



# ProFlex CSA

## Flexible Tile Adhesive for Anhydrite Floors & Plaster Walls

**20kg**



- Ideal for use with porcelain, mosaic and natural stone tiles
- **CSA** class formulation for calcium sulphate screeds
- Flexible properties for use with underfloor heating

equivalent to  
**C2FT  
S1**  
classification



### Product Selection Guide

#### 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
- × Plywood overlay (15mm min)
- × Tile backer boards
- × Cement faced fibre boards
- ✓ Anhydrite/calcium sulphate/gypsum based screeds
- × Tile on Tile\*
- ✓ Firm and stable plaster
- ✓ Plasterboard
- × Sand/cement render
- × Concrete brick/block
- × Hard vinyl tiles
- × Flooring grade asphalt

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



# TECHNICAL DATASHEET

**UltraTileFix ProFlex CSA** is a single part, rapid setting, polymer modified, flexible tile adhesive for use on internal wall and floor tiles. It is specially formulated from calcium sulphate to provide compatibility with other calcium sulphate based substrates, ensuring low tension throughout curing without the need for barrier primers as required by cement based adhesives. It is ideally suited for all calcium sulphate substrates such as anhydrite floor screeds and plaster walls. It must not be used on areas subject to moisture and frequent wetting.

UltraTileFix ProFlex CSA is a calcium sulphate based adhesive and therefore cannot be classified to BS EN 12004 which relates to cement based adhesives only. However, in dry conditions the product is equivalent to C2FT S1 classification according to BS EN 12004. It has the high level of deformation for greater tolerance to movement. It is able to take light foot traffic within 3 hours of installation depending upon temperature and substrate.

## SURFACE PREPARATION

All wall and floor substrates must be clean, dry, firm and stable, free of dust, dirt, oil and grease. Substrates should be strong enough to support the weight of the adhesive and tiles being fixed (see below for loadings).

For plasterboard and plaster finishes that have been painted and are showing a weak or flaky surface finish then mechanical sanders or hand sanding blocks are generally used to remove the film. However for the likes of floor screed surface contamination, adhesive residues and weak surface laitance or even smooth dense floors such as power floated concrete, these will require a more heavy duty scarifying using specialist flooring equipment to remove the surface of the substrate to ensure the substrate is sound, stable and has a rough open texture.

Remember - sanding or mechanical abrasion of any surface will leave powder deposits which require thorough removal by suitable vacuum equipment to provide a clean dust free surface. Failing to remove fine powder deposits and weak surfaces is a common reason for de-bonding of tile adhesive and primer from the substrate. Using a wet sponge to clean down a wall or floor of dust deposits only serves to spread it around, it is therefore advisable to vacuum thoroughly prior to use of wet sponge.

**Calcium Sulphate Floor Screeds:** It is essential that the floor is fully dry, if in doubt always check the moisture level of the floor is below 75%RH using a hair hygrometer before continuing. This type of floor can also suffer from surface laitance issues creating a weak surface layer and therefore they are highly likely to require specialist mechanical abrasion as indicated above.

**Underfloor Heating (UFH):** If UFH is being installed it must be fully commissioned before starting the tiling process to ensure it is in full working order. This includes both electric mat and water pipe systems. Once the UFH has been commissioned it can be set to a low level to provide a max floor temperature of 15°C whilst the tiling and grouting processes are undertaken. It is critical that this temperature is not exceeded as this can force dry the adhesive and grout with the potential of causing cracks in the installation or tiles to de-bond. Maintain this temperature for a minimum period of 7 days while the installation cures and hardens. After this time the UFH can be brought up to the required room temperature slowly at a rate of 5°C per day.

## PRIMING

UltraTileFix ProFlex CSA finds major use on calcium sulphate substrates (CSA). When using cement based adhesives there is a requirement to use a primer as a barrier to prevent reaction between CSA and cement. As UltraTileFix ProFlex CSA is compatible with CSA as long as thorough preparation of the substrate has been followed, ensuring the surface is abraded, completely clean, stable and measured to be dry (below 75%RH using a hair hygrometer), then there is no actual requirement to prime. Priming will however always improve adhesion and is good practice - a single application UltraTileFix ProPrimer diluted 1:1 with water (by volume) and allowed to dry would be sufficient.

**NB:** Please see technical datasheet for UltraTileFix ProPrimer for coverage rate details. If in doubt as to the need for priming please consult UltraTileFix Technical Department.

