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Technical data sheet

February 2024

# DPM One Coat Membrane & Primer

A solvent free one coat, low viscosity, two-part epoxy resin surface DPM, vapour suppressant, bonding agent and primer. Suitable for use in interior and exterior applications.



## Features

- Single coat application
- Low viscosity – easy to mix and apply
- Easy trowel and roller application
- Allows moisture levels up to 98% RH (99.9% theoretical)
- Can be applied to damp substrates
- Use as primer or bonding aid for screeds
- Solvent free
- Rapid Curing
- Suitable for underfloor heating
- Easy trowel and roller application
- Excellent chemical resistance
- Good substrate penetration
- One bucket with 2 compartments
- Cures in 6 hours at 20°C
- Available in 5kg & 10kg units.



internal



external



under-floor  
heating



flexible



lifetime  
guarantee





**British Standard – Guidelines**

All aspects of the installation must be in accordance with the requirements of BS 8204, BS 8203 (Installation of Resilient Floorcoverings) or BS 5325 (Installation of Textile Floorcoverings). Complies with EN standards and supplementary specifications.

**Description**

DPM One Coat Membrane & Primer is a solvent free one coat, low viscosity, two component epoxy resin surface damp proof membrane, vapour suppressant, bonding agent and primer which is suitable for use in interior and exterior applications. When mixed to a homogenous blend and correctly applied it produces a durable surface membrane. It can be used in domestic, commercial and industrial areas. It is also suitable for use as a primer or bonding coat prior to the application of polymer modified/proprietary cementitious screeds.

It is suitable as a damp proof membrane on cementitious substrates which have high level of relative humidity up to 98% (99.9% theoretical), when tested with a surface hygrometer in accordance with BS8203.

It is highly effective as a suppressant of residual moisture in concrete and sand: cement screeds and is widely used prior to the application of levelling screeds, smoothing underlayments and tile installations. It should not be considered as a DPM where hydrostatic pressure is a concern. This will require additional measures such as the application of external tanking membranes or pressure relief drainage systems.

**Mixing**

The DPM One Coat Membrane & Primer kits should be allowed to acclimatise to attain room temperature before mixing. The material functions best in room ambient temperatures of 10°C to 25 °C. Lower temperatures will raise the viscosity of the product whilst higher temperatures will significantly reduce the pot life. The floor temperature should also be monitored to ensure it is a minimum of 3°C above the dew point to avoid the presence of moisture on the surface which could hinder adhesion. The Nicobond Hygro Box and Thermo Probe have functions to carry out this test. The two components are pre-gauged in two separate chambers within the pack. Remove the lid of the smaller chamber and fully empty contents into the larger chamber/bucket, taking care to remove all of the product using a flat bladed trowel or scraper. The two components in the lower chamber/bucket can all then be mixed using an electric low speed drill/ paddle mixer until a uniform mix is achieved.

**How much material?**

Applied Thickness	Approximate Coverage Per 5kg unit	Approximate Coverage Per 10kg unit	Approximate Consumption Per 100m <sup>2</sup> Area
250-350 microns	10-12m <sup>2</sup>	20-24m <sup>2</sup>	8 to 10 units 5kg/ 4 to 5 units 10kg

The table should be used for guidance purposes only and all information given can be affected by the substrate texture and absorbency. The coverage given is based on a smooth non-absorbent subfloor.

**Application**

DPM One Coat Membrane & Primer is applied by pouring the mixed material on to the substrate and spreading an even coat using a B2 2.1x2.9 mm V Profile flooring notched trowel. Once applied, go over the surface immediately with a short pile roller to flatten out the trowel marks. Always pre-wet the roller before this operation to ensure that the applied coating is continuous and free from pin holes. The DPM One Coat Membrane & Primer should be applied at a set thickness of 250–350 microns.

**Substrates**

All surfaces must be sound, clean and free from any grease, oil, release agents or other curing agents, debris, dust and dirt or any other contaminants which may affect adhesion. It can be applied to damp substrates without presence of any pools of water Any existing screeds or levelling compounds which are not moisture resistant should be removed prior to the application of the membrane. It is recommended to conduct a trial adhesion test if in any doubt. Do not apply DPM One Coat Membrane if the ambient or surface temperature is below 5°C.

If the concrete is too rough it will need to be pre-smoothed using any of the moisture tolerant smoothing compounds within our range (Please see N&C Nicobond Flooring Systems, *the directory*). This is because rough “spikes” may poke through the thin coating thus allowing the DPM membrane to be compromised. Once smoothed and dry the membrane may be applied. Always consult manufacturer’s advice and/or Technical Data sheets.

