

# REPAIR CONCRETE

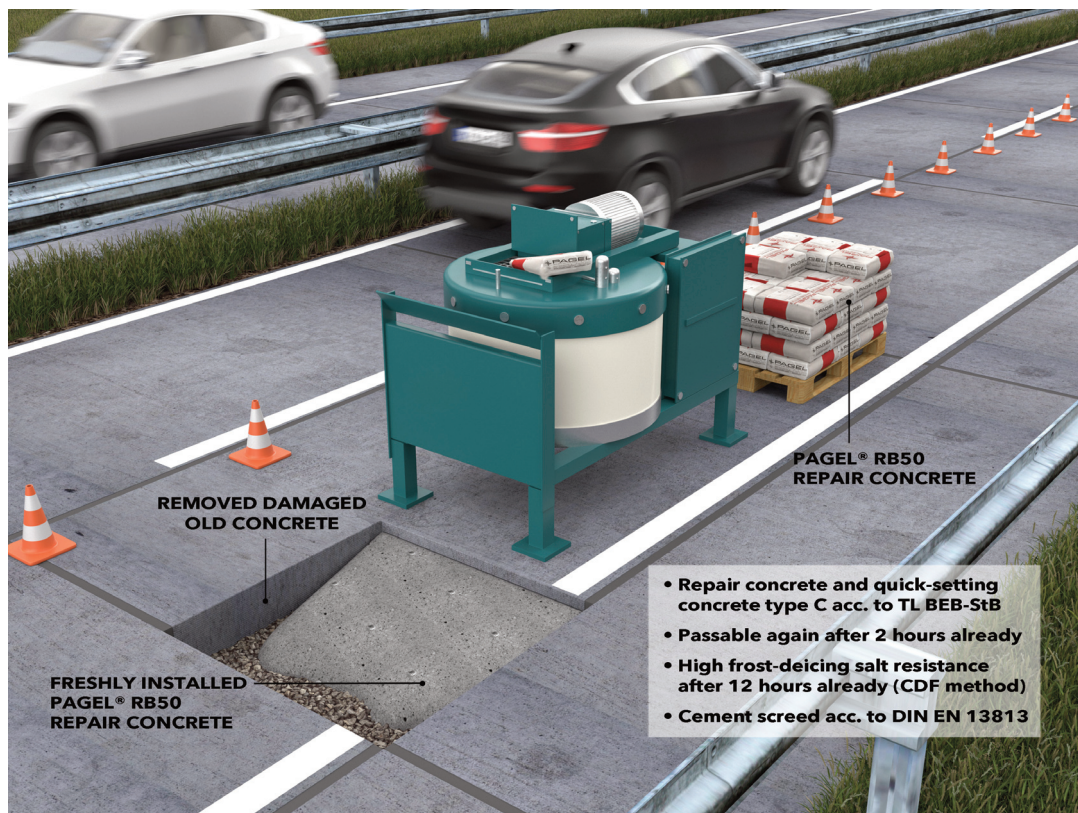
## RB50 REPAIR CONCRETE

### TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › Product acc. to
  - DIN EN 131813 "Cement-based screeds for wearing layers"
- › Repair concrete and rapid concrete type C acc. to TL BEB-StB 2015
- › High frost-deicing salt resistance - Verification by CDF procedure
- › High penetration resistance against water-polluting substances - Verification by test certificate
- › Factory production control acc. to DIN EN 13813
- › Company certification acc. to DIN EN ISO 9001:2015

### APPLICATION EXAMPLE:

Repair of a traffic area with **RB50**



## PROPERTIES

- › Ready to use, cement-bound repair and fast-setting concrete
- › Only has to be mixed with drinking water
- › Consistency class of F2 to F3 = plastic to soft (DIN EN 206-1/DIN 1045-2)
- › Easy to process
- › Very high early and final strengths
- › Loadable after only 90 minutes
- › Non-combustible
- › Largely impermeable to the ingress of water and oil
- › Residual moisture after 24 h < 4 % (CM device)

## AREAS OF APPLICATION

- › Structural maintenance of concrete traffic surfaces
- › Repair of Airfields, taxiways and aprons
- › In the field of track construction "Solid track"
- › Hall floors

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

Moisture class	WO	WF	WA	WS
<b>RB50</b>	•	•	•	•

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	1 2 3 4	1 2 3**	1 2 3
<b>RB50</b>	•	• • • •	• • •	• • •	• • • •	• •	• •

\* Having sulfate attack up to 600 mg/l

\*\* With protective measures according to DIN 1045-2

## TECHNICAL DATA

TYPE			RB50
Grain size		mm	0-5
Amount of water	max.	%	10
Processing time approx.	20 °C	min	10
Consumption approx.		kg/m <sup>3</sup>	2,200
Fresh mortar raw density		kg/m <sup>3</sup>	2,400
Layer thickness		mm	60-200
Slump flow class	5 min		F2/F3
Compressive strength	2 h	N/mm <sup>2</sup>	≥ 20
	5 h	N/mm <sup>2</sup>	≥ 25
	12 h	N/mm <sup>2</sup>	≥ 30
	24 h	N/mm <sup>2</sup>	≥ 35
	28 d	N/mm <sup>2</sup>	≥ 50
Bending tensile strength	2 h	N/mm <sup>2</sup>	≥ 3
	5 h	N/mm <sup>2</sup>	≥ 4
	12 h	N/mm <sup>2</sup>	≥ 5
	24 h	N/mm <sup>2</sup>	≥ 6
	28 d	N/mm <sup>2</sup>	≥ 8

**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:** 6 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

## PROCESSING

### PREPARING THE AREAS TO BE REPAIRED:

Vertically cut out and remove the concrete surface of the entire area to be repaired. Seal broken off concrete on the vertical cutting surfaces with **RB50** repair concrete.

When repairing concrete roads, set up sliding anchors in transverse expansion joints and connecting anchors in longitudinal joints in accordance with the client's specifications. Prepare underlying substrate for application and lay underlay

### 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:

Apply **RB50** repair concrete to the prepared areas, spread, compact and level. Create the required surface roughness with a broom. Do not rework the fresh screed surface with a spiked roller.

### 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.