FLOATING SCREED

IB20FL FLOATING SCREED

TEST CERTIFICATES AND SUPPORTING DOCUMENTS

› Product acc. to DIN EN 13813 "Cement-based screeds for wearing layers"
› Non-combustible – verification with a test for the classification according to building material class A1 resp. A1fl according to DIN 13501-1
› Factory production control acc. to DIN EN 13813
› Company certification acc. to DIN EN ISO 9001:2015

PROPERTIES

› Ready to use dry mortar, cement-bound flowing screed
› Only requires mixing with water
› Easy to process
› Can be walked on after 3 hours
› Non-combustible
› Water-tight, largely oil-proof
› Achieves a residual moisture content of ≤ 4.0 % after 24 hours (CM device)
› Resistant to frost and de-icing salt

AREAS OF APPLICATION

› Composite screed for overlays and levelling layers
› Surface coverings in living quarters and industrial sections, indoors and outdoors
› Can be used under all surface covering

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

Moisture class	WO	WF	WA	WS
IB20FL	•	•	•	•

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
		1 2 3 4	1 2 3	1 2 3	1 2 3 4	1 2 3**	1 2 3
IB20FL	•	• • •	• • •	• • •	• • •	• •	• •

* Having sulfate attack up to 600 mg/l
** With protective measures according to DIN 1045-2

TECHNICAL DATA

TYPE			IB20FL
Grain size		mm	0–2
Amount of water	max.	%	15
Processing time 20 °C approx.		min	20
Consumption approx.		kg/(m²· mm)	1.8
Fresh mortar raw density approx.		kg/m³	2,100
Layer thickness*		mm	5–35
Measure of extension (without lifting slope) approx.		mm	300
Slump flow		mm	≥ 650
Compressive strength**	1 d	N/mm²	≥ 25
	7 d	N/mm²	≥ 45
	28 d	N/mm²	≥ 60
Bending tensile strength**	1 d	N/mm²	≥ 4
	7 d	N/mm²	≥ 5
	28 d	N/mm²	≥ 7
Abrasion DIN EN 13813 approx.	28 d	cm³/50 cm²	11

* The layer thickness must be matched with the stress group and the load-bearing capacity of the substrate.
** Testing of bending tensile and compressive strength in accordance with DIN EN 196-1

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 palette 1000 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.)

PROCESSING

GENERAL NOTES ON PLANNING:
The layer thicknesses of the floor structures must be matched to the stress group and the condition of the substrate. To avoid cracking, a suitable working jointpattern, maximum individual area sizes and length-to-side ratios must be planned appropriately. Adjacent components such as walls and supports mustbe decoupled from the floor structure if necessary.

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/mm^2, KEW 1.0 N/mm^2) must be ensured.

Chippings and voids in the concrete substrate must be levelled before applying **IB20FL**.
Suitable PAGEL®-products:
- **EH1** or **UM20** as bonding bridge and afterwards **UM20** as levelling mortar
- **R20/10** as bonding bridge and afterwards **R20/50** as levelling mortar

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.

FORMWORK, ENCLOSURES FOR JOINTS AND BUILDING COMPONENTS:
If formwork is required, it must be securely fastened and sealed to the concrete substrate. Use non-absorbent formwork. 24 hours after the application of **IB20FL**, the coating above the construction joints must be trimmed.

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 mas.

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:
Corrosion protection
If necessary, apply two coats of **RM02** corrosion protection and bonding bridge to exposed and prepared reinforcement. Observe the technical data sheet.

Manular application:
For very rough surfaces apply **IB20FL** self-levelling screed as bonding bridge with a squeegee (without skids). Apply **IB20FL** afterwards with a toothed squeegee evenly. Use the (inverted) squeegee to spread the mortar to an even layer thickness and remove it over aligned level points. Do not rework the fresh screed surface with a spiked roller.

Mechanical application:
The best possible laying performance and laying quality is achieved with the M-Tec Duo 2000 mixing and feed pump by the company M-Tec.

FOLLOW-UP TREATMENT:
Exposed grout 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.
IB20FL can be carefully walked on after approx. 2-3 hours for necessary after-treatment.

Suitable curing methods:
Water spray, foil covers with jute sheets, thermofoils or moisture-retaining covering sheets, **O1** Evaporation protection.
The technical data sheet must be observed when using **O1** Evaporation protection.

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