

### Description

Freeztecq BR-Base is a highly porous material that exhibits water repellent properties. It is designed for the internal restoration of damp masonry structures.

It assists with the natural drying out of the brickwork and is able to retain salts within its highly porous structure. As a result of these combined properties, it is highly effective at protecting against moisture damage. It meets the requirements of EN 998-1.

### Advantages

- Exhibits high diffusive permeability.
- High absorption capacity for salts.
- Long-term ability to suppress the effects of moisture.

Freeztecq BR-Base is a single-component dry mortar mix. It is suitable for interior applications. It consists of Portland cement, lime, standard and lightweight aggregates, a number of speciality admixtures (to include water-repellent admixtures that suppress water absorption) and polypropylene fibres (primarily to aid with durability).

### Physical and mechanical properties

Requirements / results according to EN 998-1

Properties	Requirements for remediation mortars	Value
Reaction to fire	-	Class A1
Compressive strength (MPa)	Class CS II	Class CS II
Water absorption after 24 hours (kg/m <sup>2</sup> )	≥ 0.3	≥ 0.3
Water vapour permeability μ	≤ 15	8
Adhesive Bond (N/mm <sup>2</sup> )	-	≥ 0.6
Penetration after testing of absorption (mm)	< 5	< 5

Results in comparison to WTA 2-9-04/D requirements

	WTA Requirements	Value
Colour	-	Light Grey
Grain size (mm)	-	0 - 4
Mix water consumption per 25 kg bag (litres)	-	9 - 10
Bulk density (kg/m <sup>3</sup> )*	< 1400	< 1100
Porosity (%)*	> 40	> 60
Compressive strength (MPa)	1.5 - 5.0	> 2
Compressive tensile bending strength ratio	< 3	< 3
Capillary absorption (mm)	< 5	< 5
Diffusion resistance coefficient	< 12	8

\* = Hardened mortar

### Installation



**Substrate.** The surface must be clean and free of dust and other impurities. If bonding is a concern, then the surface must be treated with a coat of Freeztecq BR-Bond.

Any defective wall finishes must be removed to a minimum height 300mm above the level of the 'salt line', or 1 metre above the original DPC, whichever is the higher of the two. The mortar of both vertical and horizontal joints must be scraped out to a depth of about 2cm. Any damaged or defective areas of the substrate (such as damaged bricks or stones) must be replaced. Damaged surfaces should be reprofiled.

The area should then be cleaned with compressed air or with a steel wire brush.

**Preparation.** The Freeztecq BR-Base can be mixed in small amounts with an electric drill fitted with a mixing paddle. Larger amounts should be mixed with a conventional mixer. Water consumption is typically 9 - 10 litres per 1 No. (25kg) bag of product.

The mixing time should be a minimum of 10 minutes. (Typically, mixing time is between 10 and 15 minutes). Allowing the mixture to rest for approximately 3 minutes part way through mixing is best practice. Mixing for periods longer than 30 minutes should be avoided because of the risk of over-mixing. At lower temperatures, the mixing time may have to be extended.

The working time of the mix at 20°C is typically 60 minutes. Neither the temperature of the substrate base, nor the temperature of the ambient air, shall be below +5° C or above +30° C during the application process.

**Application.** Application of the Freeztecq BR-Base may be undertaken manually, or with a plastering machine, installed in layers between 15mm - 20mm thick. When applying the render in several layers, the first coat should be rendered so that the surface is coarse, thus ensuring a key for the subsequent coat. This can be achieved by using a stiff brush. Before applying any further layer, the previous layer must be allowed to dry.

Freeztecq BR-Base should be finished with Freeztecq BR-Finish. When the next layer is to be Freeztecq BR-Finish, the layer receiving the Finish coating should be rendered so that the surface is open, flat and not polished.

**Curing.** The render should be protected from direct sunlight, wind and other factors which could result in excessive evaporation. Under extreme conditions the render should be moistened.

## Consumption

1 No. (25kg) bag of Freeztecq BR-Base makes 25 litres of render: approximately 1.66 m<sup>2</sup> of render at 15 mm thickness.

### **Storage**

Store this product in a draught free environment, clear of the ground, avoiding humid conditions and extremes of temperature (minimum lower temperature of 7°C). The product should be used within 6 months of the date of production marked on the bag and should not have been exposed to the atmosphere or any risk of oxidization prior to use.

Any product that is stacked should be done so in a stable manner, and to a safe height. The stacking of product should be carried out such a manner that it does not create any risk of product falling and accidentally bursting the packaging open.

This product contains Chromium (VI) and may produce an allergic reaction. The cement in this product may contain a reducing agent; the effectiveness of the reducing agent reduces with time. The storage period for the cement ingredient is in accordance with the declared storage period set out by the BCA. Use of this product after the end of the declared storage period may increase the risk of an allergic reaction. Reducing agents do not make cementitious products safe to handle without Personal Protection Equipment (PPE).

### **Packaging**

The product is packaged in triple-ply paper bags with a PE inner lining. Each bag contains 25 kg of product.

The shelf life in undamaged original packaging is 6 months from date of manufacture.

### **Handling and Health & Safety**

Freeztecq cementitious products are alkaline. As a cementitious powder or mixture, Freeztecq BR-Base may cause significant skin and eye irritation. Directions for treating these problems are clearly detailed on all Freeztecq cementitious packaging. The Manufacturer also maintains comprehensive and up-to-date Safety Data Sheets on all its products. Each sheet contains health and safety information for the protection of workers and customers. The Manufacturer recommends you contact Manorteq Ltd or your local Freeztecq Technical Representative to obtain the latest copies of Safety Data Sheets which must be read prior to product storage or use.

### **Waste disposal**

Dispose of at a licensed waste facility accepting cementitious and alkaline earth-based waste. Dispose of all materials in accordance with current local regulations/legislation.

**Notes:**

Standards may vary from region to region. The user should make contact with their local approval body prior to carrying out any work so as to ensure they are fully compliant with any standards that are enforce.

With any Freeztecq products users should, prior to applying them, carry out trials and appropriate testing under project conditions, to satisfy themselves as to the product's suitability, ensuring that it meets all expectations for the project in question. Particular attention should be made with regards the trials and testing of Freeztecq coating products. The user must be satisfied that there is sufficient adhesion between the parent structure and the coating which is being applied prior to commencing the works.

**Warranty**

Manorteq Limited (Company No. 13817118) warrants to the purchaser that the products supplied by it shall be free from material defect. Should any of the products be proven defective, the liability to Manorteq Limited shall be limited to (at the choice of Manorteq Limited) either replacement of the proven defective products ex-factory, or refund of the NETT ex-factory purchase price at the date the proven defective products were supplied. Manorteq Limited will not be liable or responsible, to such an extent as permitted by law, for any consequential or direct damages, compensation, costs, expenses, losses or other liabilities that may occur as a result of the defective products. Manorteq Limited makes no warranty as to the merchantability or fitness for a particular purpose and the terms of this warranty are in lieu of all other warranties expressed or implied by law.

Please note: This Technical Data Sheet is for general guidance only. It does not constitute as a detailed guide for a specific application. Due to the unique circumstances of every site, each installation must be assessed on a project-by-project basis as there may be many variables to consider. Independent professional advice should be sought on each installation. The information contained within this Technical Data Sheet is to the best of Manorteq Limited's knowledge and belief, accurate and reliable of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness.