product offering, drive sales and keep your digital platforms up to date.

UltraTile work hard on establishing partnerships with market-leading industry experts to ensure all UltraTile products offer complete compatibility.

By working with complementary brands such as those below, UltraTile offer solutions you can trust.
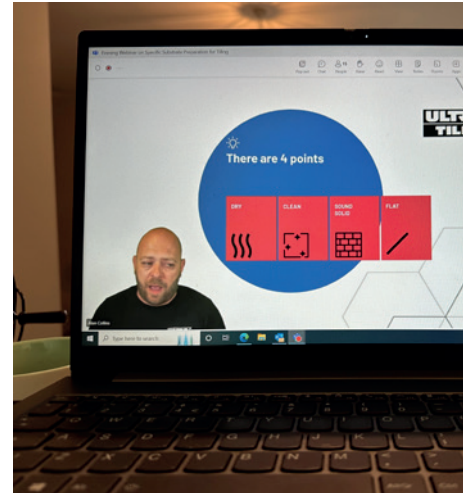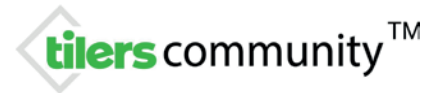
www.ultratileadhesives.co.uk

INSTARMAC

instarmac.co.uk