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Rayson MortarBond EM90

Rayson PatchBond · Repair mortars & compounds

1. PRODUCT DESCRIPTION

Rayson MortarBond EM90 is a three-pack, solvent-free epoxy mortar — resin, hardener and graded aggregate — that reinstates concrete floors with a non-shrink, highly abrasion-resistant repair.

MortarBond EM90 rebuilds damaged concrete with epoxy strength. The three components — resin, hardener and graded aggregate — combine into a trowelable mortar that hardens without shrinkage to a compressive strength of 80 N/mm² at 7 days, well above the concrete around it.

2. RECOMMENDED USES

- Repairing spalls, potholes and worn areas in concrete floors
- Reinstating joint edges and arrises before coating
- Forming durable epoxy mortar patches in trafficked areas

4. KEY PROPERTIES

- Non-shrink repair with compressive strength of 80 N/mm² at 7 days
- Tough, highly abrasion-resistant — survives forklift traffic
- Good resistance to chemicals and solvents
- Solvent-free, three-pack system with good adhesion
- Abrasion resistance
- Chemical resistance

3. SUITABLE SUBSTRATES

- Concrete floors, mechanically prepared and primed with a compatible epoxy primer

5. SYSTEM ROLE

Body coat.

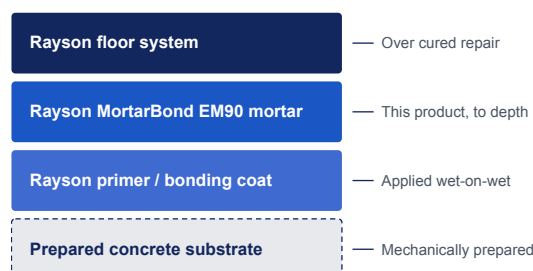


Figure 1 — Typical system build-up (top to bottom). Layer thicknesses are system-dependent; confirm the specification for your project.

6. TECHNICAL DATA

Surface preparation	Substrate must be sound, clean and free of oil, grease, laitance, loose material and bond-inhibiting contaminants. Prepare concrete mechanically (captive shot blasting, milling or diamond grinding); remove weak concrete, open blowholes and voids, and reinstate imperfections with a suitable Rayson repair product. Vacuum all dust. New concrete should be at least 28 days old.
Mixing / dilution	Mix ratio Part A : Part B : Part C = 2 : 1 : 30 by kg; no thinner required; pot life 45 minutes at 30 °C
Application method	Steel trowel
Coverage	Available from the Rayson technical team on request.
Application conditions	Minimum substrate temperature 5 °C; substrate moisture content max 5%; minimum mixing temperature +10 °C; cure between +10 °C and +35 °C; prepared substrate pull-off strength above 1.5 N/mm ² .

Drying & curing	Touch dry 4 hours at 30 °C; hard dry 16 hours; full cure 7 days
Recoat interval	Available from the Rayson technical team on request.
Film / thickness	Placed and trowelled to the required repair depth.
Pack sizes	33 kg set (Part A 2 kg resin, Part B 1 kg hardener and Part C 30 kg aggregate)
Storage	Store in unopened original packaging in a cool, dry, covered area out of direct sunlight.
Shelf life	Available from the Rayson technical team on request.

7. APPLICATION WORKFLOW



Figure 2 — Application workflow. Each stage is a hold point: confirm the previous stage is complete and within specification before proceeding.

8. RECOMMENDED SYSTEM

Floor repair and recoat

1. Cut back and mechanically prepare the damaged area
2. Prime with Rayson PrimeBond E20 (primer selection to be confirmed by the Rayson technical team)
3. Trowel in Rayson MortarBond EM90 and cure before overcoating with the floor system

9. LIMITATIONS

- Mixed mortar must be placed within its 45-minute pot life at 30 °C
- Requires a compatible epoxy primer for reliable adhesion
- Full mechanical and chemical service only after 7-day cure
- Epoxy chemistry — repairs left uncoated outdoors will yellow

10. HEALTH & SAFETY

Two-component product. Wear gloves, eye protection and suitable respiratory protection where ventilation is limited. Avoid skin and eye contact. Keep out of reach of children. Consult the Safety Data Sheet (in preparation) before use.

DISCLAIMER

The information in this data sheet is given in good faith and reflects typical values and general good practice. Because site conditions and workmanship are beyond our control, Rayson gives no warranty implied from this document; users should verify suitability for their specific application and confirm they are working from the current issue. For project-specific advice, contact the Rayson technical team.

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