

# DPM UNIVERSAL





Larsen DPM Universal is a superior 2 pack epoxy surface applied damp proof membrane. Allows immediate installation of moisture sensitive floor finishes onto damp concrete and screed. It is suitable for use as a one or two application depending on the moisture content of the floor.

1 or 2 COAT APPLICATION
SOLVENT FREE, LOW ODOUR
RED OR YELLOW FOR EASY IDENTIFICATION
EASY TO APPLY
EXCELLENT ADHESION





# **TECHNICAL DATA SHEET**

# TECHNICAL INFORMATION

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FORM: 2 part solvent free epoxy coating

COLOUR(S): Red or Yellow

**HAZARD INFORMATION:** Part A - Flammable, Irritant, May cause Allergic Reaction

Part B - Harmful, Irritant, Toxic to aquatic life Consult MSDS for full information before use.

Note: After mixing and curing the material is non-hazardous.

**CLEANING:** Clean tools, equipment etc. using suitable solvent thinners.

Mechanical means are necessary when the product has set.

**PACKAGING:** 5kg two compartment packs

**STORAGE CONDITIONS:** Store in sealed containers in dry conditions, protected from extremes of temperature

SHELF LIFE: Minimum 12 months in good storage conditions

# **APPLICATION INFORMATION**

**MIX RATIO:** Part A 3.3kg

Part B 1.7kg

(It is not recommended to split packs without the use of accurate weighing equipment.)

**POT LIFE:** Approx. 20-30min @ 20°C

**APPLICATION TEMPERATURE:** +5°C to +30°C

**DRYING TIME:** Touch dry 3-4 hrs

Hard - 8 hours

**RECOAT TIMES** Minimum 5 hrs at 10°C

Maximum 24 hrs at 10°C

**UNDERFLOOR HEATING:** Suitable for use with heated concrete and cement screeds up to a maximum surface

temperature of 27°C.

**MOISTURE VAPOUR** 

<5g/m<sup>2</sup>/24hours **PERMEABILITY** 

**COVERAGE:** 

Floor RH%	No. of Coats	Minimum Film Thickness	Minimum Application	Maximum Coverage	
Up to 85%	1	250µm	300g / m²	16m²/5kg	
Up to 92%	1	300µm	360g / m²	13m²/5kg	
Up to 98*%	2	375µm (Total)	First - 250g / m²	20m²/5kg	
*or where structural DF	PM is absent		Second - 200g / m²	25m²/5kg	



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## **DIRECTIONS FOR USE**

## **PREPARATION**

The substrate should be sound and stable concrete or cement based screed with a minimum compressive strength of 25N/mm<sup>2</sup>. The surface should be surface dry and free from laitance, dust or other contamination which may affect adhesion. It is recommended to mechanically prepare the surface by enclosed shot blasting or diamond grinding then vacuum thoroughly.

It is recommended to carry out a thorough survey of the floor with moisture testing carried out as per BS8203 with suitable, calibrated hygrometers. These figures should then be used to determine the recommended maximum coverage and minimum film thickness of DPM. It is recommended to record and keep the results of the moisture testing. Electric resistance moisture meters are only indicative and should not be used to determine minimum film thickness of DPM.

Construction joints in the floor must not be bridged by DPM. 'Live' cracks in the floor must not be bridged by DPM. Existing static cracks must be fully repaired by stitching or resin injection as required before the DPM is applied.

When applying over heated screeds, ensure the screed is cement based and that the heating system has been fully commissioned, including raising to maximum running temperature. The heating system should be switched off a minimum of 48hours before applying DPM and the temperature raised gradually starting a minimum of 48hrs after installing floor finishes in such a way as to avoid thermal shock or rapid temperature variations.

#### MIXING

Before use it is recommended to condition all packs at a temperature of 15-25°C for 24 hours.

Pour hardener (Part B) into base resin (Part A). Mix thoroughly with a slow speed drill and paddle. It is recommended to employ a back mixing method by emptying the mixed parts into another container and mixing again.

For quicker cure times add one 250g pack of DPM Accelerator per 5kg pack of DPM. Consult DPM Accelerator TDS for further information.

Mixing by hand is not suitable.

