

Technical Specifications

High Performance Repair Mortar

Adopatch HP is a pre-blended, rapid setting structural cementitious repair mortar., designed for hand applied concrete repair where a rapid return to service and a moderate high strength is required. Adopatch HP Repair Mortar contains acrylic copolymers and polypropylene fibres to resist cracking, shrinking and to ensure an extremely high bond in wet conditions and to provide high build qualities. When mixed with water it produces a putty like mortar with an excellent wash out resistance. Adopatch HP Repair Mortar can be used for the repair of highway structures, marine structures viaducts and reinforced concrete. Adopatch HP repair Mortar can be used in tidal and wet conditions but care must be taken to avoid placing the mortar under water.

Advantages

- Adopatch HP Mortar is a pre-blended rapid setting structural mortar designed for hand applied concrete repair where a rapid return to service and a moderately high strength is required.
- Adopatch HP Mortar can be used for the repair of highway structures, marine structures, viaducts and reinforced concrete
- Adopatch HP Mortar can be used in tidal and wet conditions but care must be taken to avoid placing the mortar underwater.
- Adopatch HP Mortar is a pre-blended structural cementitious mortar conforming to the requirements of BS EN 1504-3 Class R3. Adopatch HP complies with D.o.T. BD27/86 clause 6 for highway repair mortars
- Fibre reinforced to prevent cracking. Shrinkage compensated—reduced risk of cracking
- Low permeability to water, carbon dioxide and chlorides, reducing the risk of corrosion to reinforcement ow permeability to water, carbon dioxide and chlorides, reducing the risk of corrosion to reinforcement
- Single component, factory blended to eliminate the risk of site batching

Performance

TYPICAL PERFORMANCE

Compressive strength at 18-22°C N/mm²

1 day	7 days	28 days
20.0	35.0	45.0

Flexural strength N/mm²

7 days	28 days
5.0	9.0

WSR 0.15

Pot Life 15 minutes (temperature depend-
ant) Shrinkage <0.001%

Maximum Thickness 200mm

Minimum Thickness 12mm

Yield (Litres/25kg) 14.7 L

Yield (Tonne/m³) 1.7 T/m³



0086
Adomast Manufacturing Limited
2nd Floor, 85 Frampton Street,
London
NW8, 8NQ
13

0086 –CPR-594068
DoP No. 041
EN 1504-3

Concrete repair product for structural repair CC
concrete

(based on polymer modified hydraulic cement)

Compressive strength:	class R3
Chloride ion content:	≤ 0,05%
Adhesive bond:	≥ 1.5 MPa
Carbonation resistance	Passes
Thermal compatibility part 4:	≥ 1.5 MPa
Elastic modulus:	22.6 Gpa
Capillary absorption	≤ 0.5 kg.m ² .h ^{-0.5}
Dangerous substances:	comply with 5.4
Reaction to fire:	Euroclass A1

Application

Instructions for Use

All weak and friable concrete should be mechanically removed back to a sound substrate. When breaking out around steel reinforcement the steel should be fully exposed to at least 15mm behind and 50mm along past the corroded length.

When cutting back feather edging must not be permitted. Saw cut edges to a minimum of 10mm should be used to outline the repair area.

All areas to be repaired should be free of dust, grease and any other contaminants which can affect the bond of the substrate to the repair mortar. Smooth edges should be roughened and reinforcement cleaned to bright steel using approved methods and treated with Adomast Steel Primer prior to application of the repair mortar.

Ideally concrete substrates should be thoroughly soaked for several hours prior to Adopatch HP repair Mortar being applied to reduce suction. Immediately prior to placing all excess water should be removed.

Permeable concrete should be primed with Adomast Concrete Primer prior to applying Adopatch HP Repair Mortar.

Adopatch HP Repair Mortar should be applied wet on wet for maximum bond.

Mixing Instructions

25 kg of Adopatch HP Repair Mortar should be added carefully to 3.75 litres of water, which complies with BS EN 1008 (as for concrete) progressively mixing until a putty like consistency is achieved. Adopatch HP Repair Mortar should be mixed with an electrical or pneumatic power tool. Larger amounts can be mixed in a forced action paddle mixer. Small quantities can be mixed by hand, care being taken to accurately measure the water. Once mixed, the material must not be reworked. Due to the speed of the set the material should be placed as quickly as possible

Storage

Keep sealed when not in use. Avoid contact with moisture.

Shelf life is minimum 3 months but storage in the correct temperature and humidity can increase shelf life to 6 months

Health and Safety

In common with other cementitious materials ADOPATCH HP is alkaline and therefore contact with skin and eyes should be avoided.

If contact with skin should occur wash affected area well. Should material enter eyes irrigate thoroughly with clean water and if discomfort continues seek medical advice without delay.

Refer to separate ADOPATCH HP Health and Safety sheet.

HEALTH & SAFETY: Users are advised to wear a face mask, goggles, gloves and overalls when handling, mixing and applying cementitious products.

Contains Portland cement which contains Chromium VI which may produce an allergic reaction.

Clothing contaminated by wet cement should be removed immediately and washed before reuse.

Irritating to skin.

Risk of serious damage to eyes. In case of contact with eyes rinse immediately with water and seek medical advice.

Keep out of reach of children