

STEEL FIBRE FLOOR

P3A STEEL FIBRE FLOOR (0-8 mm)
P3A/15 STEEL FIBRE BASALT FLOOR (0-5 mm)

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 (P3A)
- › High frost and frost-deicing salt resistance - Verification by CIF and CDF procedure (P3A)
- › Verification of the adhesive pull strength acc. to DIN EN 13892-8 for **P3A** - Test certificate
- › Factory production control acc. to DIN EN 13813
- › Company certification acc. to DIN EN ISO 9001:2015

PROPERTIES

- › Steel-fibre reinforced industrial flooring on cement-basis for particularly heavy loads. Stress group: heavy (DIN 18560, Part 7)
- › Contains steel fibres, also available with stainless steel fibres
- › Has excellent adhesive pull strength on sufficiently tear-off-resistant concrete substrates with the accompanying bonding layers
- › Develops very high strengths, especially due to the bending tensile and shear strengths, an almost indestructible floor with high resistance to mechanical loads can be obtained
- › Impermeable to water and highly resistant to oil
- › Proves to be reliable even if dynamic loads and strong shear forces would cause material breakage under normal circumstances
- › Easy to process and cost-effective
- › P3A can also be supplied as a PCC floor or with basalt aggregates
- › Complies with the requirements of building material class A1 (non-combustible) as specified under decision 2000/605/EC of the European Commission dated September 26, 2000 (published in the official journal L258)

AREAS OF APPLICATION

- › Industrial floors subject to heavy-duty use
- › Ramps
- › Warehouses, factories
- › Roller tables, roller conveyors, transportation routes
- › Production and conveyor lines
- › Tank halls, garages and repair shops
- › Carriage balances or truck balances

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

Feuchtigkeitsklasse	WO	WF	WA	WS
P3A / P3A/15	•	•	•	•

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
P3A	•	••••	•••	•••	••••	••	••
P3A/15	•	••••	•••	•••	•••	••	••

* Having sulfate attack up to 600 mg/l

TECHNICAL DATA

TYPE			P3A*	P3A/15**
Grain size		mm	0-8	0-5
Layer thickness		mm	20-80	20-80
Amount of water	max.	%	12	12
Processing time approx.		min	40	40
Consumption approx.		kg/(m ² · mm)	2.1	2.3
Compressive strength	1 d	N/mm ²	≥ 40	≥ 40
	7 d	N/mm ²	≥ 60	≥ 65
	28 d	N/mm ²	≥ 75	≥ 75
Bending tensile strength	1 d	N/mm ²	≥ 5	≥ 5
	7 d	N/mm ²	≥ 7	≥ 7
	28 d	N/mm ²	≥ 9	≥ 9
Adhesive pull strength	28 d	N/mm ²	≥ 2.0	≥ 2.0

* Concrete compressive strength tested as specified by DIN EN 12390-3; Bending tensile strength tested as specified by DIN EN 12390-5

** 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 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

APPLICATION

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.

The load-bearing substrate to which the industrial screed will be bonded must conform at least to the strength class C25/30.

Prewetting:

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

Reinforcing steel:

Blast all rust off exposed reinforcement bars until the underlying metal has been exposed acc. to purity grade SA 2 ½ in accordance with DIN EN ISO 12944-4.

CORROSION PROTECTION:

Apply two complete coats of **RM02** CORROSION PROTECTION to the derusted reinforcing steel using a brush.

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.

BONDING AGENT:

PH10 INDUSTRIAL FLOOR BONDING AGENT or **PH15**. With basalt steel fibre floors, use a brush or broom and brush onto the prewetted, matt-moist concrete substrate until it has penetrated right down into the pores and do not leave any gaps. The subsequent mortar coating must be applied wet-on-wet. The technical data sheet **PH10/PH15** INDUSTRIAL FLOOR BONDING AGENT must be observed.

As an alternative, **EH1** EPOXY RESIN BONDING AGENT can be used on dry substrates. The technical data sheet **EH1** EPOXY RESIN BONDING AGENT must be observed.

APPLICATION:

Apply compressively to the bonding layer before it starts setting using conventional tools, distribute and smoothen.

Temperature range: + 5 °C to + 30 °C

Mixing water: Drinking water quality

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, **O1** EVAPORATION PROTECTION. The technical data sheet must be observed when using **O1** EVAPORATION PROTECTION.