

ONE PART LIGHT WEIGHT POLYMER MODIFIED REPAIR MORTAR FOR HIGH BUILD REPAIRS

DESCRIPTION

A ready to use one part light weight repair mortar. Provides excellent thermal compatibility to concrete, waterproof properties and long term durability.

USES & ADVANTAGES

Specifically designed for vertical and overhead repairs of all sizes where high build is required. Provides excellent durability & resistance to chloride & carbon-dioxide.

Advantages include:-

- High build one application.
- Excellent bond.
- Contains shrinkage compensators.
- Low permeability.
- One part & prebagged.
- Can be wet sprayed.
- No formwork required.
- Overhead & vertical repairs made easy.
- Can be applied in sections up to 80 mm.

PROPERTIES

The following results were obtained at a water : powder ratio of 0.19 and temperature of 25°C.

Appearance: Grey powder
Fresh Wet Density: Approx. 1,400 kg/m³ depending on actual consistency used.

Setting Time: Initial 2.00 hours
 ASTM C191-01a / ASTM C807 Final 4.50 hours

Compressive Strength: Approx. 24-28 N/mm²
 ASTM C109 at 28 days

Flexural Strength: 4.6 N/mm² at 28 days
 ASTM C348

Tensile Strength: 1.8 N/mm² at 28 days
BS 6319 Part 7

Carbon Dioxide Barrier 10 mm. of Conpatch 675:
 Equivalent to 800 mm of concrete

Chemical Resistance:
 Reduces dramatically chemical attack due to low permeability. Impermeable to acid gases water borne chlorides, ions and oxygen. Chloride diffusion is very low. Chloride diffusion < 2 x 10⁻¹⁰ cm²/sec.

Drying Shrinkage: < 400 micro strain at 7 days
 ASTM C490 < 580 micro strain at 28 days
 BS 6319 Part 7

Fire Rating: Non combustible

Coefficient of Thermal Expansion: 7 to 12 x 10⁻⁶/ °C

Water Absorption: 10 minutes 0.002 ml/m²/sec.
ISAT 2 hours 0.001 ml/m²/sec.

Chloride Diffusion: < 2 x 10⁻¹⁰ cm²/sec.

Tested to BS 6319 Part 2,6 & 7.

APPLICATION INSTRUCTIONS & SURFACE PREPARATION

Saw cut repair area to a depth at least 10 mm. to avoid feather edges. Break out repair area.

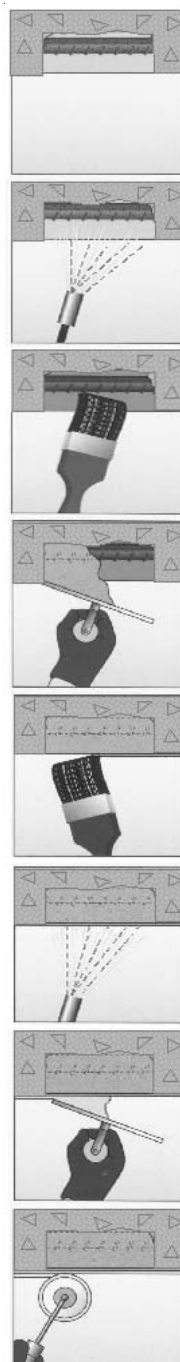
Clean surface remove unsound concrete, dust, oil, paint, grease, algae, etc. The surface must be left clean & roughened.

Steel should be cleaned to bright condition & primed using

2 coats of **Congard Zinc**.

Thoroughly soak the concrete with water prior to applying Conmix Latex bonding bridge. Work well into the surface. (Remove excess water before applying the bonding bridge). Do not allow bonding bridge to dry out work **wet on wet**. If it dries out remove & reprime. **Conmix Latex** bonding bridge is not required in all circumstances consult Cormix Technical Dept.

Typical Procedure for Concrete Repair Using Conpatch Repair Mortars



Remove damaged concrete and prepare exposed steel reinforcement.

Thoroughly clean area of repair using high pressure water jet to remove all loose debris and contamination.

Mix and apply **Congard Zinc** to rebar allow to dry. Apply **Conmix Latex** bonding bridge if required. Apply repair material **WET ON WET** to bonding bridge.

Replace damaged concrete using **Conpatch 675** one component polymer modified light weight mortar, build up in layers if necessary.

