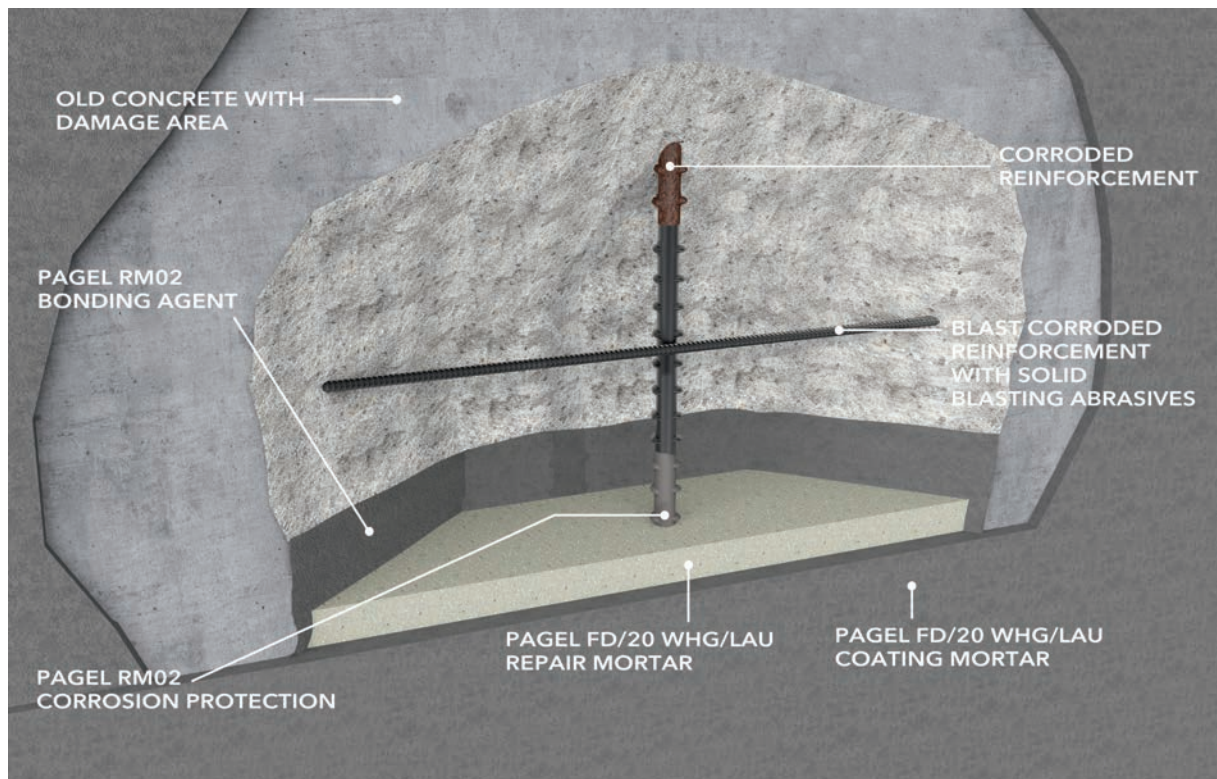


HG/LAU PLANT MORTAR

FD/20 WHG/LAU MORTAR (0-2 mm)

TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › General building authority approval of the DIBt for restoring the liquid tightness of concrete sealing constructions in LAU plants with the approval number Z-74.11-171
- › Certificate of conformity Reg. No. ZERT 5 I 19/938 QDB
- › Concrete replacement system acc. to ZTV-ING Part 3, Section 4, DAfStb directive SIB M3 and DIN EN 1504-3 for statically relevant applications
- › Non-combustible - Verification with a test for the classification according to building material class A1 according to DIN EN 13501-1
- › High frost and frost-deicing salt resistance - Verification by CIF and CDF procedure
- › Stress groups II and III (DIN 18560-7, table 1)
- › Externally monitored by the QDB (Qualitätsgemeinschaft Deutsche Bauchemie)
- › Factory production control acc. to DIN EN 1504-3
- › Factory production control acc. to DIN EN 13813
- › Company certification acc. to DIN EN ISO 9001:2015



PROPERTIES

- › Ready-to-use repair mortar for LAU plants, only requires mixing with water
- › Reduces the ingressing of CO₂ and moist (inhibiting carbonisation), largely oil and water impermeable, at the same time equipped with a high alkaline reserve, active protection against corrosion of the reinforcement
- › Soft plastic processing consistency with very good stability on vertical and horizontal surfaces, even overhead
- › Open to water vapour diffusion
- › High frost and frost-deicing salt resistance
- › Is supplied as a system and consists of the following system components:
 - RM02** CORROSION PROTECTION AND BONDING AGENT
 - FD/20** WHG/LAU MORTAR (0-2.0 mm)

AREAS OF APPLICATION

- › Restoration of liquid impermeability in LAU plants of concrete sealing constructions for undisturbed liquids damaging concrete and polluting water for up to 144 hours
- › Mortar system for the protection against water polluting liquids for certain installation thicknesses for indoor and outdoor use
- › Suitable for areas subject to vehicle traffic from vehicles with pneumatic and Vulkollan tyres
- › Repair of plants and building components in structural and non-structural engineering for storage, filling and handling (LAU plants) of substances up to a stress group "medium"
- › Repair of concrete sealing constructions for the restoration of liquid impermeability against water-polluting substances, e.g. for filling stations for refuelling and defuelling with liquids and fuels in the sector of cars, rail vehicles, watercrafts and aircrafts

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

Moisture class	WO	WF	WA	WS
FD/20 (PCC/M3)	•	•	•	•

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
		1 2 3 4	1 2 3	1 2 3	1 2 3 4	1 2 3*
FD/20	•	••••	•••	•••	••••	••

* Having sulfate attack up to 600 mg/l

TECHNICAL DATA

TYPE			FD/20
Grain size		mm	0-2
Amount of water	max.	%	12
Processing time	+ 20 °C	min	≥ 45
Consumption approx.		kg/(m ² · mm)	1.85
Fresh mortar raw density approx.		kg/m ³	2,200
Layer thickness (in total, 2 layers)		mm	15-50**
Compressive strength*	1 d	N/mm ²	≥ 30
	7 d	N/mm ²	≥ 40
	28 d	N/mm ²	≥ 50
Bending tensile strength*	1 d	N/mm ²	≥ 4
	7 d	N/mm ²	≥ 5
	28 d	N/mm ²	≥ 8
Adhesive pull strength	7 d	N/mm ²	≥ 2
E-Module	28 d	N/mm ²	≥ 30,000

* Testing of bending tensile and compressive strength in accordance with DIN EN 196-1:

DAfStb directive SIB storage B

** Permissible overall layer thickness acc. to DIBt general building inspection approval (abZ) No. Z-74.1-171

Note: All fresh and solid mortars are tested at 20 °C ± 2. 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 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.)

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.

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 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.

APPLICATION:

BONDING LAYER: **RM02** onto the prewetted, slightly moist concrete substrate until it has penetrated right down into the pores and without leaving any gaps. The subsequent mortar coating must be applied wet-on-wet.

Apply **FD/20** compressively to the bonding layer before it starts setting using conventional tools, distribute and smoothen.

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 FINISHING METHODS:

Water spray, cover foil with jute sheets, thermofoils, felt foils or moisture-retaining covering sheets.