Technical Data Sheet



Ezirender® High Build One Part High Build Repair Mortar



EPIREZ® Ezirender® High Build is a versatile polymer modified lightweight repair mortar enabling high build concrete repairs in both overhead and vertical applications.

EPIREZ® Ezirender® High Build 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.

EPIREZ® Ezirender® High Build is a one-part product and requires only the addition of water.

EPIREZ® Ezirender® High Build can be applied up to 100 mm thick without sagging.

EPIREZ® Ezirender® High Build 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.

INTENDED USE

- High rise façade repairs
- Cooling tower repairs
- Soffit repairs
- Bridge repairs
- Pavements

PRODUCT FEATURES

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

ESTIMATING DATA

EPIREZ® Ezirender® High Build 20 kg will yield approx. 13 L.

(e.g. 0.43 m² at 30 mm thick)

ORDER INFORMATION

E991462 EPIREZ® Ezirender® High Build 20 kg

ITW Polymers & Fluids 100 Hassall Street Wetherill Park NSW 2164 Phone (02) 9757 8800 Fax (02) 9757 3855 www.itwpf.com.au ITW Polymers & Fluids Unit 2 / 38 Trugood Drive East Tamaki 2013, Auckland Phone (09) 272 1945 Fax (09) 273 6489 www.itwof.co.nz

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TECHNICAL DATA

Technical data should be considered representative or typical only and should not be used for specification purposes.

EPIREZ® Ezirender® High Build mixed with water at 3.4 L per 20 kg bag.

Work Time @ 25°C 30 minutes
Initial Set @ 25°C 90 minutes
Final Set @ 25°C 2 hours

Compressive Strength: (ASTM C105)

1 Day: 19 MPa 28 Days: 45 MPa

Tensile Strength:

1 Day: 0.6 MPa 28 Days: 1.8 MPa

Adhesion to Concrete (primed): Excellent – Exceeds substrate tensile strength

Thermal Expansion: $1 \times 10^{-5} \, ^{\circ}\text{C}^{-1}$ Water permeability coefficient: $1 \times 10^{-10} \, \text{cm.s}^{-1}$ Chloride ion resistance: Excellent Carbon Dioxide Resistance: Excellent

SURFACE PREPARATION

General

- 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.
- The existing concrete to be patched should then be thoroughly saturated with water. Standing water should be removed prior to patching.
- Alternatively, for best results or in situations where EPIREZ® Ezirender® High Build 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).
- EPIREZ® Ezirender® High Build should be applied whilst primer is still tacky.

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MIXING INSTRUCTIONS

Temperature must be above 5°C for the mixing and placement of grout.

- Use a low speed mixer (400 rpm) to mix EPIREZ® Ezirender® High Build into water.
- Use 3.3 to 3.5 litre water per 20kg bag
- Add product to water and mix for 5 minutes.

APPLICATION INSTRUCTIONS

- For large patching repairs **EPIREZ® Ezirender® High Build** can be easily sprayed in thickness greater than 100mm without segregation.
- Sprayed EPIREZ® Ezirender® High Build 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 EPIREZ® Ezirender® High Build contact ITW Polymers
 & Fluids Technical Department.

Curing

- As EPIREZ® Ezirender® High Build is a cement based repair product, it should be cured in keeping
 with good concrete practice.
- Keep moist, especially in thinner sections.
- EPIREZ® Ezirender® High Build hardens rapidly. Use a concrete curing compound to ensure proper curing practice if the render is not being top-coated.

CLEAN UP

Grout should be removed from tools and equipment immediately after use with clean water.

STORAGE

Store in dry conditions between 10°C and 30°C. Protect from frost.

When stored in original sealed containers in dry conditions, the Shelf Life: 12 months.

PRECAUTIONS

Please refer to appropriate material safety data sheet (MSDS) prior to using this product.

For technical assistance, please call 1800-063-511

FOR INDUSTRIAL USE ONLY

WARRANTY

EPIREZ® will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Polymers & Fluids and EPIREZ® makes no representations or warranties of any kind concerning this data.

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AUSTRALIA

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