

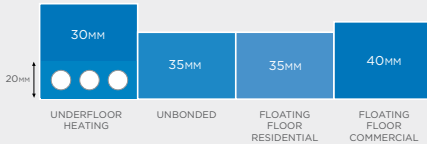
LOW SHRINKAGE

A lower shrinkage than conventional sand and cement screeds enables areas of up to 250m² to be constructed without the requirement for jointing. This offers reductions in joint maintenance requirements, an increased flexibility in floor covering options but also reduces on site activities and materials required to create joints.

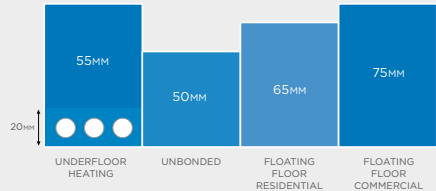
HEALTH AND SAFETY/ SIMPLIFIED CONSTRUCTION

The selection of a flowing screed over a conventional sand and cement screed simplifies the construction process removing the screeding and compaction processes⁸. These traditional activities are labour intensive and can be undertaken for an extended periods of time, with flowing screeds a simplified less intensive finishing process is employed undertaken in a more natural stance.

TOPFLOW SCREED C BELITEX
SCREED THICKNESS



SAND/CEMENT
SCREED THICKNESS







ONSITE APPLICATION

As a flowing screed the installation of Topflow Screed C Belitex requires a significant change from traditional sand cement screeds methods. There are a number of key criteria which are required to be followed to ensure that the screed is successfully installed and to provide a durable and long lasting solution.

TABLE 2

FLOWING VS TRADITIONAL SCREED PERFORMANCE COMPARISON

PRE-INSTALLATION	
SITE CONDITIONS	Topflow Screed C Belitex must only be installed in a weather tight environment. Installation should only be carried out once all windows and doors are in place or with each opening sealed with polythene. Internal temperatures should be kept above 5°C during installation and for 48 hours after installation.
JOINTING	Whilst possessing low shrinkage characteristics there still remains a critical need for effective joint control to ensure longevity and quality. Around the perimeter and any embedded items expansion joints should be used. At all openings crack inducers should be used to avoid uncontrolled cracking.
CONTAMINATION	The floor itself and all tools and equipment to be used for installation should free and clean from other cementitious or anhydrite based products. Contamination by these substances can lead to rapid setting and negative effects on shrinkage characteristics.
INSTALLATION	
PUMP PRIMING	Priming of the pump should never be carried out with a cementitious slurry as this can lead to a flash set. A 50/50 mix of Topflow Screed C Belitex and water should be used, captured and discarded prior to the commencement of installation.
ACTIVATION AND DAPPLING	Prior to the application of the activator the screed should have a single pass with the dapple bar. Activator should be applied to the screed at a rate of no less than 1 litre per 20m ² . A final pass with the dapple brush to full depth should then be applied with care taken to not over finish the screed or refinish as this can have negative effects on final levels.
POST-INSTALLATION	
SITE CONDITIONS	Once placed and finished the room is required to be sealed for a minimum of 24 hours (48 hours in winter). After this period doors and windows can be opened to provide ventilation to assist in the drying process but should be closed overnight.
SURFACE COVERINGS	The screed will be ready to accept ceramic floor coverings after 14 days and when its relative humidity is 75% or less. All other surface coverings can be applied after 21 days.

SUSTAINABILITY

Utilising a quick drying flowing cementitious screed solution offers environmental improvements to be made in all internal flooring applications when used in place of traditional solutions.

Material Efficiency

Topflow Screed C Belitex can be laid thinner than traditional sand cement screeds which enables less material to go further improving the material efficiency of the solution.

Resource Depletion

The use of finite resources is a key issue when considering the selection of construction materials and solutions. Topflow Screed C Belitex in providing a high quality finish reduces the demand on additional products to provide a final flat finish to accept final floor coverings, reducing finite material demand.



RECYCLING

The concrete industry has taken significant steps to improve its performance in terms of material reuse, reducing the depletion of abiotic resources, increasing energy efficiency and reducing carbon emissions. Significant improvements have already been achieved compared to the industry's 1990 baseline⁹.

With respect to material reuse and the depletion of abiotic resources, concrete readily utilises recycled and secondary materials along with cement replacements. This has enabled the industry to be a net user of waste, using 107 times more waste than it generates⁹, and concrete itself is also highly recyclable¹⁰.

BES 6001*

Tarmac has achieved an 'Excellent' rating for all its production sites and products. The independent third-party scheme assesses responsible sourcing policies and practices throughout the supply chain¹¹.



ISO 14001

Tarmac is fully accredited with ISO 14001, having implemented Environmental Management Systems throughout our business, maintaining our commitment to reducing our environmental impact¹².

BREEAM

Tarmac products can support and demonstrate their sustainable credentials by contributing to the awarding of credits in the BREEAM scheme, the following table details key areas where credits can be awarded¹³.

CREDIT	SUPPORT
Man 03: Responsible Construction Practices	Tarmac's Carbon Calculator has the capability to determine and provide data relating to the CO ₂ arising from the delivery transport.
Mat 03: Responsible sourcing of materials	Ready-mixed products are primarily constituted of locally available materials. All ready-mixed products produced by Tarmac are BES 6001 "Excellent" accredited.
Mat 01: Life Cycle Impacts	We have a range of products and solutions which match or can be tailored to match and satisfy specifications linked in the Green Guide. We are also able to provide EPD to support the awarding of further credits.

Tarmac concrete products offer the ability to conform with a wide-ranging number of assessment criteria in both BREEAM and CEEQUAL. For more information contact Tarmac sustainability team.

Our BES 6001 certificate number for our readymix concrete products is BES 559207.

PEOPLE



Safety and health
Our people
Community involvement

PLANET



Climate change
Environmental stewardship
Resource efficiency

PERFORMANCE



Economic value
Governance and ethics
Communication

SOLUTIONS



Sustainable supply chain
Innovation and quality
Sustainable construction

OUR SUSTAINABILITY STRATEGY

Sustainability is about securing long-term success for our business, customers and communities by improving the environmental, social and economic performance of our products and solutions through their life-cycle. This means considering not only the goods we purchase, our operations and logistics but also the performance of our products in use and their reuse and recycling at the end of their life. By doing this, we can understand and take action to minimise any negative aspects, while maximising the many positive sustainability benefits our business and products bring.

Using this 'whole life' thinking we have engaged with our stakeholders to develop our sustainability strategy. The strategy defines the main sustainability themes and our key priorities, those issues which are most important to our business and our stakeholders. It sets out our commitments to transform our business under four main themes: **People, Planet, Performance and Solutions**.

Building on progress already made, we have set ambitious 2020 milestone targets for each of our key priorities. These ambitious targets have been set to take us beyond incremental improvement programmes to business transforming solutions.

FOUR THEMES

Twelve key priorities

Twelve commitments

Twelve 2020 milestones

Forty four other performance targets

Our 2020 milestones are supported by a range of other performance targets.

This hierarchy helps make it easier to build understanding, drive improvement and enables us to report progress in a meaningful and measurable way.

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