

# Technical data sheet

*TOPFLOW* Screed C  
using **CHRYSOFLOOR®**  
technology

## TOPFLOW Screed C

**TOPFLOW** Screed C is a pump applied free flowing cement based screed suitable for most applications including underfloor heating and wet environments. TOPFLOW Screed C Cure is also available, which contains an integral moisture suppressant in the mix that controls drying and eliminates the need for sprayed application of an evaporation barrier.

### PRODUCT DESCRIPTION

Designed to provide a smooth level surface in both commercial and domestic buildings prior to the application of floor finishes, **TOPFLOW** Screed C can be placed unbonded or floating. It is also suitable for use with underfloor heating. For advice on specifications and for proprietary systems contact your Tarmac representative.

Suitable for all residential and commercial floors carrying pedestrian traffic within BS8204 classification.

### TOPFLOW SCREED C BENEFITS

- It is a more conductive medium than sand cement screed and is self-compacting
- It can be laid thinner than competing sand cement systems without detriment to its performance, so any underfloor heating pipes are closer to the surface (nominal cover to pipes 30mm)
- Drying times are 21 to 28 days (based on a nominal depth of 50mm) dependant on environment
- Forced drying of the screed can commence at 7 days by commissioning the underfloor heating system
- It can be laid as a floating construction over most types of rigid insulation board or acoustic matting at a minimum thickness of 35mm
- It offers significant programme benefits, as areas of up to 120m<sup>2</sup> can easily be installed and finished per hour
- Its low shrinkage values mean you require less construction joints than traditional sand cement screeds

- It can receive foot traffic 48 hours after placing and partitions can be erected seven days after placing
- It is installed by trained and competent contractors who have invested in the necessary equipment to install the product correctly
- It is non-combustible – Category A1 in accordance with EN 13501-1:2007-A1:2009
- No need to include reinforcement.

### TECHNICAL DATA

<b>Screed C</b>	CT-C20/F4
<b>Appearance/colour:</b>	Dark Grey fluid mortar
<b>Wet density:</b>	2,200kg/m <sup>3</sup>
<b>Dry density:</b>	>1850kg/m <sup>3</sup>

### SPECIFICATION

<b>Flow range</b>	260mm ± 20
<b>Maintenance of fluidity</b>	2 hours
<b>Compressive strength at 28 days</b>	20N/mm <sup>2</sup>
<b>Flexural strength at 28 days</b>	4N/mm <sup>2</sup>
<b>Wet density</b>	2,200kg/m <sup>3</sup>
<b>Drying shrinkage at 28 days typically &lt;</b>	400µm/m
<b>Thermal conductivity</b>	1.7 to 2.9 w/mK
<b>Fire rating (BS 476: Part 4)</b>	non-combustible



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## MINIMUM THICKNESS

Bonded	30mm minimum nominal 50mm
Unbonded	30mm minimum nominal 50mm
Floating over thermal insulation	35mm (residential) 40mm (commercial)
Cover to heating pipe	30mm

## MAXIMUM THICKNESS

Recommended to be no more than 50mm. Depths over this may impact on drying times.

## SHRINKAGE

**TOPFLOW** Screed C is a low shrink cementitious flooring solution.

## DRYING TIMES

Due to the nature of **TOPFLOW** Screed C and its design make up the screed will be dry to receive floor coverings at between 21 to 28 days depending on environment and screed depth (depths over 50mm nominal depth may take longer to dry) and chosen floor covering.

Laboratory tests show that at 20°C and 60% R/H (relative humidity) the screed will have achieved 75% R/H at 21 to 28 days. The environment in which the screed is placed may impact this figure.

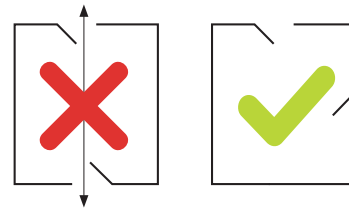
## USE

### Considerations in use

- **TOPFLOW** Screed C is not suitable as a wearing surface itself, or for external areas
- The building should be weatherproof before screeding commences. Where applicable, especially on ground floors, there must be a damp-proof membrane below the screed or sub-base
- The screed should only be laid when the internal air temperature is between 5°C and 30°C
- Cannot be laid to falls.

## Following placing

- The floor should not be subjected to severe draughts, direct sunlight or heating for the first 48-72 hours
- The room in which the screed has been laid should therefore be sealed for a minimum of 24 to 48 hours. After this time the room should be ventilated. Windows and doors should then be closed at night and reopened during the day to allow further ventilation to aid drying.



## Drying

- The ambient conditions must be suitable for the drying of the screed with low air humidity (preferably 60% RH or less) and good ventilation
- Before floor finishes are laid, the moisture content of the screed should be ascertained to be at or below the required level (75% RH)
- At 21 to 28 days place a digital hygrometer on the floor and leave for 24 hours, the reading should be at 75% RH, at this point the floor is ready to take floor coverings. The type of floor coverings to be used may impact on this time frame, manufacturers guidance needs to be followed.
- Drying time at 20°C 60% RH: Up to 50mm thickness 21 to 28 days dependant on floor coverings
- **TOPFLOW** Screed C will require no sanding to remove laitance but it is recommended to lightly abrade to clean and remove building residue from the floor prior to application of floor covering.

## HEALTH AND SAFETY

Some of the components of this product may be hazardous during mixing and application. Please consult the relevant Health and Safety data sheets, available from Tarmac on request and provided with each delivery.