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Technical Data Sheet

EPIGARD ES100

Product Description

Epigard ES100 is a heavy duty, chemical and abrasion resistant floor screed based on the latest, fast cure epoxy resin technology: It's innovative and unique formulation results in long term durability in a range of demanding environments. Epigard ES100 offers comparable performance to more established polyurethane based systems in many applications and has the added benefits of a gloss finish and long term colour stability. Unlike polyurethane based systems, Epigard ES100 is available in light coloured pastel shades. Epigard ES100 is available as a wall render and cove skirting grade system, which can be trowel finished, or with an optional sealed surface.

Key Benefits

- Chemical resistant
- Temperature resistant
- Slip resistant
- Excellent substrate adhesion
- Abrasion and impact resistant
- Easily cleaned
- Matching coving and render screed available
- Non-tainting
- Fast curing – single application

Technical data

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

Performance Data

Compressive Strength:	53 N/mm^2
Flexural Strength:	15 N/mm^2
Tensile Strength:	6 N/mm^2
Bond Strength to Concrete:	Exceeds cohesive strength @ 30N/mm^2
Temperature Resistance:	Constant up to 75°C dependant on in-service conditions
Flash Steam Cleanable:	Yes
Water Permeability:	Nil

Epigard ES100 resin is classified as Low Slip Potential Flooring (when dry) and Moderate Slip Potential Flooring (when wet) 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.

Continued slip resistance can only be maintained if the guidelines in the HSE's STEP tool (Slips and Trips eLearning Package) are followed.

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 8, System Make-Up:

Primer(s):	1 coat Epigard ES100 Primer
System:	1 application Epigard ES100
Sealer Coat(s) – render screed:	Optional
Optional Variations:	Cove Grade, Wall Render Grade

System Details:

Finish:	Slip resistant, gloss finish
Thickness:	5-9 mm

Chemical Resistance

Epigard ES100 is resistant to a wide range of acids, alkalis, oils, greases, salt solutions, fuels and some solvents. For full details consult the John Lord Technical Dept.
Note: Light discolouration or staining may occur when exposed to some chemicals based on the nature of the spill and cleaning regime followed.

Curing Time

A completed resin floor can go into service after the following minimum cure periods at 20°C and above:

Light Traffic:	6 hours
Heavy Traffic:	30 hours
Full Chemical Cure:	7 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 12 months.

EPIGARD ES100

Other Products

The following products from the John Lord Group are recommended for use with Epigard ES100

- Epigard resin render screed
- ASPEN Stainless steel drainage systems
- ASPEN Stainless steel wall support kerbing system

Standard Colour Range

As screen and print settings are beyond our control, these colours are an indication only. Please request product samples for accurate colour information of any of these nine standard colours or a bespoke colour.

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/Dry Processing areas including Food Processing
- Breweries/Dairies
- Dry Powder Environments
- Engineering and Manufacturing Facilities
- Warehousing
- Chemical Industry
- Pharmaceutical Production Facilities
- Catering and Leisure
- Workshops/Machine Shops/Plant Rooms
- Printing Industry

Application Temperature

The correct temperature is critical to the successful application of Epigard ES100; the air temperature should be maintained between 15°C and 23°C during the application and curing period. We strongly recommend that the area is heated to a temperature of between 15°C and 23°C for up to 24 hours prior to application; this allows the ambient and substrate temperature to regulate before the application commences.
Materials
should be kept in an area with a temperature of at least 15°C for 12 hours prior to application. De-humidifiers must be used in humid conditions and there must be adequate ventilation during application.

Priming

The dry, prepared, dust-free substrate should receive a roller-applied tack coat of Epigard ES100 primer to approximately 0.5kg/m^2; a thicker coat may be required for more porous substrates. The tack coat should be allowed to begin to tack off before applying the finishing screed. Epigard Fastrac primer may also be used on semi-cured, new or damp concrete – see separate data sheet for details.

System Application

Once mixed, the material should be applied to the tacky substrate and spread to the required thickness using a pin rake or trowel. The surface should then be closed using a steel float if required.

Substrate Suitability and Preparation

A separate technical data sheet is available on 'Substrate Suitability and Preparation'.

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 warm water washing (up to 75°C) with suitable detergent products – see John Lord Cleaning Guide for further details.
- Flash steam cleaning is suitable on an occasional basis.

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 Ltd the suitability of the product for a particular application. John L. Lord & Son Ltd cannot accept any responsibility for work and the subsequent performance of their systems that are not controlled by their own contracting services.
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