

STEEL FIBRE FLOOR

IB50SF STEEL FIBRE FLOOR

TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › Product acc. to
 - DIN EN 13813 "Cement-based screed for wearing layers"
- › High wear resistance - verification with a test acc. to Böhme acc. to DIN EN 13892-3
- › Verification of the adhesive pull strength acc. to DIN EN 13892-3
- › Factory production control acc. to DIN EN 13813
- › Company certification acc. to DIN EN ISO 9001:2015

PROPERTIES

- › Ready to use, cement-bound steel fibre floor
- › Only has to be mixed with drinking water
- › High Bending tensile and impact strength
- › High resistance to mechanical loads
- › Also available with stainless steel fibres
- › Easy to process
- › Abrasion resistant
- › Non-combustible
- › Water-tight, largely oil-proof
- › **schwindreduziert**

SYSTEM COMPONENTS

- RM02** Corrosion protection and bonding agent
IH10 Industrial floor-Bonding agent
IB50SF Steel fibre floor

AREAS OF APPLICATION

- › Industrial floors subject to heavy-duty use
- › Ramps, warehouses
- › **Panzerhallen**, garages, workshops
- › Carriage balances or truck balances

MOISTURE CLASSES BASED ON CONCRETE CORROSION FROM ALKALI-SILICIC ACID REACTIONS

Feuchtigkeitsklasse	WO	WF	WA	WS
IB50SF	•	•	•	•

The aggregates in PAGEL®'s products comply with the requirements of alkali sensitivity class E1 from non-hazardous sources specified under DIN EN 12620.

EXPOSURE CLASS ALLOCATION ACC. TO: DIN EN 206-1 / DIN 1045-2

	XO	XC	XD	XS	XF	XA*	XM
	1234	123	123	1234	123**	123	

IB50SF	•	••••	••••	••••	••••	••	••
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* Having sulfate attack up to 600 mg/l

** With protective measures according to DIN 1045-2

TECHNICAL DATA

TYPE			IB50SF
Grain size		mm	0-5
Amount of water	max.	%	12
Processing time approx.		min	30
Consumption approx.		kg/(m ² · mm)	2.2
Layer thickness**		mm	20-100
Compressive strength	1 d	N/mm ²	≥ 40
	7 d	N/mm ²	≥ 60
	28 d	N/mm ²	≥ 70
Bending tensile strength	1 d	N/mm ²	≥ 4
	7 d	N/mm ²	≥ 6
	28 d	N/mm ²	≥ 8
Adhesive pull strength	28 d	N/mm ²	≥ 2.0
Abrieb DIN EN 13813 approx.	28 d	cm ³ /50 cm ²	7

* Concrete compressive strength tested as specified by DIN EN 12390-3;

Bending tensile strength tested as specified by DIN EN 12390-5

** Die Schichtdicke ist auf die Beanspruchungsgruppe und den tragenden Untergrund abzustimmen.

Note: All fresh and solid mortars are tested at 20 °C ± 2 °C. Higher or lower temperatures result in deviating properties of fresh respectively solid mortars and test results. Depending on the temperature, the consistency can be adapted with a slight reduction of the mixing water.

Storage: 12 months. Cool, dry, free from frost. Unopened in its original container.

Delivery form: 25-kg bag, Euro pallet 1,000 kg

Hazard class: Non-hazardous material, observe information on packaging.

GISCODE: ZP1

PAGEL® PRODUCT COMPOSITION:

Cement: acc. to DIN EN 197-1

Aggregate: acc. to DIN EN 12620

Additions: acc. to DIN EN 450, general building inspection approval (abZ),
DIN EN 13263 (fly ash, microsilica, etc.)

Admixtures: acc. to DIN EN 934-4

PROCESSING

ALLGEMEINE HINWEISE ZUR PLANUNG:

Schichtdicken der Fußbodenaufbauten sind auf die Beanspruchungsgruppe und den vorliegenden Untergrund abzustimmen.

Zur Rissvermeidung sind ein geeignetes Fugenbild, max. Einzelflächengrößen und Längen-Seiten-Verhältnisse geeignet zu planen.

Angrenzende Bauteile wie z. B. Wände und Stützen sind ggf. geeignet vom Fußbodenaufbau zu entkoppeln.

SUBSTRATE PREPARATION:

Remove loose and unsound material such as cement slurry and dirt etc. using suitable methods, e.g. shot-blasting or similar until the underlying solid grain structure has been exposed.

A sufficient average tear strength (1.5 N/mm², KEW 1.0 N/mm²) must be ensured.

Prewetting:

Prewet the concrete substrate to capillary saturation for approx. 6-24 hours.

Reinforced concrete:

The grade of surface preparation of reinforcement as well as other metallic parts is based on the requirements of the current applicable regulations and must be ensured before the application.

Non-iron metals:

Cement and cement-bound building materials may cause non-iron-metals in the transitional area of the contact surface (e.g. aluminium, copper, zinc) to loosen. Please contact us for technical advice.

MIXING:

The dry mortar is supplied ready to use and only needs to be mixed with water. Fill the specified amount of water apart from a residual amount into a clean and suitable mixing device (e.g. compulsory mixer). Add the dry mortar and mix for at least 3 minutes. Add the remaining water and mix for at least another 2 minutes until it forms a homogeneous mass.

Mixing water:

Drinking water quality

Temperature range:

+5 °C to +30 °C (component, air and material temperature)

Low temperatures and cold mixing water reduce strength development, require intensive forced mixing and reduce flowability. Higher temperatures accelerate.

APPLICATION:

Korrosionsschutz:

Ggf. freiliegende und vorbereitete Bewehrungseinlagen lückenlos mit **RM02** Korrosionsschutz zweilagig beschichten. Hierbei Technisches Merkblatt beachten.

Händische Applikation:

Die mineralische Haftbrücke **IH10** bei Verarbeitung von **IB50SF** Stahlfaserboden ist mit Bürste oder hartem Besen auf den vorgenässten, mattfeuchten Betonuntergrund lückenlos und porentief einzubürsten. Hierbei Technisches Merkblatt beachten. Die nach folgende Mörtelbeschichtung muss frisch-in-frisch erfolgen. Bei Arbeitsunterbrechung bzw. Erhärtung muss die Haftbrücke vollständig abbinden. Nach entsprechender Wartezeit Vorgang wiederholen. Anschließend **IB50SF** Stahlfaserboden mit geeigneten Arbeitsgeräten in die noch nicht abgebundene Haftbrücke festverdichtend einbringen, verteilen und glätten.

FOLLOW-UP TREATMENT:

Fresh mortar areas must be protected from premature water evaporation (from wind, draughts, direct exposure to sun, etc.) immediately on completion of the work for a period of 3-5 days.

Suitable curing methods:

Water spray, foil covers with jute sheets, thermofoils or moisture-retaining covering sheets, **01** Evaporation protection.

The technical data sheet must be observed when using **01** Evaporation protection.

Notes

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