

TECHNICAL INFORMATION

HI-FLOW BASE

Product Data Sheet: Flooring Screed and Underlayments

DESCRIPTION

Hi-Flow Base is a free flowing, self-smoothing and protein free flooring underlayment which is obtained by mixing water with a carefully selected pre-blended formulation of high quality raw materials.

USES

Hi-Flow Base can be installed at thicknesses from 7mm to 60mm and provides an economic means of raising and levelling industrial subfloors. Thicker sections can be achieved by introducing an aggregate, please contact our technical department for more information. Hi-Flow base can be installed extremely quickly, with laying rates in excess of 1000m² per day easily achievable.

Examples of use for **Hi-Flow Base** include schools, office buildings, leisure centres, warehouses, public buildings, department stores and hospitals.

APPLICATION

In small areas the system can be mixed and placed using a suitable hand drill and accessories but for large areas the use of a mixer pump is recommended. Laying rates in excess of 1000m² per day can be achieved using a suitable machine and when combined with the rapid drying and hardening properties enables very large areas to be returned to service quickly.

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%.

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

PRIMING

Substrate priming should be carried out using **Tarmac Epoxy DPM** blinded with 8/16's grade sand or by 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. Coverage depends upon the porosity of the substrate and the amount of primer dilution, approximately 0.3/litres/m².

MIXING AND LAYING

When mixing and laying by hand a nominally 25kg bag of **Hi-Flow Base** will require addition of approximately 6 litres of clean, cool water compliant with BS EN 1008.

Application by use of a suitable mixer pump will require the regular checking of the material flow to ensure that the correct consistency of material is being achieved.

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

Setting and hardening times will be shortened at high temperatures and extended at low temperatures but generally **Hi-Flow Base** will be dry enough to withstand foot traffic after 2 to 4 hours at 20°C.

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.

Hi-Flow Base should not be exposed to conditions that accelerate drying whilst hydration is taking place. Exposure to excessive drying conditions can induce plastic cracking.

At 20mm thick **Hi-Flow Base** will be ready to receive **Hi-Flow Commercial**, **Hi-Flow Renovation** or **Hi-Flow Tuf Top** after 24 hours.

The relative humidity of the floor must be checked before laying floor coverings or coatings.

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 minimize but not eliminate the risk of cracking due to movement.

STANDARDS

The installation should be carried out in accordance with the relevant sections of the codes of practice BS 8203, BS 8204 and BS 5325.

YIELD

For every 1.0mm thickness approximately 1.62kg of dry powder per square metre will be required. 1 square metre at 10mm thickness will require 16.2kg of dry powder.

TYPICAL PERFORMANCE

Fresh Properties:			
Pot Life:		30-35 mins (temperature dependant)	
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	10	1 day	2.5
7 days	20	7 days	4.0
28 days	25	28 days	7
Controlled Expansion ASTM C490		7 days 0.015%	28 days 0.025%

QUALITY CONTROL

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

PACKAGING AND STORAGE

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

Palletised **Hi-Flow Base** 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.

SPECIFICATION WRITING SERVICE

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

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**

Tarmac Building Products Ltd.,
Swains Park Industrial Estate, Park Road, Overseal,
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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