



Product Description

Uragard MonoCast is a heavy duty polyurethane-based resin product specifically designed for applications within the food and beverage industry. This system is recommended for particularly wet and/or slippery conditions which require compatible anti-slip profiling, together with superior all-round performance including chemical resistance, wear, impact and abrasion resistance and thermal shock resistance.

Key Benefits

- Attractive and uniform surface finish
- Three 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 L. Lord & Son Ltd is an ISO 9001:2008 accredited company and all products are manufactured strictly to ISO quality standards.

Performance Data

Compressive Strength:	48-58 N/mm ²
Flexural Strength:	12-18 N/mm ²
Tensile Strength:	7-8 N/mm ²
Bond Strength to Concrete:	Exceeds cohesive strength @ 30N/mm ²
Dynamic E-Modulus:	14000 N/mm ²
E-Modulus in Compression:	3250-5000 N/mm ²
Coeff. Thermal Expansion (ASTM C531: part 4.05):	°C ⁻¹ 3.6x10 ⁻⁵
Temperature Resistance:	Up to 80°C
Flash Steam Cleanable:	Yes
Water Permeability:	Nil

All figures are measured and expressed under laboratory conditions: Actual performance may vary from the above values depending upon 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 Uragard MonoCast base screed and aggregate broadcast
Sealer Coat(s):	1 Uragard MonoCast sealer coat
Optional Variations:	Extra sealer coats to suit

System Details:

Finish:	Matt/semi-gloss
Thickness:	3mm to 6mm
Standard Colours:	Red, buff, terracotta, green, grey or cream

Chemical Resistance

Resistant to a wide range of acids, alkalis, oils, greases, fuels, salt solutions and some solvents. For full details consult the 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:	48 hours
Full Chemical Cure:	48 hours

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.

Other Products

The following products from the John Lord Group are recommended for use with Uragard MonoCast:

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

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 Processing Areas including Food Processing
- Meat Processing
- Breweries
- Dairies
- Manufacturing Facilities

Substrate Suitability and Preparation

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

Application 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 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 Application

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 be removed by vacuum.

Sealer Coats

Once any excess Uragard MonoCast aggregate has been removed from the surface, one coat of Uragard MonoCast sealer coat should be applied to the broadcast surface using a 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.

Note: The texture of Uragard MonoCast on the finished floor surface may appear banded or slightly variable. This is a natural, visual aspect of the system, which can also be influenced by atmospheric conditions and is not defective in anyway. Polyurethane systems have limited colour stability which can result in discoloration of the floor over a period of time upon exposure to UV light. Our standard colour range has been carefully chosen to provide a colour range limiting the extent of discolouration.

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.
- Jet wash cleaning systems (medium pressure).

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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