

# MIXBUILD HB

Single component Polymer modified, high build repair mortar



## Introduction

**Mixbuild HB** is a single component polymer; cementitious medium weight repair mortar. When mixed with specified amount of water, a gray trowelable mortar results, it is ideal for high build applications on inverted or vertical surfaces. Mixbuild HB can be applied up to 50mm thick in one pass without formwork. Concrete repair mortar is specially formulated with fibre reinforced to produce shrinkage free mortar giving a smooth finish with excellent adhesion and very good water resistant properties.

## Appropriation

- Repair of damaged, weak or de bonded concrete
- Repair of honey combed concrete & Crack filler for concrete
- Patch work repair on horizontal, vertical and overhead surfaces
- Replacement of concrete suffering from attack of chlorides or sulphates
- Replacement of concrete spalled or chipped

## Characteristics

Premixed powder, which requires only on site addition of water  
 High bond strength to prepare surfaces  
 Durable low permeability and weather proof & Non slumping  
 Resistance to carbonation and attack by chlorides

## Technical Data and Properties

|                                   |   |
|-----------------------------------|---|
| Standard Confirms to              | ASTM C 387:77A<br>Din 1048 & DIN 1045 Class B |
| Color and Appearance              | Grey Powder                                   |
| Density                           | 1.65  |
| Compressive Strength @ 28Days     | 43.9N/mm <sup>2</sup>                         |
| Flexural Strength @28Days         | 8.9N/mm <sup>2</sup>                          |
| Tensile Strength @ 28Days         | 3.71N/mm <sup>2</sup>                         |
| Bond Strength @28Days             | < 26N/mm <sup>2</sup>                         |
| Water Absorption                  | 0.95%   |
| Pot Life @ 25°C                   | 30min   |
| Recommended Application thickness | 10-50mm/ layer                                |



## Product Management

**Surface preparation:** The surface of the concrete to be repaired should be sound and uncontaminated. The decayed or damaged area should be saw cut, keeping the sides of the area as square as possible. Loose materials must be removed carefully using suitable means such as sharp tools chipping hammers. If the reinforcement is corroded make sure that the back of the steel is completely exposed. Then clean the steel to bright metal condition.

### Priming:

Reinforcement steel – must be fully exposed and thoroughly cleaned around the whole circumference during preparation. By using Mixguard RP – Rust remover

Grit blasting is also a preferred method. The steel should then be coated with Mixbuild ZR – Zinc rich epoxy primer.

**Concrete -** If the concrete damaged is severe and is due to chloride attack, before applying the Mixbuild HB a bonding coat with epoxy bond is advisable. For Mixbuild HB to achieve optimum bond in the fresh and cured states, it should be applied when the bonding agent is still tacky. For normal priming on concrete surface it recommended to use Mixbond – bonding agent to obtain maximum bonding strength.

**Mixing:** hand or mechanical mixing can mix Mixbuild HB. For hand mixing, quantities not greater than 10 kg may be mixed at one time. Slowly add the Mixbuild HB powder to clean gauged water, working well to produce a smooth mortar. The consistency of the mix can be adjusted by the addition of more powder or water necessary.



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the construction chemist...

**Placing and finishing:** Whilst the primer is still tacky, apply the mortar mix and compact well. Application can be by a trowel or a rubber gloved hand to force the material in place. Mixbuild HB can be applied at a thickness of 40mm at one pass on vertical and overhead surfaces. High build application can be achieved by using form work. While applying multi-layers, the previous layer should be cross-hatched and allowed to set before applying the next coat.

**Curing:** Mixbuild HB should be cured in accordance with good concrete practice by applying of a suitable curing membrane or by covering the work with properly secured plastic sheeting. Protection against rapid drying from wind, sun or excessive heat is necessary.

**Cleaning**

Clean tools with water immediately after use.

## Packing & Shelf life

Mixbuild HB is available in 25 kg bags.

Up to 12 months in unopened containers, Keep out of direct sunlight and moisture.

## Health & Safety

Mixbuild HB contains no hazardous substances; however it should not be allowed to come into contact with skin and eyes. Wear suitable protective gloves and goggles whilst handling. When in contact with the skin and eyes, wash thoroughly and immediately with warm water. If swallowed seek medical attention. For more details, please refer to the MSDS released on each PyChem product

Technical information given in this data sheet is true and exact to the best of our knowledge, laboratory upshot and hand-on application. The data sheets of all products are revised/updated regularly and hence ensure that the latest release is used for reference and recommendation. The date of publishing is as in this sheet. All data are mean of numerous tests, assessment and analysis conducted under laboratory ambience. Climatic disparity in temperature, humidity and porosity of substrate may impinge on values



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