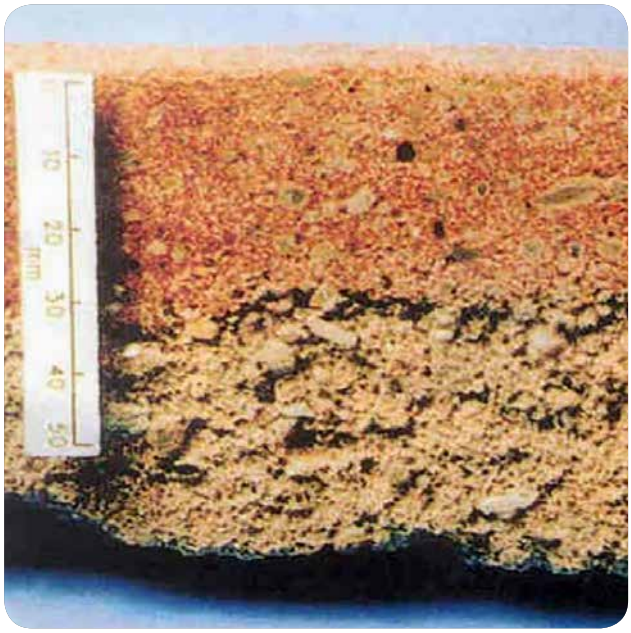
Flowcrete
for the world at your feet

System Data Sheet

Isocrete
floor screeds

PHS (Penetrating Hardening System)



Description

PHS is an ultra low viscosity, solvent free liquid for re-strengthening and restoration of failed cement/ sand screeds to Category A, BS8204 1987 Table 1, (BRE Screed Tester). PHS penetrates into the defective screed, filling voids and binding loose particles together to provide a high strength material.

Uses

To re-strengthen and refurbish failed cement/ sand screeds to a better than new condition with the minimum of down time and disruption to the occupants in heavy use areas such as hospital corridors, operating theatres and commercial buildings.

To re-bond de-bonded cement/sand and granolithic screeds (see also separate PHS for Stitch Pinning data sheet).

Benefits

- Minimum disruption to occupants
- High speed installation, dramatically shortens overall programme
- Overnight cure for failed sand cement screeds
- Dust free installations. No disruption or damage to other finishes.
- Impermeable to water, acts as a damp proof membrane
- Significantly exceeds BS8204 BRE test category A requirements for floor screeds
- Guaranteed to BRE Test Category A requirement for 15 years
- Solvent free
- Low odour
- Installed by trained licensed applicators

Project References

Available on request.

Classification of Screeds and Acceptance Limits for Screeds at Least 14 Days Old

Category	Type of Use	Examples of Use	Acceptance Limits - 4 Drops of the Weight - Indentation not to exceed
A	Areas expected to take very heavy traffic and/or where any disruption at a later date would be unacceptable	Hospital operating suites and corridors leading to them. X-ray rooms. Rooms in animal or other research buildings requiring a microbe-free environment. Rooms where radioactive material is handled. Rooms requiring long term dust-free atmosphere, e.g. telecommunication exchanges.	3mm
B	Areas expected to take heavy traffic including heavy trolleys. Public areas.	Main corridors, lift lobby areas, circulation areas within stores, public foyers, canteens and restaurants. Public rooms in residential accommodation. Hospital wards.	4mm
C	Other areas subjected to mainly foot traffic and light trolleys.	Offices, consulting rooms, domestic housing.	5mm

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Model Specification

Product: PHS (Penetrating Hardening System)
The installation should be carried out by an PHS Licensee with a documented quality assurance scheme. Preparatory work and application in accordance with suppliers instructions.
Manufacturer: Flowcrete Middle East FZCO
Telephone : Customer Service +971 4 886 4728

PHS system to be supplied and installed on a scarified and vacuum cleaned existing screed in accordance with the instructions of Flowcrete, by one of their approved licensees.

Products Included in this System

PHS

Commercial Finish:

Sand:	1.0 - 2.0mm Silica Sand blind
Repairs:	Isocrete 4000
Finish:	Isocrete 1500 - to receive soft floor finishes

Industrial Finish:

Sand:	1.0 - 2.0mm Silica Sand scatter
Repairs:	Flowtex F1 Mortar (as required to repair local areas)
Resin Finish:	e.g. Flowshield SL

Detailed application instructions are available upon request.

Installation Service

The installation should be carried out by a Flowcrete approved applicator with a documented quality assurance scheme. Obtain details of our approved contractors by contacting our customer service team or enquiring via our website at www.flowcrete.ae

Testing

Testing and reports leading to detailed specifications can be undertaken by Flowcrete and its Licensees. Where visible floor marking is permissible, soundness of the screed - both pre and post installation - can be assessed using the BRE indentation test to BS8204.

Typical PHS treated Screed	<1mm
Category A	Maximum 3mm
Category B	Maximum 4mm
Category C	Maximum 5mm

The Stanger nail test can be utilised where carpet is in place (not BS approved).

Technical Information

UK Patent No. 2240977
The figures that follow are typical properties achieved in laboratory tests at 20°C and at 50% Relative Humidity.

Compressive Strength	77 N/mm² (BS6319)
Flexural Strength	74 N/mm² (BS6319)
Tensile Strength	60 N/mm² (BS6319)
Abrasion Resistance BS8204: Part 2	AR1/DF (very heavy duty)
Adhesion to Cement: Sand Screed	Greater than cohesive strength of screed. >1.5 MPa
Modules in Tension	2.81 GPa (Giga Pascal) ISO 527
Modules in Flexure	2.64 GPa (Giga Pascal) ISO 178
Freeze/Thaw Cycle Test	No loss of adhesion
Water Permeability	Nil – Karsten test (impermeable)
Water Vapour Permeability	ASTM E 96:90 2 gms / m² / 24 hours

Speed of Cure

	20°C
PHS, Light Foot Traffic	8 hrs
PHS, Full Cure Time	12 hrs

Focus on the Floorzone

Flowcrete Middle East FZCO is a division of the Flowcrete Group, world leaders in specialist industrial and commercial flooring. Systems available include: underfloor heating systems, floor screeds, surface damp proof membranes, decorative floor finishes, seamless terrazzo, car park deck waterproofing and corrosion protection systems… to name just a few. Our corporate objective is to satisfy your flooring needs.

Environmental Considerations

The finished system is assessed as non-hazardous to health and the environment. The long service life and repair of damaged floors reduce the need for further repairs and maintenance. Environmental and health considerations are controlled during the manufacture and application of the products by Flowcrete staff and fully trained and experienced contractors.

Important Note

Flowcrete's products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request.

Further Information

To ensure you are specifying a fit for purpose flooring for your project please consult our Technical Advisors on the number below or visit our website to register your interest in specifying one of the most durable floors on the market.

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