



EPIREZ®

TECHNICAL DATA

Ezirender™ High Build

One-Part High Build Repair Mortar



Ezirender™ High Build (HB) is a versatile polymer modified lightweight repair mortar enabling high build concrete repairs in both overhead and vertical applications.

This **Epirez®** product offers the unique advantage of shrinkage control in both plastic and hardened states, so that repairs will maintain long term durability and form an integral part of the parent structure.

Additionally **Ezirender™ High Build (HB)** offers the advantage of a true one part product and requires only the addition of water.

Ezirender™ High Build (HB) is a proprietary formulation containing special cements, sands and modifiers to control hardening characteristics and shrinkage. Proprietary polymers are also added to maximise the physical and chemical properties and adhesion of the repair.

Always seek qualified structural engineering guidance for all repairs.

Areas of application

- High rise facade repairs
- Cooling tower repairs
- Soffit repairs
- Bridge repairs

Features

- High build application (up to 100mm)
- Good adhesion
- Easy use (simply add water)
- High strength to weight ratio
- Low permeability
- Contains no chlorides
- Cost effective
- Dual shrinkage control (both plastic and hardened states)

General properties

(**Ezirender™ High Build (HB)** mixed with water at 3.4 litres/20kg bag)

The information contained in this Technical Bulletin is as up to date and correct as possible as at the time of issue. The data provided should be used as a guide only as the performance of the product will vary depending on differing operating conditions and application methods.

The sale of any product described in this Technical Bulletin will be in accordance with ITW Polymers & Fluids Conditions Of Sale, a copy of which is available on request. To the extent permitted by law, ITW Polymers & Fluids excludes all other warranties in relation to this product.

Work Time	: 30 Minutes at 25°C
Initial Set	: 1½ Hours at 25°C
Final Set	: 2 Hours at 25°C
Yield	: Approx 13 Litres/20 kg Kit
Compressive Strength, 1 Day	: 19 MPa
28 Days	: 45 MPa
Tensile Strength, 1 Day	: 0.6 MPa
28 Days	: 1.8 MPa
Adhesion to Concrete (Primed)	: Exceeds Parent Tensile Strength
Thermal Expansion	: 1×10^{-5} Deg C ⁻¹
Water Permeability Coefficient	: 1×10^{-10} cm/sec
Chloride Ion Resistance	: Excellent
Carbon Dioxide Resistance	: Excellent

Estimating

20 kg Ezirender™ High Build (HB) = 0.43 m² at 30 mm thick
 4 Ltr Ezirender™ High Build Primer = 12 – 15 m² per litre

Application Directions

Surface preparation

Prepare concrete surfaces to remove all laitance, grease, paint and corrosion. Use high pressure water blasting or grit blasting. Provide mechanical "keys" where possible. Reinforcing steel showing signs of corrosion should be blast cleaned in accordance with **AS1627:4 - 2005** to Class 2 ½, near white metal finish. Saw cut edges of repair area to a depth of 10mm to avoid feather edging. Clean repair area with oil free compressed air.

Surface preparation guidelines cannot cover all site or field contingencies and it is always recommended to perform an on-the-spot adhesion test as a Quality Assurance audit if doubt exists over the process.

Priming

Prime reinforcing steel with **Epirez® Epoxy Mastic Metal Primer (215)** to stop further corrosion. Prime concrete surfaces with **Ezirender™ High Build Primer** (coverage 12 – 15 m²/litre).

In situations where **Ezirender High Build (HB)** may be subject to continual or intermittent immersion, the parent concrete surface should be primed with **Epirez® General Purpose Epoxy Mortar Binder (133)** or **Epirez® Non-Sag Epoxy Mortar Binder (633)**.

Ezirender High Build should be applied whilst primer is still tacky.

Mixing

Use a low speed mixer (400 rpm) to mix **Ezirender™ High Build (HB)** into water. Use 3.3 to 3.5 litre water/20kg bag, add product to water and mix for 5 minutes.

Spraying

For large patching repairs **Ezirender™ High Build (HB)** can be easily sprayed in thickness greater than 100mm without segregation. Sprayed **Ezirender™ High Build (HB)** gives a dramatic saving in time and labour, especially in areas with difficult access or limited shutdown time. For complete details of procedures for sprayed **Ezirender™ High Build (HB)** contact ITW Polymers & Fluids Technical Department.

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Curing

As **Ezirender™ High Build (HB)** is a cement based repair product, it should be cured in keeping with good concrete practice. Keep moist, especially in thinner sections. **Ezirender™ High Build (HB)** hardens rapidly. Use a concrete curing compound to ensure proper curing practice if the render is not being topcoated.

Cleaning

Clean tools and equipment with water immediately after use.

Limitations

Ezirender™ High Build (HB) should not be applied at temperatures below 5°C

Storage and shelf life

When stored in original sealed containers under dry conditions shelf life is 12 months.

Packaging

Ezirender High Build (HB) is available in 20 kg bags. **Ezirender™ High Build Primer** is available in 4 litre drum.

Ordering Information:

Ezirender™ High Build (HB)	20 kg	#991462
Ezirender™ High Build Primer	4 Ltr	#991469

Note

The figures quoted for work time and setting time after mixing the components are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

Health & Safety Information

The product is hazardous. A Material Safety Data Sheet is available from the ITW Polymers & Fluids Technical Department upon request or available on our website www.epirez.com.au.

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