

TECHNICAL INFORMATION

HI-FLOW TUF TOP

Product Data Sheet: Flooring Screed and Underlayments

DESCRIPTION

Hi-Flow Tuf-Top is a high strength, single-part cementitious self-levelling compound which provides a wearing surface in industrial and commercial applications between 5mm and 20mm.

Hi-Flow Tuf-Top is specially formulated to provide a smooth and durable floor finish with excellent abrasion and impact resistance. The screed is available in a range of colours, alternatively paint or resin coatings can be used to provide a decorative finish.

APPLICATION

In small areas the system can be mixed and placed using a suitable hand drill and accessories. When installing large areas the use of a suitable mixer pump is recommended. Laying rates in excess of 1000m² per day can be achieved using an appropriate machine. This, combined with rapid drying and hardening properties enables a swift return to service.

Hi-Flow Tuf-Top is not recommended for use in external or areas subject to wet conditions unless sealed with a suitable waterproof coating.

BONDED SUB-FLOOR PREPERATION

Substrates should be hard, sound and free from dust, dirt, oil, grease, paint, plaster, laitence or other contaminants which could prove a barrier to adhesion. Heavily contaminated floors may require special treatment and specific advice should be sought. Generally substrates are best prepared by mechanical methods such as shotblasting, planing or scabbling. The substrate should be vacuum cleaned prior to application of primer. Indoor and floor slab temperatures should exceed +6°C with a relative humidity not exceeding 95%.

PRIMING

Tarmac Epoxy DPM is recommended to provide a high strength and durable bond and controls moisture movement within the floor.

These properties make it ideal for use in areas expecting heavy traffic or where the relative humidity of the substrate is above 75%. Two coats of **Tarmac Epoxy DPM** should be used, with the second coat blinded with 8/16 grade sand to provide a key.

Alternatively low humidity substrates subject to minimal traffic can be primed with two coats of **Tarmac Acrylic Primer**.

Particularly porous or absorbent substrates may require additional coats of primer which should be applied to a point where it will stand on the surface without being absorbed. Acrylic Primer should not be applied to substrates with a temperature of less than 6°C.

Both primers must be installed following the recommendations on the relevant technical datasheet.

MIXING

Hi-Flow Tuf Top can either be mixed by the process of continuous pumping or mixed by hand.

When mixing by hand 25kg bags of Hi-Flow Tuf Top should be added to 6.25 litres of clean, cool, potable water and mixed for a minimum of 3 minutes until a smooth, homogeneous consistency is achieved.

The fluidity of the screed must be checked prior to laying to ensure that the correct consistency of material is achieved and any required adjustments should then be made before proceeding with application.

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For more details contact:
03444 630 046 pozament@tarmacbp.co.uk

INSTALLATION

Levelling work is best carried out at room temperatures between 15°C and 25°C and less than 75% relative air humidity. The minimum temperature at which the product should be laid is 6°C with a maximum of 30°C. Indoor and floor temperatures should exceed 6°C for one week after the application. The relative humidity of the concrete floor must not exceed 95%.

DRYING

After application **Hi-Flow Tuf Top** will be ready to receive foot traffic after 2 to 4 hours and will be ready to receive forklift traffic after 36 hours*.

Hi-Flow Tuf Top can receive suitable coatings after 24 hours*. The relative humidity of **Hi-Flow Tuf Top** must be checked prior to the installation of floor coverings.

Hi-Flow Tuf Top should not be exposed to conditions that accelerate drying whilst hydration is taking place, such as draughts and forced heating. Exposure to excessive drying conditions can induce plastic cracking and negatively influence the wearing ability of **Hi-Flow Tuf Top**. Wherever possible preventative measures should be taken to avoid these conditions. Correct substrate preparation and the control of site atmospheric conditions are imperative to the performance of the screed.

**Drying times will be reduced at higher temperatures and extended at low temperatures.*

JOINTS

The screed should be separated from all walls, columns and other upstands by a strip of compressible foam material. The minimum thickness of foam should be 5mm, with thicker foam recommended in large area pours. Movement joints should be incorporated as advised in BS 8204.

This best practice will minimise but not eliminate the risk of cracking due to movement.

STANDARDS

The installation should be carried out in accordance with the relevant sections of BS 8204.

YIELD

For every 1.0mm thickness approximately 1.62kg of dry powder per square metre will be required. For example, one 25kg bag will cover approximately 3.1m² at 5mm.

TYPICAL PERFORMANCE

Fresh Properties:			
Working Time:		Approximately 30 mins**	
Flow Ring Values:		230 - 245mm (65mm Ø, 40mm High Flow Ring)	
Hardened Properties:			
Compressive and Flexural Strength N/mm ² (air cured at 20°C) EN 196 Mortar Prisms			
Compressive Strength (N/mm ²)**		Flexural Strength (N/mm ²)**	
1 day	15	1 day	4
7 days	24	7 days	6
28 days	32	28 days	9
Controlled Expansion ASTM C490 **		7 days	28 days
		0.015%	0.025%

***These figures are derived from laboratory testing at 20°C.*

QUALITY CONTROL

All Tarmac products are factory blended, tested and packaged to quality control procedures in accordance with BS EN ISO 9001.

PACKAGING AND STORAGE

Hi-Flow Tuf Top is available in nominal 25kg bags, palletised and shrink wrapped. **Hi-Flow Tuf Top** may also be available in Intermediate Bulk Containers or in Bulk Powder Tankers.

Palletised **Hi-Flow Tuf Top** should be stored in cool dry areas clear of the ground, sheeted or under cover and stacked not more than two pallets high. The product should be used on a first in – first out basis. Shelf life is minimum 3 months when properly stored but could be in excess of 6 months subject to temperature and humidity conditions.

SPECIFICATION WRITING SERVICE

Tarmac are able to provide bespoke specification clauses for the use of Hi-Flow Flooring Systems, please contact our sales office for more information.

The information supplied in our literature or given by our employees is based upon extensive knowledge and experience. This information, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. Any existing intellectual property right must be observed. Tarmac's standard terms and conditions apply.

For more details contact:
 03444 630 046 pozament@tarmacbp.co.uk

INFORMATION, PRICES & ORDERING

For technical information, pricing and to place orders contact our Sales Office on the following:

Telephone: **03444 630 046**

Email: **pozament@tarmacbp.co.uk**

Visit our website: **pozament.co.uk**

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Swadlincote, Derbyshire, DE12 6JT

HEALTH & SAFETY

Health and safety advice, which must be followed, can be found on the Material Safety Data Sheet. Users are advised to wear face mask, goggles, gloves and overalls when handling, mixing and applying cementitious products.

Contains Portland Cement Contains Chromium (VI), which may produce an allergic reaction. Clothing contaminated by wet cement should be removed immediately and washed before reuse. R38 - Irritating to skin. R41 - Risk to serious damage to eyes. S26 - In case of contact with eyes, rinse immediately with water and seek medical advice. S37/39 - Wear suitable gloves and eye/face protection. S2 - Keep out of reach of children.

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