

Technical Data Sheet

URAGARD

MT (F)

DESCRIPTION

Uragard MT (F) is a three component, flexible, self-smoothing and hardwearing polyurethane resin floor finish. Uragard MT (F) can be supplied with an optional broadcast finish to create an anti-slip profile, or as the standard smooth, semi-gloss finish. It is ideal for use over structurally sound suspended wood or steel mezzanine substrates and substrates susceptible to movement.

KEY BENEFITS

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

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

Density (ASTM C64-82):	1500 Kg /m ³
Dynamic E-Modulus (ASTM C597-83):	6000 N /mm ²
Tensile Strength (ISO R527):	10.0 N /mm ²
Tensile elongation at break (ISO R527):	40%
Linear shrinkage on cure (ASTM C490-85):	0.05
Coeff. Thermal Expansion (ASTM C531 Part 4.05):	°C ⁻¹ 7.5x10 ⁻⁵
Abrasion Resistance (ASTM D4060 Taber Abrader 1Kg load, 1000 cycles):	CS 17 Wheel: 77mg loss H22 Wheel: 246mg loss
Temperature Resistance:	At 3mm: Constant -10°C to 60°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 7

System Make-Up:

Primer (s)	1x scratchcoat Uragard Primer + Silica sand/ Mineral flint broadcast to 1.5-2 kg/m ² .
System	1x application Uragard MT(F)
Sealer Coat (s)	None
Optional Variations	<ul style="list-style-type: none"> • Anti-slip finish • Multi-layer Coating system

System Detail:

Finish:	Smooth, semi gloss or anti-slip finish
Thickness:	0.5 - 3mm
Standard Colours:	Red, Buff, Terracotta, Green, Dark Grey

Chemical Resistance

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

Foot traffic:	24 hours
Light traffic:	48 hours
Heavy traffic/ Full Chemical Cure:	5 days

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

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

- Suspended substrates/substrates with flexing movement
- Dry processing, assembly and packing
- Warehousing and storage inc. chemical storage
- Pharmaceutical production
- Workshops/ Plant Rooms

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 MT(F) 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 MT(F). 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 - 23°C for up to 24

hours prior to application to allow the ambient and substrate temperatures to regulate before application commences. Materials should also be kept in a warm area of 15°C minimum 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 & rust-free substrate should receive a scratch coat of Uragard primer applied by squeegee or short pile roller. Dry silica sand or mineral flint is broadcast onto the surface at a rate of 1.5-2 kg/m². Once the scratch coat has fully cured the Uragard MT (F) can be applied. Nb. Wooden or steel substrates should be scrim bonded across joints impregnated with Uragard primer.

System: **Self-smoothing System:** The Uragard MT(F) should be mixed and poured onto the substrate, then trowelled to a thickness of between 1-3 mm. A spike roller should be passed through the trowelled material to assist flow and release any trapped air. **Anti-slip Finish:** As above. Mineral flint is broadcast into the uncured MT(F) to saturation. Upon cure excess aggregate is removed. The surface then receives one or two roller-applied sealer coats of Uragard MT(F) Resin Sealer. Sealer coats should be applied at a min. of 18°C and a second coat can be applied within 8-10 hours of the first coat. **Coating System:** The MT(F) is mixed and roller applied in two or three coats to a thickness of 250-750 microns.

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, reflective cracking of the topping may occur.

Note:

The texture of the above product may on the finished floor surface provide a banded or slightly variable appearance. 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 U.V light. Our standard colour range has been carefully chosen to provide a colour range limiting the extent of discoloration.

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

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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