

Technical Data Sheet

RIZISTAL

Rizistal Grade 'R12' Cement

DESCRIPTION

Rizistal Grade 'R12' Cement is an epoxy resin based cement, ideal for bedding and jointing chemical-resisting bricks and tiles. Supplied in a three part pack, it has excellent adhesion to all types of bricks and ceramics, and to concrete and steel. Rizistal Grade Cement is impervious to moisture and unaffected by a range of acids, alkalis and solvents.

KEY BENEFITS

- Excellent chemical resistance
- Excellent bond strength to ceramic tiles and bricks
- Non-tainting
- Impermeable
- Easily applied
- Water washable during finishing
- Available in a range of colours

TECHNICAL DATA

John Lord is an ISO 9001:2000 accredited company and all John Lord products are manufactured strictly to ISO quality standards.

Performance Data

Flexural Strength:	25 N /mm ²
Compressive Strength:	85-95 N /mm ²
Tensile Strength:	18 N /mm ²
Density (mixed cement):	1.75 Kg/litre
Volume:	20Kgs – 11 litres
Coeff. Thermal Expansion (ASTM C531 Part 4.05):	°C ⁻¹ 3.6x10 ⁻⁵
Temperature Resistance:	Constant up to 75°C Occasional up to 100°C at flash exposure
Flash Steam Cleanable:	Yes
Water Absorption (after 7 days):	0.4 %

All figures are measured and expressed as per laboratory conditions. Actual performance may vary from the above values depending on site conditions.

Physical Properties

System Make-Up:

Primer (s):	None
System:	1 x application of Rizistal Grade 'R12' Cement
Sealer Coat (s):	None
Optional Variations:	None

System Details:

Finish:	Smooth, uniform, matt finish
Thickness:	Maximum of 8mm bed thickness, if to be used for a Bed and Joint Cement
Standard Colours:	Please ask J Lord Technical Dept for info on colours available

Chemical Resistance

Resistant to a wide range of chemicals including acids, alkalis, oils, greases and salt solutions. For full details visit our website: www.john-lord.co.uk/products/technical-guides.php or consult John Lord Technical Dept.

Curing Time

Floor can go into service after the following minimum cure period at 18°C and above:

Foot Traffic:	24 - 36 hours
Full Chemical Cure:	7 days

Shelf Life / Storage

The product should be kept in its original unopened container until use.

The product should be stored in weather tight conditions, at temperatures between 10°C and 25°C, avoiding direct sunlight. Under these conditions this product has a shelf life of up to 12 months.

In-Service Maintenance

Good housekeeping and regular cleaning can considerably extend the service life of a floor, will enhance the floor's appearance and reduce soiling tendencies.

Suitable cleaning methods for this product (when used as a jointing cement) include:

- Rotary scrubbing machine and /or hot water washing (up to 60°C) with suitable detergent products – see John Lord Cleaning Guide for further details
- Flash steam cleaning is suitable on an occasional basis

APPLICATION INFORMATION

John Lord recommend that all products are installed by their own Contracts Department. John Lord Contracts Department provide a professional service with experienced Project Management supervision and skilled, trained and NVQ /CSCS approved applicators.

Suitable Applications

As a bedding and jointing cement for tiled floors, linings and brick structures in the following industries:

- Food Processing
- Dairies
- Abattoirs
- Breweries
- Paper Industry
- Chemical Processing
- Engineering and Manufacturing facilities
- Pharmaceutical production facilities

Substrate Preparation

If Rizistal Grade 'R12' Cement is to be used as a bedding cement, careful preparation of the substrate prior to application is essential. A detailed inspection of the substrate must be undertaken to determine the nature of preparation required eg. mechanical scarifying, diamond grinding, shot blasting, chemical decontamination, hot compressed air treatment. Under certain circumstances, an isolating membrane may be recommended. Steel decking should be prepared to S.A 2.5 or similar. For specialist advice on substrate preparation contact John Lord.

Application Technique

Temperature: Air temperatures should be maintained between 10°C and 25°C during the application of this product. We also strongly recommend that the application area is maintained to temperatures of above 10°C for up to 24 hours prior to application to allow the ambient and substrate temperatures to regulate before the application commences. Materials should also be kept in a warm area of 15°C minimum temperature for 2-3 days prior to application. De-humidifiers must be used where high humidity conditions prevail. Ensure adequate ventilation during application.

Statement of Responsibility

The technical data and application information within this John Lord Technical Data Sheet is provided as an introduction to the system only and may vary according to on-site or environmental conditions. As the information provided is of a general nature, no guarantee is implied and it is the responsibility of the client or user to discuss in detail with John L. Lord & Son, the suitability of the product for a particular application or requirement beforehand. John L. Lord & Son cannot accept any responsibility of work and the subsequent performance of their systems that are not controlled by their own contracting services.

John L. Lord & Son reserve the right to alter information contained in this document without prior notification, and it is the responsibility of the client or user to obtain the most recent issue.



Priming: None required.

Mixing: Rizistal Grade 'R12' Cement can be mixed by hand, although an electric mixer will give more consistent results. Place contents of resin base and hardener containers into a clean mixing bowl and mix thoroughly, ensuring all the product is used (in order to ascertain the correct resin ratio). Add the powder slowly whilst continuing to mix liquids together until a cement of even consistency is achieved.

System: Rizistal Grade 'R12' Cement is frequently used as a jointing material in combination with either Tile Adhesive, or with a semi-dry sand and cement mix enriched with Rizistalcrete Polymer additive. This method of application is cost effective especially when used over uneven substrates or when falls are to be created in the bedding cement.

If Rizistal Grade 'R12' Cement is to be used as a bed and joint cement, bed thickness must not exceed 8mm, especially when laying heavy tiles. Rizistal Grade 'R12' cement has the advantage of allowing joints to be finished with warm soapy water and a sponge, thereby ensuring a smooth, flat joint. Applying the same treatment simultaneously to the tile will produce a floor of clean appearance, free from cement residue.

Joints: Joints should be an average of 6mm wide and should be pointed or gunned in after the bedding cement has achieved initial cure. Joints should be free from bedding cement residue and ideally clean and dry. Some dampness in the joints can however be tolerated.

Precautions

Appropriate PPE such as gloves, goggles and barrier cream should be worn during mixing and application of this product. Product should not come into contact with the skin or eyes, or be swallowed. Avoid inhalation.

For full health and safety hazard information, please refer to the John Lord Safety Data Sheet (SDS) for each component of this product. COSHH and SDS documents can be obtained from our Bury Office or via our website www.john-lord.co.uk

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