johnlord
SPECIALIST FLOORING

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Technical Data Sheet

Rizistalcrete Polymer Flooring System

Product 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
- Slip resistant
- Abrasion and impact resistant
- Low permeability
- Excellent compatibility with Uragard HT range

Technical Data

John L. Lord & Son Ltd is an ISO 9001:2008 accredited company and all products are manufactured strictly to ISO quality standards.

Physical Properties

Complies with BS 8204-6 / FeRFA Type 8, System Make-Up:

Primer(s):	1 coat Rizistalcrete Primer
System:	1 application Rizistalcrete Polymer screed
Sealer Coat(s):	None as standard
Optional Variations:	Clear, polyurethane sealer coat

System Details:

Finish:	Uniform matt, grey profile
Thickness:	Minimum 15 mm, over 100 mm requires reinforcement

Chemical Resistance

Highly resistant to a wide range of chemicals including organic solvents, acids and alkalis. For full details consult the John Lord Technical Dept.

Note: Discolouration or staining may occur when exposed to some chemicals based on the nature of the spill and cleaning regime followed.

Performance Data

Compressive Strength:	59 N/mm^2
Flexural Strength:	8 N/mm^2
Tensile Strength:	6 N/mm^2
Bond Strength to Concrete:	> 2.0 N/mm^2
Temperature Resistance:	Constant 5°C to 90°C. Occasional spillages of up to 120°C at 50 mm thickness
Water Permeability:	2.0 % after 72-hour immersion
Flash Steam Cleanable:	Yes

Rizistalcrete Polymer Flooring System is classified as Low Slip Potential Flooring (both wet and dry) as described in 'The Assessment of Floor Slip Resistance: The UKSG Guidelines issue 4 / 2011'. Results were obtained from tests carried out by the Health and Safety Laboratory (HSL) and from our own internal laboratory tests.

All figures are measured and expressed under laboratory conditions. Actual performance may vary from the above values depending upon site conditions.

Curing Time

A completed resin floor can go into service after the following minimum cure periods at 15°C and above:

Light Traffic:	72 hours
Heavy Traffic:	7 days
Full Cure:	14 days

Shelf Life and 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 6 months.

Application Information

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

Suitable Applications

- Wet and Dry Food Processing, eg. Abattoirs, Bakeries
- Pharmaceutical Production
- Brewing and Beverage
- Chemical Processing
- Heavy Engineering
- Aerospace

Application Temperature

Air temperatures should be maintained between 8°C and 25°C during the application of this product. We also strongly recommend that the application area is maintained to temperatures of between 8°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 10ºC minimum temperature for 12 hours prior to application. Ensure adequate ventilation during application.

Priming

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

System Application

To mix the Rizistalcrete screed, blend the graded aggregates, chippings and OP cement with the latex polymer in a forced rotation mixer, then add pure water to achieve the desired, semi-dry consistency.

Apply the screed with a plastic or steel float to a thickness of minimum 15 mm as 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 multilayer application with structural mesh reinforcements is recommended for thicknesses over 100 mm. After application, the screed should be conditioned under lapped polythene for 24 hours to 48 hours to ensure hydration of the cement.

Joints

All known expansion joints should be followed through the resin floor finish using Epiflex Jointing Mastic. If concrete movement or cracking takes place after application, then reflective cracking of the topping may occur.

In-Service Maintenance

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

Suitable cleaning methods for this product include:

- Rotary scrubbing machine or hot water washing (up to 80°C) with suitable detergent products. See John Lord Cleaning Guide for further details.
- Flash steam clean is suitable on an occasional basis.

Statement of Responsibility

The 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 Lord the suitability of the product for a particular application. John Lord cannot accept any responsibility for work and the subsequent performance of their systems that are not controlled by their own contracting services. John Lord reserve the right to alter information in this document without prior notification; it is the responsibility of the client or user to obtain the most recent issue.