

Technical Data Sheet

URAGARD MTF

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Product Description

Uragard MTF is a three component, flexible, self-smoothing and hard wearing polyurethane resin floor screed. Uragard MTF can be supplied with an optional broadcast finish to create an anti-slip profile or as the standard smooth, semi-gloss finish.

Uragard MTF is ideal for use over structurally smooth suspended wood or steel mezzanine substrates and substrates susceptible to flexing movement.

Key Benefits

- Flexible yet resilient once cured Easy to clean, semi gloss finish
- Wear and impact resistant
- Abrasion resistant
- Chemical resistant
- Optional anti-slip finish, multilayer coating system

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

Density (ASTM C64-82):	1500 kg/m³
Dynamic E-Modulus (ASTM C597-83):	6000N/mm ²
Tensile Strength (ISO R527):	10 N/mm²
Bond Strength to Concrete:	Exceeds cohesive strength @ 30N/mm²
Tensile Elongation at Break (ISO R527):	40%
Linear Shrinkage on Cure (ASTM C490-85):	0.05
Coefficient of Thermal Expansion (ASTM C531 part 4.05):	°C ⁻¹ 7.5x10 ⁻⁵
Abrasion Resistance: ASTM D4060 Taber Abrader 1kg load, 1k cycles)	CS17 Wheel: 77mg loss H22 Wheel: 246mg loss
Temperature Resistance:	At 3mm: Constant -10°C to 70°C
Flash Steam Cleanable:	Yes
Water Permeability:	Nil

Uragard MTF is classified as Low Slip Potential Flooring (when dry) and High 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 using a #96 Slider. 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 under laboratory conditions: Actual performance may vary from the above values depending upon site conditions.

Physical Properties

Complies with BS 8204-6 / FeRFA Type 7, System Make-Up:

Primer(s):	1 scratch coat Uragard Primer and silica sand/mineral flint broadcast to 1.5 to 2kg/m²
System:	1 application Uragard MTF
Sealer Coat(s):	None
Optional Variations:	Anti-slip finish Multi-layer coating system

System Details:

Finish:	Smooth, semi gloss or anti-slip
Thickness:	1.5mm to 3mm
Colours:	Red, Buff, Terracotta, Green, Grey or Cream

Chemical Resistance

Highly resistant to a wide range of chemicals including dilute mineral acids, strong alkalis and certain solvents including aliphatic hydrocarbons. 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:

Foot Traffic:	24 hours
Light Traffic:	48 hours
Heavy Traffic / Full Chemical Cure:	5 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.

Other Products

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

- 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

- Suspended Substrates with Flexing Movement
- Dry Processing, Assembly and Packing
- Warehousing and Storage, including Chemical Storage
- Pharmaceutical Production
- Workshops and Plant Rooms

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 MTF and air temperatures should be maintained between 18°C and 23°C during the application and curing period of this product. If temperatures fall below 18°C the application could become prone to installation difficulties. The application area should be 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 15°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 and rust-free substrate should receive scratch coat of Uragard primer applied with a squeegee or short pile roller then dry silica sand or mineral flint is broadcast onto the surface at a rate of 1.5kg to 2kg/m². Once the scratch coat has initially cured, the Uragard MTF can be applied. NB: wooden or steel substrates should be scrim bonded across joints; impregnated with Uragard primer.

System Application

The Uragard MTF should be mixed and poured onto the substrate then trowelled to a thickness of between 1.5mm and 3mm. A spike roller should be passed through the trowelled material to assist flow and release any trapped air.

To achieve an anti-slip finish mineral flint is broadcast onto the uncured Uragard MTF to saturation: once cured excess flint is removed. The surface then receives two or three roller-applied sealer coats of Uragard MTF resin sealer. Sealer coats should be applied at a minimum temperature of 18°C, the second coat being applied 8-10 hours after the first.

Coating System

The Uragard MTF coating is mixed and roller applied; two or three coats to 250-750 microns total thickness.

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 MTF 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 70°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 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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