

## Technical Data Sheet

### RIZISTALCRETE

#### Polymer Flooring System

#### DESCRIPTION

Rizistalcrete Polymer Flooring is an advanced polymer-modified screed which can be used as a high performance floor finish or as a levelling and/or intermediate screed, in situations where conventional concrete, cement screeds and granolithic screeds cannot provide adequate performance. Due to the polymeric action of the modified styrene butadiene emulsion, Rizistalcrete Polymer screed has superior substrate adhesion, good compressive, tensile and flexural strengths. Rizistalcrete Polymer Flooring also provides chemical, slip and temperature resistance and has greatly reduced permeability. Rizistalcrete is ideal for overlaying with the full range of John Lord Resin Flooring and Tiling products.

#### KEY BENEFITS

- Excellent substrate adhesion
- Good compressive strength
- Non toxic
- Thermal shock resistant
- Abrasion and impact resistant
- Low permeability
- Slip resistant

#### 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:	3 N /mm <sup>2</sup>
Compressive Strength:	59 N /mm <sup>2</sup>
Tensile Strength:	3 N /mm <sup>2</sup>
Bond Strength to Concrete:	Failure in Concrete
Temperature Resistance:	Constant 5°C to 70°C
Flash Steam Cleanable:	Yes
Water Permeability (after 72 hours immersion):	2.0 %

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

#### Physical Properties

Complies with BS 8204-6 / FeRFA Type 6

#### System Make-Up:

Primer (s):	1 x application Rizistalcrete Primer
System:	1 x application of Bonding Grout + 1 x application of Rizistalcrete Screed
Sealer Coat (s):	None
Optional Variations:	Clear Urethane Sealer coats

#### System Details:

Finish:	Uniform profile, matt finish
Thickness:	12-15mm for a Finishing Screed. Min. of 12mm for a Levelling/Fall Screed.
Standard Colours:	Grey, Red, Green Buff and Brown

#### Chemical Resistance

Resistant to a limited range of dilute chemicals, oils, greases and salt solutions. For full details visit our website: [www.john-lord.co.uk/products/technical-guides.php](http://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 - 72 hours
Heavy Traffic:	72 hours+
Full Cure:	7-10 days

#### Shelf Life / Storage

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

The polymer 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 6 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 finishing screed) 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

- Dry & Wet processing areas eg. Food Processing
- Engineering and Manufacturing facilities
- Warehousing
- Intermediate screed for resin-based finishes
- Workshops / Plant Rooms

### Substrate Requirements

Concrete substrates should be a minimum strength of 35N/ Sq.mm, with a minimum cement content of 320 –350kgs per cubic metre. Substrates should have minimum laitance and be free from dust and contamination. Substrates should be free of any unseen defects such as structural instability or intermediate delamination. Tolerances and levels in concrete substrates should be of the standard required of the seamless screed finish (when used as a finishing screed only). Substrates should be dry to 75% RH as per BS8204 or by Vaisala thermo hygrometer type HMI 31. Substrates should incorporate an effective D.P.M and be free from rising dampness, moisture and osmosis. Newly laid substrates must be allowed sufficient 'drying out' time prior to overlaying. The drying time required will depend upon ambient temperatures, humidity and substrate thickness.

NB. When used as a Levelling/ Fall Screed, Rizistalcrete Polymer Flooring System can be laid over existing concrete or granolithic screeds which have become worn, damaged and uneven, avoiding costly excavation and replacement of floor slabs. Rizistalcrete can be used very effectively to fill, level out and refinish such floors, providing a long-term durable surface. Rizistalcrete products should NOT be applied to the following substrates: *Asphalt, Unmodified sand cement screeds, PVC tiles or sheet.*

### Substrate Preparation

Careful preparation of the substrate 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. For specialist advice on substrate preparation, contact John Lord.

### 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.



### 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 between 10°C and 25°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 12°C minimum temperature for 12 hours prior to application. De-humidifiers must be used where high humidity conditions prevail. Ensure adequate ventilation during application.

**Priming:** The dry, prepared, dust-free substrate should receive a roller-applied coat of Rizistalcrete primer. For maximum adhesion the primer should be allowed overnight cure before overlaying the following day.

**System:** A bonding Grout should be liberally applied by brush to the primed substrate immediately prior to the application of the Rizistalcrete screed. If it reaches initial cure prior to overlaying, a further application must be made. To mix the Rizistalcrete screed, blend the graded aggregates, chippings and O.P cement with the latex polymer in a forced rotation mixer, then add pure water to achieve the desired consistency. Apply the screed with a plastic and steel float to a thickness of 12-15mm for a finishing screed and a minimum of 12 mm for a levelling or fall screed. Rizistalcrete can be used to create falls either by a ramp between different levels or by comprehensive floor falls to drainage. A multi layer application with structural mesh reinforcements is recommended for thicknesses over 75mm. After application the screed should be conditioned under lapped polythene for 24-48 hours to ensure hydration of the cement.

**Joints:** All known movement joints should be followed through the floor finish using Epiflex jointing mastic. If concrete movement or cracking takes place after application, reflective cracking of the topping may occur.

### 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](http://www.john-lord.co.uk)

SINCE 1901