

Technical Information Sheet
Article No. 1290

Concrete and Screed Strengthener

Range of use

Protection for fresh concrete:

A chemical consolidation agent, Concrete and Screed Strengthener increases the strength of fresh concrete and cement screed surfaces and, because of its vapour inhibiting effect, leads to more uniform drying.

Strengthening, repairs:

The use of Concrete and Screed Strengthener on utilised concrete and cement screeds binds dust and strengthens the structure and surface in the fine pore area.

Surface protection:

By strengthening and consolidating the surface which reduces capillary absorbency, Concrete and Screed Strengthener protects against soiling and damage of the pore structure through liquid mediums. It also reduces abrasion on the substrate.

Adhesive primer:

Surfaces that have been protected with Concrete and Screed Strengthener provide an ideal substrate for subsequent coatings from the Remmers coating programme – even years later.

Characteristic data of the product

Product base:	alkaline silicate solution
Colour:	clear, without colour
Density:	approx. 1.15 g/cm ³
pH value:	approx. 11.5

Property profile

Concrete and Screed Strengthener is a clear, alkaline, silicate solution:

Abrasion resistance (accord. to Taber 1000 rev/1000 g CS 17 roll):

Untreated:	0.15 g (B 25)
Treated:	0.03 g, corresponds to an increase in abrasion resistance of approx. 80%

Water absorption (accord. to Karsten 7 days):

Untreated:	0.5 ml (compacted concrete)
Treated:	0.1 ml, corresponds to a reduction in the absorption of water by approx. 80%

Absorption of harmful salts (through capillary action, 24 hours):

Untreated:	0.77 g (sand-lime brick, 1.5 cm depth)
Treated:	0.44 g, corresponds to a reduction of the absorption of harmful salts by approx. 60%

Compressive strength after 7 days:

Untreated:	36 N/mm ² (compacted concrete)
Treated:	39 N/mm ² , corresponds to an increase in compressive strength of approx. 8%.

Water vapour diffusion capacity:

S _d value:	< 4 m
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Directions

Application with spraying equipment or a brush:

The cleaned concrete/screed surface should be pre-wet in advance (best 1 day before impregnation). The surface should be dry but still dark with moisture. Spray or brush on Concrete and Screed Strengthener several times to saturation (wet-on-wet) but avoid pools. Remove excess material or, after a corresponding gel formation time (approx. 30 min.), wash off with water.

Impregnation under gravity:

Pre-wet the cleaned floor in advance (best 1 day before impregnation). The surface should be dry but still dark with moisture. Apply Concrete and Screed Strengthener very generously, then work the material into the surface with a hard broom until a gel begins to form (approx. 30 min.). After gel has formed, excess material is mixed with plenty of water, worked through with a broom and then completely vacuumed off the surface. When using Concrete and Screed Strengthener on large surfaces, the use of cleaning machines equipped a vacuum cleaner is recommended. If remains of the water-gel material remain on the substrate, the white crystals that form can be swept off with a soft broom.

Note on working

Old covers:

When restoring old surfaces, these can be subjected to foot traffic after they have dried. Depending on how damaged the floor was prior to treatment, full loading capacity is given after 2 to 7 days and the surface can then be deco-

rated in colour by coating with Epoxy BS 2000/3000.

Protection for fresh concrete:

The use of Concrete and Screed Strengthener to protect fresh concrete can be carried out as soon as the surface can be subjected to foot traffic. After the desired surface strength has been achieved, the surface can be utilised. Before a coating is applied, the substrate should have reached its compensation moisture balance. The treated surfaces can be then decorated in colour by coating with Epoxy BS 2000/3000.

Notes

Protect glasses, glass, clinker, brick, tiles, etc. from splashes. If splashed, wash off with water immediately.

In the case of pigmented screeds, there may be a change in colour after Concrete and Screed Strengthener has been applied.

Because of the differing absorption behaviour of mineral substrates, impregnated surfaces look spotty.

Concrete and Screed Strengthener should not be used on surfaces that have already been impregnated with synthetic resin or on extremely damaged pore structures (broken out areas, macroscopic cracks or pores).

The reaction of Concrete and Screed Strengthener may take up to 90 days, depending on ambient conditions.

Tools, cleaning

Surface sprayer, soft broom, MV2 Sprayer, suitable cleaning machines.

Clean tools/equipment with clean water while the material is still fresh. Reacted material can only be removed mechanically.

Packaging, application rate, shelf-life

Packaging:

10 kg, 30 kg plastic canisters, 200 kg drum

Application rate:


Depending on the absorbency of the substrate and application method, approx. 0.15 - 0.50 kg/m²

Shelf-life:

At least 2 years in unopened, original containers stored cool but frost-free.

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.

	
Remmers Baustofftechnik GmbH Bernhard-Remmers-Straße 13 D-49624 Löhningen	
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EN 13813 SR-B_{fl}-s1	
Concrete and Screed Strengthener	
Synthetic resin screed for use in buildings (System construction according to directions in the Technical Data Sheet)	
Behaviour under fire	B _{fl} – s1 ¹⁾
Release of corrosive substances	SR
Water permeability	NPD ²⁾
Resistance to wear	NPD
Adhesive pull strength	NPD
Impact resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal insulation	NPD
Resistance to chemicals	NPD

1) In Germany, DIN 4102 is presently still valid, Fire Class B1 is fulfilled and is comparable with DIN EN 13501-1 Class B_{fl}

2) NPD: characteristic value not stipulated

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

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Remmers (UK) Limited Crawley
United Kingdom
Tel: +44(0) 845 373 0103
Fax: +44(0)845 373 0104
www.remmers.co.uk

Remmers India Pvt. Ltd.
Gurgaon
Tel.: +91 124 400 9131
Fax: +91 124 400 9134
www.remmers.in