

Technical Data Sheet

URAGARD

MonoCast

DESCRIPTION

Uragard Monocast is a heavy duty polyurethane-based resin system specifically designed for application within the food and beverage industry. This system is recommended for wet and/or slippery conditions which require chemical resistance and anti-slip profiling.

KEY BENEFITS

- Attractive surface finish
- 3 grades of anti-slip profile available
- Quick curing
- Non tainting, solvent-free
- Chemical and temperature resistant
- Seamless and hygienic
- Highly durable and impact 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

Compressive Strength:	48-58 MPa
Flexural Strength:	12-18 MPa
Tensile Strength	75-78 MPa
Dynamic E-Modulus:	14000 N/mm ²
E-Modulus in Compression:	3250-5000 MPa
Coeff. Thermal Expansion (ASTM C531: Part 4.05):	°C ⁻¹ 3.6x10 ⁻⁵
Temperature Resistance:	Constant up to 80°C.
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 4

System Make-Up:

Primer (s)	1-2 coats Uragard Primer
System	1 application Monocast Base Screed + aggregate broadcast
Sealer Coat (s)	1 x Monocast Sealer Coat
Optional Variations	Extra sealer coats to suit.

System Details:

Finish:	Matt/ semi-gloss finish
Thickness:	3 - 6mm
Standard Colours:	Red, Green, Grey, Terracotta, Buff. Bespoke colours available also.

Chemical Resistance

Resistant to a wide range of acids, alkalis, some solvents, oils, greases, salt solutions and fuels. For full details please 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:	24 hours
Heavy traffic/ Full Chemical Cure:	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 warm 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
- Jet wash cleaning systems (medium-pressure)

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

- Wet Processing areas inc. Food processing

- Manufacturing facilities
- Breweries
- Dairies

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 Monocast 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. Before application of Uragard Monocast, the substrate should be in a dry, dust-free, well-prepared condition. If the substrate is known to be particularly porous, an initial 2-part water-based primer should be applied and left to cure for 8-10 hours at 18°C. 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 Monocast and air temperatures should be maintained between 18°C and 23°C during the application and curing period of this product. We also strongly recommend that the application area is heated to temperatures of between 18°C and 23°C for up to 24 hours prior to application to allow the ambient and substrate

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.

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temperatures to regulate before the application commences. Materials should also be kept in a warm area of 18°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 be primed with one or two coats of roller-applied Uragard Monocast primer. Proceed to application immediately.

System: Once primed, the Uragard Monocast base screed can be mixed and poured onto the substrate, then spread to the desired thickness using a pin rake and trowel. A spike roller should then be passed through the base screed until all trapped air has been released. The bauxite-based aggregate is then broadcast onto the surface until saturated, then left overnight to cure. Any excess must then be removed by vacuum.

Sealer Coats: Once any excess Monocast aggregate has been removed from the surface, one coat of Sealer Coat should be applied to the broadcast surface by squeegee. A second coat may be roller-applied if a smoother finish is required.

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.

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.

