

Technical Data Sheet

PROTECT

No.4

DESCRIPTION

Protect No. 4 is a two-component, solvent-free epoxy resin floor coating system and primer for light to medium duty use. It can be used as a concrete sealer, restorative sealer to certain specialist resin screeds or primer prior to overlaying with our specialist floor coatings and screeds. When cured, it offers a matt surface finish.

KEY BENEFITS

- Solvent free
- Fast curing
- Excellent sealer/ primer for porous substrates
- Excellent bond strength

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

Bond strength to concrete/ resin screeds:	Excellent
Temperature Resistance:	Constant up to 60°C
Flash Steam Cleanable:	No
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 1/ 2

System Make-Up:

Primer (s)	None
System	1-4 x coats Protect No.4
Sealer Coat (s)	None
Optional Variations	None

System Details:

Finish:	Smooth, matt finish
Thickness:	0.10 – 0.40 mm
Standard Colours:	Range of colours and bespoke colours available.

Chemical Resistance

Resistant to a wide range of acids, alkalis, oils, greases, fuels, salt solutions and solvents. 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:	5 days
Full Chemical Cure:	7 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 12 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 hot water washing (up to 50°C) with suitable detergent products – see John Lord Cleaning Guide for further details

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

- Chemical Processing
- Workshops
- Production areas
- Warehousing
- Pharmaceutical industry
- Electronics manufacturing

- Showrooms
- Restorative sealer to specialist resin screeds
- Primer coat for Uragard MT (F) and SL.

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. Protect No.4 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 Protect No.4 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

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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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.

System: When used as a coating system, Protect No.4 should be roller-applied to the dry, prepared, dust-free and contamination-free substrate at approximately 100 microns per coat. A minimum of 2 coats is recommended to achieve a uniform matt finish, and 3 coats is recommended for particularly porous substrates. Application of Protect No. 4 is normally undertaken at a rate of one build coat per 8 hours at 18°C. When used as a primer, 1 or 2 coats of Protect No.4 should be roller-applied to the dry, prepared, dust and contamination-free substrate. Certain floor finishes may also require a silica sand (0.4-0.7mm) broadcast within the primer, at a rate of 0.5-1 kg/m² to be added between two coats. The two component system should always be mixed mechanically (ie. Low speed drill and paddle) and an addition of 2-5% warm water added prior to application.

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.