## MIXING

Once the substrate has been prepared, continue with the tiling installation. UltraTileFix ProFlex CSA should be added slowly to clean water in a suitable clean mixing tub and mixed thoroughly using a drill/mixer and paddle to give a slump free, easily worked mortar consistency. Once mixed the mortar is immediately ready for use and has a pot life of approximately 60 minutes at 20°C. Mix only sufficient material to be used within the pot life of the product. Do not remix or rewet/dilute product which has aged and that is starting to thicken or set.

Mixing Ratio: 20kg unit requires 4.5L - 4.6L of water.

## APPLICATION

Apply the adhesive to the required thickness (limits 3mm – 10mm) in areas up to 1m<sup>2</sup> at a time. For internal walls use a notched trowel to the following notch dimensions to provide solid rib lines:

Mosaic tiles: 3mm x 3mm at 6mm centres  
General wall tiles: 5mm x 5mm at 10mm centres  
General floor tiles: 8mm x 8mm at 16 mm centres

For floors and external applications we advise to use the solid bed method. This involves applying a uniform bed of adhesive to the floor and “buttering” the back of the tile with the same adhesive. When the tiles are bedded with a twisting action, pressing firmly down it ensures 100% contact is made with both the floor and the tile.

When fitting tiles leave spaces between each of the tiles to allow for grouting (approx: walls 1mm – 3mm and floors 2mm – 12mm).

Before the tile adhesive sets clean off the excess adhesive from the face of the tile and grout joints with a clean damp cloth or sponge.

## WALL TILING & LOADINGS

Wall types vary considerably but all have the same basic need to be structurally sound, strong, smooth and level. It is essential that the wall to be tiled has sufficient inherent strength to hold the proposed tile and the adhesive being used. The following chart lists maximum national standard loadings for a variety of wall substrates:

LOADINGS	
Gypsum plaster	20kg/m <sup>2</sup>
Skimmed plasterboard (gypsum)	32kg/m <sup>2</sup>
Plywood (exterior grade)	30kg/m <sup>2</sup>
Gypsum fibre boards	40kg/m <sup>2</sup>
Cement tile backer boards	40kg/m <sup>2</sup>
Glass reinforced cement sheets	50kg/m <sup>2</sup>

## CLEANING

Tools should be thoroughly cleaned with water to remove excess material immediately after use and before adhesive sets.

## GROUTING

Leave the installed tiles for a minimum period for at least 4 hours to set hard before grouting and/or walking on the tile. This time may be extended on impervious/non-porous substrates. It is also dependent on temperatures and conditions. Always check and ensure that adhesive has set hard before grouting. UltraTileFix ProGrout Smooth and ProGrout Flexible are available for use in a variety of colours.

# TECHNICAL DATASHEET

TECHNICAL DATA	
Unit Size:	20kg Bags
Colours:	Beige (based on CSA component)
Classification:	Equivalent to Class C2FT S1
Bed Thickness:	3mm – 10mm
Grout After*:	4 hours
Coverage:	4.5kg / m <sup>2</sup> at 3mm Bed Thickness
Pot Life*:	60 Minutes at 20°C
Set Time*:	3 Hours at 20°C
Application Temperatures:	5°C to 25°C

\*Depending on temperatures, substrate and site conditions.

## POINTS OF NOTE

The curing period for cement based tile adhesives will be affected by extremes in temperature. High temperature site conditions will increase the speed of cure therefore reducing the pot life and set times. Low temperatures will reduce the speed of cure extending the pot life and set times. It is therefore good practice to consider site conditions and storage of materials as essential factors in planning tiling installations.

All UltraTileFix adhesives are manufactured to meet the performance requirements of BS EN 12004 and the relevant classifications.

UltraTileFix would always advise that tiling installers follow the guidelines for tiling as laid down in BS EN5385. It is essential that expansion joints are built into the design of the tiling installation in order to prevent tension build up. This is a common occurrence which can result in tiles de-bonding.

Please note that this product uses natural aggregates and other materials that may marginally vary in colour. This does not affect the consistency or characteristics of the product.

## STORAGE

This product must be stored in unopened bags, clear of the ground in dry conditions. Avoid frost. Ideal storage temperatures are between 5°C and 25°C.

## SHELF LIFE

Under the above storage conditions this product has a shelf life of 12 months.

## HEALTH & SAFETY

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste appropriately. A full Material Safety Data Sheet relating to this product is available from [ultratilefix.co.uk](http://ultratilefix.co.uk).

## QUALITY ASSURANCE

All products are manufactured in a plant whose quality management system is certified as being in conformity with BE EN ISO 9001. UltraTileFix products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All UltraTileFix products are sold subject to our terms and conditions of sales, copies of which may be obtained upon request.

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