Once set firm, the repair and surrounding area coat with **Corcure 90** or **Corcure 75** curing compound.

Remove any remaining **Corcure 90** from treated area if to overcoat.

Any further leveling may be achieved with fairing material.

A final coat of **Elastoclad** decorative elastomeric, anti-carbonation coating will prevent the ingress of water chlorides and other aggressive influences, effectively halting the carbonation process. **Elastoclad** is water vapour permeable, allowing the substrate to breathe, and has excellent elasticity, bridging dynamically moving cracks even at low temperatures.

ONE PART LIGHT WEIGHT POLYMER MODIFIED REPAIR MORTAR FOR HIGH BUILD REPAIRS

PRIMING

Apply **Conmix Latex** / cement bonding slurry to prepared surface and whilst still tacky apply **Conpatch 675**.

MIXING

Ensure thorough mixing in a forced action mixer or with a heavy duty drill (400/500 rpm.). Do not use free fall mixers or part bags.

Use 3.1 litre of clean water. Put the water into the mixer & add an 18 kg bag of **Conpatch 675**, mix for 3-5 minutes. Always add powder to water. The maximum water content should be 3.25 litre per 18 kg bag.

APPLICATION

Apply **Conpatch 675** to the prepared area by hand or trowel. Work a thin layer into the primer then build until the required depth. On vertical & overhead surfaces build may be as high as 50-80 mm. without formwork. If high build is required work in layers. If sagging takes place re-apply system including primer. The minimum build for **Conpatch 675** is 10 mm. Intermediate layers should be scratched keyed & cured with water.

Spray Application

Conpatch 675 applied by wet spray provides cost saving in terms of less wastage and higher productivity & gives a more dense material.

Finishing

Finish with a steel, wooden or plastic float.

CURING

Cure immediately after finishing with a curing compound e.g. Corcure 90. Large areas should be cured as work progresses. Do not use wax or P.V.A. based curing compounds if the surface is to be overcoated.

OVERCOATING

Conpatch 675 may be overcoated with most coating systems e.g. Elastoclad or Conshield acrylic coatings.

LIMITATIONS

Conpatch 675 is not appropriate where high strengths are required or in trafficed areas (see properties). Do not mix part bags.

COVERAGE YIELD

Conpatch 675	14 - 15 litre : 18 kg bag. Approx. 1.5 m ² at 10 mm thickness
Congard Zinc	11.8 m ² /litre at 50 micron d.f.t.
Conmix Latex	Approx. 5 m ² /litre

PACKAGING

18 kg. 4 Ply plastic lined bags.

STORAGE & SHELF LIFE

Conpatch 675 has a shelf-life of up to 12 months in unopened packs kept in a dry store. If high humidity is apparent the life may be reduced to 6-8 months.

HEALTH & SAFETY

Conpatch 675 is non-toxic but is alkaline in its nature. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves and eye protection and dust mask. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. When in contact with skin rinse with clean water and cleanse with soap and water. **Conpatch 675** is non-flammable.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord.

CONTACT DETAILS

Cormix International Limited

Regional Office,
89 Romklao Rd., Sansab, Minburi, Bangkok 10510
Tel. (66 2) 917 3955-8, 543 8890
Fax. (66 2) 917 3959, 543 8891
<http://www.cormix.com> E-mail : info@cormix.com

NOTE : Every reasonable precaution is taken in the manufacture of all CORMIX-products to ensure that they comply with CORMIX's high standard of quality. The recommendations and properties of the product are based upon what is believed to be the most reliable information available, and are not intended as recommendations which infringe on other patents. Although all CORMIX-products are subject to rigid quality tests, no specific guarantee can be given, because results depend, not only on quality, but also on other factors beyond our control. We welcome therefore consultation in the event of doubt concerning application, or performance, and point out that oral recommendations, which vary from the instructions contained herein, are not binding without written confirmation by CORMIX. All transactions shall be subject to our terms and conditions of sale-delivery-and-service. This data sheet supersedes the previous one and a reprint may be issued without notice to supersede this edition, as and when deemed necessary. The information given in this leaflet is to the best of our knowledge true and reliable. Field service where provided does not constitute supervisory responsibility. Our guarantee is therefore limited to the quality of materials delivered.