**Nicobond ScreedPro Underlayments**

For guidance on using DPM One Coat Membrane with screed products refer to the individual ScreedPro Data sheet concerned.

**Concrete & Sand/Cement Screeds**

Concrete and sand/cement screeds must be dry, and any laitance or surface treatments removed. A second coat may be necessary where high porosity is evident or where there are heavy undulations within the sub floor.

When applying to industrial floors, it is recommended to apply 2 coats of DPM. Allow the first coat to cure and then after applying the second coat, liberally “blind” the surface with kiln dried aggregate. Once cured, vacuum up any loose material prior to applying other toppings.

**Power Floated Concrete**

The surface should have been allowed to dry for at least six weeks. Power Floated Concrete can have a loose top layer and in some cases laitance once it has dried. Mechanically remove any laitance, surface treatments and curing agents. All dust and debris must be removed using a vacuum.

**Under-floor Heating**

The DPM should only be applied if the heating system has been installed and brought up to working temperatures for at least 7 days then brought down to ambient temperature over 2-3 days and no higher than 15°C. Once the DPM is cured, switch on starting with a low temperature, gradually increasing it to its operating temperature at a rate of 5°C per day.

**Movement Joints**

DPM One Coat Membrane & Primer should not be used to bridge any existing movement Joints Careful consideration should always be given to the function and location of movement joints at perimeters, intermediate bays, thresholds and between heated and non-heated floor zones, these should be carried through to the surface per normal recommendations.



## Technical Information

Specification	One Coat Surface DPM
Application Thickness Dry Film	250 – 300 microns
Working Life @20°C	45 - 60 minutes
Curing Time @20°C	Approx. 5 – 6 hours
Curing Time @10°C	Approx. 15 – 20 hours
Ready to receive smoothing compound	Nicobond DPM One Coat Membrane & Primer will only need to be primed with neat Nicobond Primer if left over 24 hours (36 hours in colder conditions). Prior to this a primer is not required as the DPM is tacky so will provide an adequate key for a smoothing compound.
Ready for Ceramic Tiles	When cured
Resilient floor coverings / LVT (Dependent on thickness)	When cured
Installation Temperature	Minimum 5°C
Storage Temperature	+5°C and 30°C
Service Temperature	-20°C to +80°C
Colour	Dark Grey
Packaging	5kg & 10kg Dual Chamber pack

## Technical Terms & Definitions

### Porous (Permeable & Absorbent)

Porous surfaces are any materials having minute or narrow spaces through which liquid or air may pass. Examples of porous materials are quarry tiles (unsealed), unvarnished (unfinished) wood, concrete (not power floated), sand /cement screeds and vinyl.

### Non-Porous (Impermeable & Non-Absorbent)

Non-porous surfaces tend to be thick, dense, and solid so that nothing can penetrate beyond its outer-most surface. Examples of non-porous surfaces are solid plastics, metal objects, varnished wood, laminate counters, granite, power floated concrete, glazed ceramic tiles, porcelain tiles, flooring grade asphalt and quarry tiles (sealed).

### Fast Setting Screeds

Allows a faster setting time to achieve foot traffic within a shorter period. Such products may still require 12-24 hours to dry out completely (depending on thickness). Always consult manufactures technical data sheet for advice.

### Fast Drying Screeds

Allow for the quicker installation of floorcoverings. Such products may be dry with in 4-6 hours (depending on thickness).

### Tools

B2 2.1mm x 2.9mm V Profile flooring notched trowel.

### Cleaning

Clean tools thoroughly with a solvent based cleaning fluid immediately after use. Once cured DPM One Coat Membrane is difficult to remove.

### Shelf Life

A **minimum of 24 months** in unopened containers from the date of manufacturing printed on the packaging.

