

## Isocrete K-Screed HDP



### Description

A semi-dry polymer modified cementitious screed incorporating proprietary additives and polymer latex.

### Uses

To level and repair concrete or screeds to produce a suitable heavy duty screed base to receive the Flowcrete Deckshield System.

Isocrete K-Screed HDP is utilised in bonded (15mm min) screed constructions.

### Benefits

- Improved cohesion and workability.
- Improved physical strengths - e.g. compressive, flexural, tensile.
- Improved mechanical properties - e.g. abrasion resistance.
- Can be applied at low thickness.
- Toppings and screeds installed at low water - cement ratios.
- Low shrinkage.
- Can be pumped.

### Mix designs for nominal 1:3 by volume batches

#### Weights of materials required – all figures in kgs

Portland cement	25	50
Sand	80	160
2 - 5 mm Granite Chippings	20	40
K-Screed Additive	0.5 (Size 3)	0.5 (Size 4c)
Isopol SBR	1.25	2.5
Water (approx)	5.0	10
<b>Total</b>	<b>132</b>	<b>263</b>

Portland cement Type CEM 1 Class 42.5N to BS EN 197-1. (Other Classes of 42.5 or higher may be used but may affect working and hardening times).

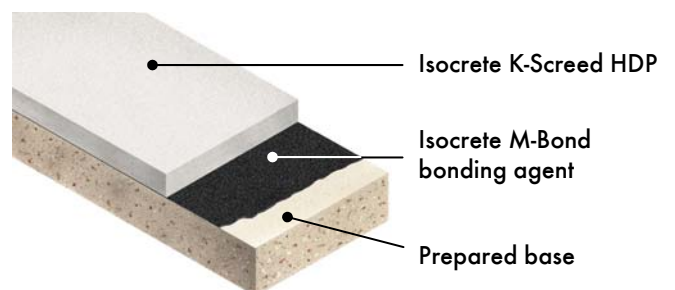
Sand to BS EN 13139 0/4 mm (MP) category 1, with not more than 10% passing sieve size 150 micron.

Isocrete K-Screed Additive is available in 3 sizes.

The amount of water added will vary with the moisture content of the sand. Sands to BS EN 13139 0/4 mm are generally suitable, but should be checked prior to use to confirm that the water required to produce a workable 'earth moist' screed gives a ratio for water:cement of approx 0.35:1 to ensure good hydration and quick drying.

### System Design

#### Bonded Screed



## Model Specification

Product: Isocrete K-Screed HDP  
Preparatory work and application in accordance with suppliers instructions.

Supplier: Flowcrete UK Ltd.  
Telephone : +44 (0)1270 753000

Isocrete K-Screed HDP screed to be supplied and laid bonded with Isocrete M-Bond epoxy bonding agent on a suitable shotblasted or scabbled and vacuum cleaned insitu concrete base in accordance with the instructions of Flowcrete UK Ltd. by one of their approved licensees.

## Products included in this system

**Bonder:** Isocrete M-Bond @ 0.5 kg/m<sup>2</sup>

**OR,** if a dpm required

Isocrete M-Bond Extra @ 0.9 kg/m<sup>2</sup>

**Screed:** K-Screed HDP @ 27 kg/m<sup>2</sup> for 15mm (Minimum Thickness 15 mm)

**Curing:** Polythene sheet.

A damp proof membrane is required on ground floors and may be required on new concrete slabs to seal in excess construction moisture in the base.

The screed may be reinforced with Isocrete PP Fibres (see separate data sheet).

Detailed application instructions are available upon request.

## Installation Service

The installation should be carried out by a Flowcrete approved licensee with a documented quality assurance scheme. Obtain details of our approved contractors by contacting our customer service team or enquiring via our web site [www.flowcrete.co.uk](http://www.flowcrete.co.uk)

## Environmental considerations

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

## Technical Information

The figures that follow are typical properties achieved in laboratory tests at 20 °C and at 50% Relative Humidity .

Days	7	28
Compressive Strength	> 30 N/mm <sup>2</sup>	> 45 N/mm <sup>2</sup>
Flexural Strength	> 6 N/mm <sup>2</sup>	> 7 N/mm <sup>2</sup>
Tensile Strength	> 2.5 N/mm <sup>2</sup>	> 3.5 N/mm <sup>2</sup>
Bond Strength	> 1.5 N/mm <sup>2</sup>	> 2.0 N/mm <sup>2</sup>

Fresh wet density 2,200 kg/m<sup>3</sup>

## Speed of Cure

	10 °C	20 °C
Working time	2 - 3 hrs	2 hrs
Light foot traffic	48 hrs	24 hrs
Full traffic	7 days	7 days
Curing under polythene	3 days minimum	3 days minimum

Avoid rapid curing. As soon as possible after laying, cover with polythene sheet and leave for a minimum of 72 hours.

## Coverage

### K-Additive

K-Additive Size 3 sachet weighs 500 gms.  
Used at 1 sachet Size 3 / 25kg cement.  
At 15mm screed thickness, requires 125 gms/m<sup>2</sup>.

Also available in concentrated form,  
K-Additive Size 4 sachet weighs 500 gms.  
Used at 1 sachet Size 4 / 50kg cement.  
At 15mm screed thickness, requires 62.5 gms/m<sup>2</sup>.

### Isopol SBR

Used at 1.25 kg / 25 kg cement.  
At 15mm screed thickness, requires 315 gms/m<sup>2</sup>.

## Important Notes

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.

Any suggested practices or installation specifications for the composite floor or wall system (as opposed to individual product performance specifications) included in this communication (or any other) from Flowcrete UK Ltd constitute potential options only and do not constitute nor replace professional advice in such regard. Flowcrete UK Ltd recommends any customer seek independent advice from a qualified consultant prior to reaching any decision on design, installation or otherwise.