### **APPLICATION**

Mark out the area to ensure the correct coverage depending on the required minimum film thickness. During application check the minimum wet film thickness (disposable wet film gauges are readily available and inexpensive). After application double check the number of packs used was correct.

ONE COAT APPLICATION - (Only suitable with floor moisture up to 92% RH)

Do not exceed maximum coverage of 16m<sup>2</sup>/5kg pack at up to 85%RH or 13m<sup>2</sup>/5kg pack up to 92%RH.

After fully mixing pour out the DPM on the floor and spread to an even thickness for example with a V-notched trowel. The wet DPM must then be leveled by rolling with a suitable roller, pre-wetted in DPM. It is important to ensure the coating is continuous, is of the minimum required film thickness and is free from pinholing. Should this not be the case, a second coat should be applied as below.

TWO COAT APPLICATION - (Up to 98%RH or where a functional structural DPM is absent)

Do not exceed the maximum coverage of 20m²/5kg pack for the first coat or 25m²/5kg pack for the second coat.

DPM is available in red and yellow to provide clear indication of number coats.

Apply first coat (usually red) at a rate of not less than 250g/m<sup>2</sup> by pouring the DPM on the floor and spread to an even thickness for example with a V-notched trowel. The wet DPM must then be leveled by rolling with a suitable roller, pre-wetted in DPM. After a minimum of 5 hours and within a maximum of 24 hours, apply the second coat.

The second coat (usually yellow) should be applied at a rate of not less than  $200g/m^2$  by pouring the DPM on the floor and spread to an even thickness for example with a V-notched trowel at right angles to the first coat. The wet DPM must then be leveled by rolling with a suitable roller, pre-wetted in DPM. It is important to ensure the coating is continuous, is of the minimum required film thickness and is free from pinholing. As required the second coat may be broadcast with a dry sand (0.7-1.2mm) @ 1.5-2.5 kg/m², ensuring a fully blinded 'sandpaper' surface. Excess sand should be removed by vacuuming after the DPM has dried.

Protect the DPM from contamination or damage until the final floor covering is applied.

# **SUBSEQUENT LAYERS**

Depending on the subsequent layers in floor, different systems may be employed as follows:

DIRECT APPLICATION OF FLOORING ADHESIVE - check with adhesive supplier that this method is suitable and compatible with the DPM.

SUBSEQUENT RESIN COATING/FINISHES - May be applied directly to the DPM within 24 hours. Where this will not happen a 2 coat system should be employed with a full sand scatter as detailed above (sand size may be reduced to 0.5-0.7mm).



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## SUBSEQUENT LAYERS (contd.)

LEVELLING COMPOUNDS - Up to 6mm in low to medium traffic areas, apply one coat of neat NP Keycoat Primer or Primer Grip 360 to the surface of DPM. Allow primer to dry clear before applying levelling compound. (Most resilient flooring adhesive manufacturers recommend a minimum 3mm levelling compound on top of a DPM.)

LEVELLING COMPOUNDS - Greater than 6mm and medium to heavy traffic areas, apply DPM as a two coat system with full sand scatter applied to the second coat as detailed above.

## RESTRICTIONS

All work should be carried to current best practice, including British Standards (including BS8203 and BS8204) and CFA and FeRFA Guidance documents. DPM Universal is not suitable for resisting hydrostatic pressure, nor will it necessarily reduce the incidence of osmotic blistering. DPM Universal should not be used on substrates which are not moisture tolerant and should not be used on gypsum or magnesite screeds. Curing times are affected by site and substrate temperatures and it is recommended that both are above 10°C. Insufficient mixing, incorrect mixing ratio and temperatures below 5°C will result in lack of uniform hardening and failure of the integrity of the DPM.

The information and recommendations above are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied in accordance with current best practice, national standards and our recommendations. As we have no control over site conditions or methods of application, no liability can be derived from the contents of this information sheet, or from any written recommendations, or from any other advice offered. The user of the product is solely responsible for the product's suitability for the intended application and is recommended to test the suitability prior to use. We reserve the right to change the properties of our products without notice. All orders are sold subject to our current terms of sale and delivery. With the publication of this Technical Information Sheet all previous editions are no longer valid.

For further information consult our Technical Department BELFAST: 028 9077 4000 DUBLIN: 01 834 8255

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