### Storage

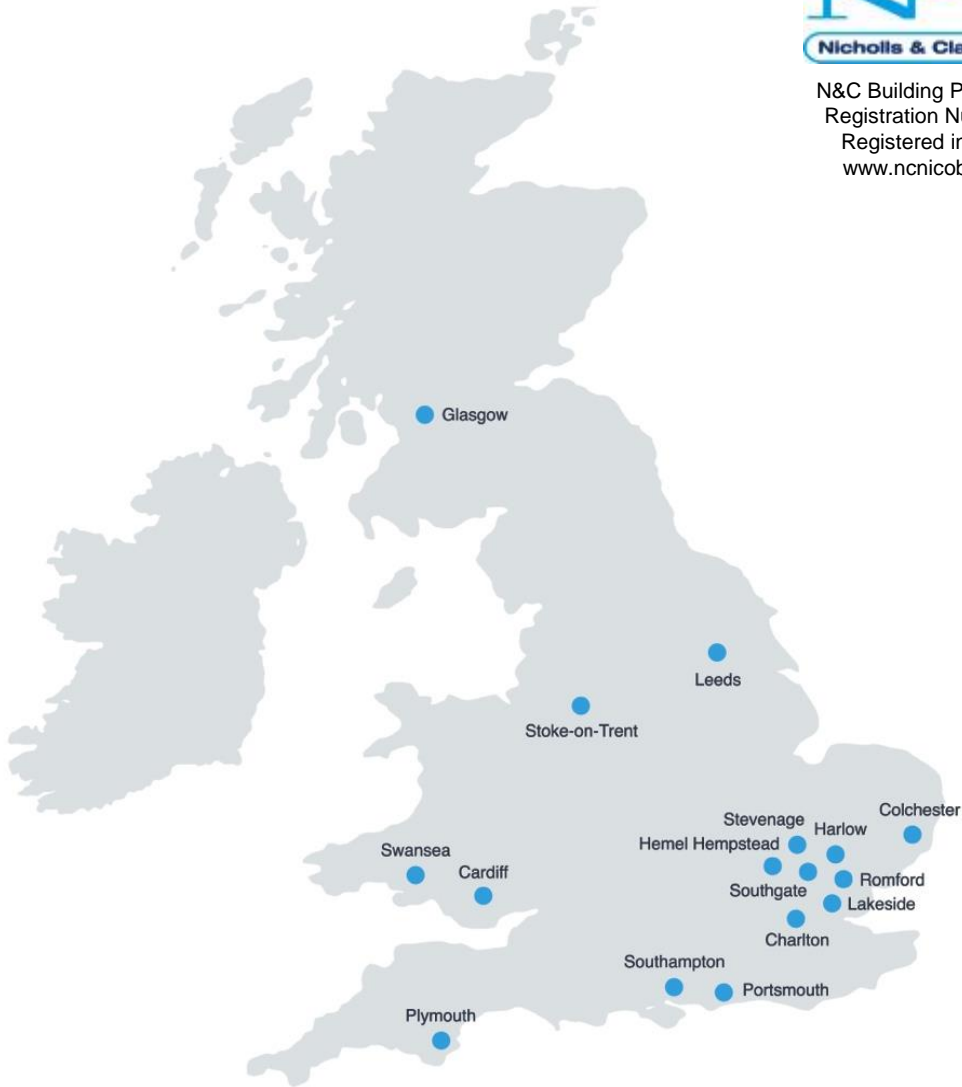
This product must be stored clear of the ground, under dry conditions and out of direct sunlight. Protect the liquid from frost. If allowed to freeze N&C Building Products cannot guarantee the performance of the product.

### Health & Safety Advice

Wear suitable protective clothing, gloves and eye/face protection. Ensure the working area is well ventilated, keep containers closed when not being used and take precautions to guard against naked flames and smoking.

The relevant Material Safety Data Sheet can be obtained from the website or directly from N&C Building Products Ltd at the address below.

N & C Building Products Limited  
 41-51 Freshwater Road  
 Chadwell Heath  
 Romford  
 Essex RM8 1SP  
 Tel: 020 8586 4600  
 Fax: 020 8586 4646  
 Email: [technical@nichollsandclarke.com](mailto:technical@nichollsandclarke.com)  
 Web: [www.ncnicobond.com](http://www.ncnicobond.com)



#### Distribution Centres, Trade Counters & Showrooms

N&C Building Materials  
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 Chadwell Heath,  
 Romford Essex RM8 1SP  
 Tel: 020 8586 4600  
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 Plympton  
 Plymouth PL7 1SR  
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 Fax: 01752 342746

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 Hillington  
 Glasgow G52 4BN  
 Tel: 0141 880 1200  
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 Flanders Road  
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 Southampton SO30 2QT  
 Tel: 01489 779700  
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 London SE7 7SJ  
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 London N18 3AF  
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 Edinburgh Way,  
 Harlow Essex CM20 2HW  
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 Severalls Park, Colchester  
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 Business Park, Maylands  
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