

Technical Data Sheet
Uragard HDR



Product Description

Uragard HDR is a fast application, rake and trowel applied development of the well proven Uragard HT range of polyurethane flooring systems. Uragard HDR provides exceptional all-round performance with excellent chemical, wear, impact and abrasion resistance. Uragard HDR provides an effective slip resistant surface, whilst the resin rich composition aids cleanability. Uragard HDR also provides excellent thermal shock resistance.

Key Benefits

- Solvent free
- Excellent cleanability
- Excellent mechanical strength
- Excellent adhesion characteristics
- Excellent all-round chemical resistance
- Temperature resistant at temperatures from -25°C to 120°C at 9mm
- Fast curing
- Can be steam cleaned
- Reduced installation times

Technical Data

John L. Lord & Son Ltd is an ISO 9001:2008 accredited company and all products are manufactured strictly to ISO quality standards.

Physical Properties

Complies with BS 8204-6 / FeRFA Type 8, System Make-Up:

Primer(s):	1 application of Uragard Primer or Epigard Fastrac Primer
System:	1 rake or trowel application of Uragard HDR
Sealer Coat(s):	None as standard

System Details:

Finish:	White speckled resin rich, smooth, matt, anti-slip
Thickness:	6mm to 9mm

Curing Time

A completed resin floor can go into service after the following minimum cure periods at 18°C and above:

Light Traffic:	16 hours
Heavy Traffic:	48 hours

Performance Data

Compressive Strength:	58.0 N/mm ²
Compressive Modulus:	9850 N/mm ²
Flexural Strength:	15 N/mm ²
Bond Strength to Concrete:	Exceeds cohesive strength @ 30N/mm ²
Flexural Modulus:	2400 N/mm ²
Tensile Strength:	6.0 N/mm ²
Tensile Modulus:	450.3 N/mm ²
Temperature Resistance:	Constant -25°C to 100°C Occasional steam up to 120°C at 9mm
Flash Steam Cleanable:	Yes
Water Permeability:	Nil
Abrasion Resistance: (Taber mg loss/1000 cycles/1kg load with H18 wheel)	1120

Uragard HDR is classified as Low Slip Potential Flooring (both wet and dry) 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.

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.

Chemical Resistance

Resistant to a wide range of chemicals including sugars, oils, alkalis, most acids and some solvents. For full details consult the John Lord Technical Dept.

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 HDR:

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

Standard Colour Range



As screen and print settings are beyond our control, these colours are an indication only. Please request product samples for accurate colour information of any of these six standard colours or a bespoke colour.

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 and Dry Food Processing, eg. Abattoirs, Bakeries
- Pharmaceutical Production
- Brewing and Beverage
- Chemical Processing
- Heavy Engineering
- Aerospace

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 HDR and air temperatures should be maintained between 12°C and 25°C during the application and curing period of this product. We also strongly recommend that the application area is heated to temperatures of between 12°C and 25°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 12°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 receive a roller applied tack coat of Uragard primer. After approximately 30 minutes tack off time, the Uragard HDR can be applied. Epigard Fastrac primer may also be used on semi-cured, new or damp concrete – see separate data sheet for details.

System Application

The Uragard HDR should be mixed and rake and/or trowel applied at a thickness of between 6 and 9mm.

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 HDR 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.

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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