

Emer-Patch repair mortars are medium weight, shrinkage compensated and suitable for use on vertical and overhead concrete spalling repairs.



Emer-Patch High Build Repair

- ✓ For vertical and overhead 30 – 50 MPa strength concrete repairs
- ✓ Up to 100mm thick on vertical surfaces
- ✓ Medium weight formulation enabling extra high-build
- ✓ Classified RCS (Respirable Crystalline Silica) Hazard Free*
- ✓ Available in a weatherproof bag



Emer-Patch Repair 40

- ✓ For vertical and overhead 30 – 45 MPa concrete repairs
- ✓ Up to 40mm thick on vertical surfaces
- ✓ Classified RCS (Respirable Crystalline Silica) Hazard Free*
- ✓ Available in a weatherproof bag



*Non-hazardous in accordance with Australian Inventory of Industrial Chemicals, contains <0.1% RCS.



Concrete Spalling

Steel reinforcement corroding within the concrete is the main cause of spalling concrete – commonly referred to as “concrete cancer”.

If moisture and oxygen can get to the steel reinforcement it will generally rust unless it is protected by the alkalinity (high pH) of the surrounding concrete.

Rust (oxidation of steel) occupies a volume around 8 times that of the original steel reinforcement. As the steel rusts the diameter of the reinforcing bar increases due to the rust occupying a greater volume than the original steel.

This expansion leads to stresses in the concrete and ultimately cracking and failure of the concrete substrate.



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Emer-Patch Concrete Repair Application Guide

Follow these steps to repair the concrete using Emer-Patch.



1. Break Out

The affected concrete is broken out with a percussion hammer or chisel and hammer to fully expose corroded steel reinforcement.

The perimeter of the repair area is saw cut to a minimum depth of 10mm.



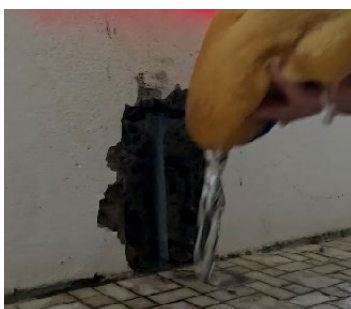
2. Remove Corrosion

Rust is removed mechanically until the reinforcement steel is bright and clean.



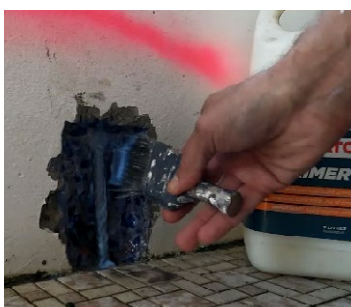
3. Steel Treatment

A zinc rich metal primer (Dulux® Metalshield® Cold Galv Primer) is then applied to the reinforcement steel and allowed to dry.



4. Substrate Saturation

Soak the concrete repair area with clean water. This can be done by hosing or soaking the repair area thoroughly with clean water until it is completely saturated. Remove any excess water prior to priming.



5. Prime

The concrete surface is primed with Emer-Patch Primer HAR and allowed to go tacky prior to the application of Emer-Patch repair mortar. Note: If primer dries before the application of the repair mortar the surface needs to be primed again with Emer-Patch Primer HAR.



6. Mixing

It is important to ensure that Emer-Patch High Build Repair is thoroughly mixed. Due to the thickness of the product, a heavy duty mixer 1200W or above with a Helical mixing paddle is required. Add the required amount of drinking quality water into the mixer and, with the machine in operation, add half the bag of Emer-Patch repair mortar and mix for 30 seconds, then gradually add the remaining powder and mix for a further 3 to 4 minutes until thoroughly mixed. It may initially look dry but do not add more than the maximum amount of water. After the required mixing time, the consistency should be like plasticine - smooth and not sagging.



7. Repair Mortar Application

After the repair mortar is mixed with water, push it into the repair area. First, work a thin layer of the repair mortar into the pre-soaked / primed substrate and then build the mortar onto this layer. Ensure full contact of the repair mortar around the steel reinforcement. Emer-Patch High Build Repair can be applied in sections up to 100mm thickness on vertical surfaces and up to 80mm thickness in overhead locations.



8. Finishing

Emer-Patch repair mortars are finished by striking off the repair area flush with the surface by using a steel trowel or straight edge. Close off the face of the repair with a steel trowel. Allow the Emer-Patch High Build Repair to stiffen before attempting to finish off. The completed surface should not be overworked.



