

Technical Data Sheet

URAGARD

ZO Anti-Static

DESCRIPTION

Uragard ZO Anti-Static is an attractive Terrazzo screed containing electrically conductive properties, specifically formulated for use in Pharmaceutical and specialist Electronics facilities. Uragard ZO Anti-Static also provides all-round heavy-duty performance, with excellent mechanical strength, excellent adhesion characteristics, excellent all-round chemical resistance, high heat distortion and is easy to clean.

KEY BENEFITS

- Anti-Static to BS2050:1978 & DIN 51953
- Attractive Terrazzo appearance
- Solvent Free, Low Odour
- Easy to Clean
- Fast Curing/ Quick to Apply
- Excellent Mechanical Strength
- Excellent Adhesion characteristics
- Excellent all-round Chemical Resistance
- High Temperature Resistance

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

| | |
|--|--|
| Compressive Strength: | 55.0 N / mm ² |
| Compressive Modulus: | 9850.0 N / mm ² |
| Flexural Strength: | 17.0 N / mm ² |
| Flexural Modulus: | 2,400.0 N / mm ² |
| Tensile Strength: | 5.5 N / mm ² |
| Tensile Modulus: | 450.3 N / mm ² |
| Temperature Resistance: | Constant 0°C to 70°C. Occasional spillages of up to 100°C |
| Surface Spread of Flame (BS476: Part 7): | Class 2 |
| Electrical Conductivity (BS2050 :1978): | 5x10 ⁴ -10 ⁶ Ohms |
| Flash Steam Cleanable: | Yes |
| Water Permeability: | Nil |

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 7

System Make-Up:

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|---------------------|--|
| Primer (s) | 1 x application of Uragard ZO Anti-Static Primer |
| System | 1 x trowel application of Uragard ZO Anti-Static Screed Surface Grinding & Polishing 1 x application of Uragard ZO Grout |
| Sealer Coat (s) | Optional |
| Optional Variations | Optional Protect Sealer coat or ZO Sealer |

System Details:

| | |
|-------------------|--|
| Finish: | Resin rich, smooth, matt finish. Optional sealed matt or gloss finish |
| Thickness: | 9mm and above |
| Standard Colours: | Red, Buff, Terracotta, Green, Grey, with multi-coloured aggregates. |

Chemical Resistance

Resistant to a wide range of chemicals including sugars, alkalis and most acids. 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 periods at 18°C and above:

| | |
|----------------|----------|
| Light traffic: | 12 hours |
| Heavy traffic: | 48 hours |

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 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 include:

- Rotary scrubbing machine and /or hot water washing (up to 70°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 Dept. provide a professional service with experienced Project Management supervision and skilled, trained and NVQ /CSCS approved applicators.

Suitable Applications

- Food Processing
- Brewing and Beverage
- Hospitals / Laboratories
- Pharmaceutical Production
- Electronics Industry
- Dry processing

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 resin finish. 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. Uragard ZO Anti-Static 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. Steel decking should be prepared to S.A 2.5 or similar. For specialist advice on substrate preparation, contact John Lord.

Application Technique

Temperature: Correct temperature is critical to the successful application of Uragard ZO Anti-Static and air temperatures should be maintained between 10°C and 25°C during the application and curing period of this product. 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: A matrix using self-adhesive copper conductor strips should be applied to the substrate prior to priming and connected to a suitable earthing point. The dry, prepared, dust-free substrate should receive a roller-applied coat of Uragard ZO Anti-Static primer bond coat. It is recommended that substrates which are known to have a high porosity or void content should receive one coat of Fastrac primer, 12 hours prior to the application of the copper conductor strips and Uragard ZO Anti-Static primer.

System: Once conductivity readings have been taken successfully, the resin components of the Uragard ZO Anti-Static system should be mixed by low speed mixer for approx. 1 minute, then combined with the other components (added slowly) in a forced action mixer until a smooth and even consistency is reached. The screed should then be trowel applied to a nominal thickness of 9mm+. The screed should be allowed to cure at temperatures of between 15°C - 20°C, for between 16 and 36 hours. After cure, the floor should be wetted, and a coarse grinding should commence using a diamond headed Turco type (or similar) floor grinding machine. This is followed by another wetting of the entire floor area, and a fine grinding using Carborundum grinding heads. After washing off all surface slurry and allowing the floor to dry out (usually overnight) Uragard ZO Grout is applied to the entire surface of the new floor finish using a steel float. Care must be taken to work the Grout into the surface of the screed. The Uragard ZO Grout should be allowed to cure for 12 to 48 hours (depending on ambient temperature) before a wet fine polish commences (identical to the fine grinding procedure as described earlier). The floor should then be thoroughly washed down and vacuumed until clean and dry.

Sealer coats: The finished Uragard ZO Anti-Static can be sealed with 2-3 coats of Protect acrylic sealer for light duty areas, or with a single coat of light stable, polyurethane based ZO Sealer for heavy duty areas.

Joints: All known 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.

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 H&S 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