

INDUSTRIAL FLOOR

IB20 INDUSTRIAL FLOOR IB50PP INDUSTRIAL FLOOR

TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › Product acc. to DIN EN 13813 "Cement-based screeds for wearing layers"
- › Factory production control acc. to DIN EN 13813
- › High penetration resistance to water-polluting substances - verified by testing the penetration behaviour of water-polluting substances (**IB20**)
- › Company certification acc. to DIN EN ISO 9001:2015

PROPERTIES

- › Ready to use industrial floor mortar
- › Only has to be mixed with drinking water
- › Easy to process
- › Quick hardening
- › Low shrinkage
- › Abrasion proof
- › Non-combustible
- › Impermeable to water and largely resistant to mineral oils and fuels
- › Residual moisture after 24 h < 4 % (CM device)
- › Frost and frost-deicing salt resistant
- › Temperature-resistant up to 400 °C
- › Pumpable (screw pump)

SYSTEM COMPONENTS

- RM02** Corrosion protection
- IH10** Industrial floor-Bonding agent
- IB20** Industrial floor
- IB50PP** Industrial floor

AREAS OF APPLICATION

- › Industrial floor subject to heavy-duty use
- › Car parks and garages
- › Exhibition halls
- › Market halls
- › Steel plants

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

Moisture class	WO	WF	WA	WS
IB20/IB50PP	•	•	•	•

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 4	1 2 3**	1 2 3
IB20	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •
IB50PP	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •

* Having sulfate attack up to 600 mg/l

** With protective measures according to DIN 1045-2

TECHNICAL DATA

TYPE			IB20	IB50PP
Grain size		mm	0-2	0-5
Amount of water	max.	%	10	13
Processing time approx.	20 °C	min	30	30
Consumption approx.		kg/(m ² · mm)	2.0	2.2
Fresh mortar raw density approx.		kg/m ³	2,200	2,300
Layer thickness*		mm	10-100	20-100
Compressive strength**	1 d	N/mm ²	≥ 30	≥ 50
	7 d	N/mm ²	≥ 45	≥ 65
	28 d	N/mm ²	≥ 60	≥ 85
Bending tensile strength**	1 d	N/mm ²	≥ 3	≥ 4
	7 d	N/mm ²	≥ 5	≥ 5
	28 d	N/mm ²	≥ 7	≥ 7
Adhesive pull strength	28 d	N/mm ²	≥ 2.0	≥ 2.0
Residual moisture (CM device)	24 h	%	≤ 4	≤ 4
Abrasion DIN EN 13813 approx.	28 d	cm ³ /50 cm ²	7	5

* 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 1,000 kg

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

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 joint pattern, maximum individual area sizes and length-to-side ratios must be planned appropriately. Adjacent components such as walls and supports must be 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/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:

Corrosion protection

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

Manual application:

The mineral bonding bridge **IH10** Industrial floor/ Bonding bridge must be brushed onto the pre-wetted, surface-dry matt damp substrate with a brush or broom without gaps and pore deep. Observe the technical data sheet. The subsequent coating must be applied fresh-in-fresh. The bonding bridge must set completely if work is interrupted. Repeat the process after a suitable waiting time. Apply **IB20** Industrial floor fresh-in-fresh with suitable tools on the bonding bridge. Compact, spread and smooth the material afterwards. Machine surface smoothing of the mortar is possible.

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.

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.