9. Curing

Emer-Patch repair mortars, like with all cementitious materials, must be cured immediately after finishing in accordance with good concrete practice. Application of a curing compound to the repair area after finishing is recommended. Alternatively, tape down plastic sheeting around the perimeter over the repair area.



10. Overcoating

Emer-Patch repair mortars applied at greater than 10mm thick (up to 50mm thick) may be overcoated with Emer-Clad Facade after 3 days drying time. Refer to Emer-Clad Facade TDS for priming and application details.

Always refer to the TDS for application and other important information.

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Code	Product	Size	Barcode
EMER-PATCH			
FE400125-18KG	Emer-Patch High Build Repair	18KG	9300611619228
FE400130-9.5KG	Emer-Patch Skim Coat	9.5KG	9300611619464
FE400100-5L	Emer-Patch Primer HAR	5L	9300611617279
FE400120-18KG	Emer-Patch Repair 40	18KG	9300611617286
FE400140-18KG	Emer-Patch Horizontal Quick Set	18KG	9300611617293

EMER-SEAL

FE320603-600ML	Emer-Seal Paintable Grey FC (Fast Curing)	600ML	9300611608840
FE320604-600ML	Emer-Seal Paintable White FC (Fast Curing)	600ML	9300611614094

EMER-PROOF

FC001079-4L	Emer-Proof Primer Non Porous	4L	9300611573520
FC000581-4L	Emer-Proof Primer Porous	4L	9300611548504
FC000581-15L	Emer-Proof Primer Porous	15L	9300611548511
FC043129-UNIT	Emer-Proof EJB Butyl Square Floor Waste Detailing Collar	N/A	9330221153409
FC043270-UNIT	Emer-Proof EJB Inside Corner	N/A	9330221152716
FC043275-UNIT	Emer-Proof EJB Outside Corner	N/A	9330221152709
FC000691-UNIT	Emer-Proof Joint Sealing Tape	120MM x 10M	9300611555724
FE200120-10L	Emer-Proof Vapour Control Part A	10L	9300611622815
FE200121-10L	Emer-Proof Vapour Control Part B	10L	9300611622808
FC000584-12.5L	Emer-Proof Quick Dry Part A	12.5L	9300611549419
FC000585-12.5KG	Emer-Proof Quick Dry Part B	12.5KG	9300611549426
FC043117-15L	Emer-Proof Advanced	15L	9330221153492
FC000850-15L	Emer-Proof Top Coat	15L	9300611564351
FC000988-15L	Emer-Proof Landscape	15L	9300611569370
FE200100-15L	Emer-Proof Silane Sealer	15L	9300611616227

EMER-CLAD

FE100220-4L	Emer-Clad High Bond Primer	4L	9300611619457
FC061791-4L	Emer-Clad Solvent Based Primer	4L	9300611589514
FC061791-20L	Emer-Clad Solvent Based Primer	20L	9300611583321
FC061785-15L	Emer-Clad Water Based Primer	15L	9330221149297
FC000685-15L	Emer-Clad Facade Matt Deep	15L	9300611554376
FC061723-15L	Emer-Clad Facade Matt Light Gry	15L	9330221149457
FC061724-15L	Emer-Clad Facade Matt Mid Gry	15L	9330221149440
FC000686-15L	Emer-Clad Facade Matt Ultra Deep	15L	9300611554383
FE100100-15L	Emer-Clad Facade Matt White	15L	9300611599377
FC000687-15L	Emer-Clad Facade Matt Extra Bright	15L	9300611554390
FC000681-15L	Emer-Clad Facade Satin Deep	15L	9300611554352
FC061703-15L	Emer-Clad Facade Satin Light Gry	15L	9330221149570
FC061704-15L	Emer-Clad Facade Satin Mid Gry	15L	9330221149563
FC000682-15L	Emer-Clad Facade Satin Ultra Deep	15L	9300611554338
FE100200-15L	Emer-Clad Facade Satin White	15L	9300611599384
FC000683-15L	Emer-Clad Facade Satin Extra Bright	15L	9300611554345
FC000937-UNIT	Emer-Clad Reinforcement Tape	100MM x 50M	9300611567840
FC000940-UNIT	Emer-Clad Reinforcement Tape	1.2M x 100M	9300611567871

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