

# Drybase® Liquid-Applied DPM

## Product Description

**Drybase® Liquid-Applied DPM** is a single-pack barrier coating for above ground use. It is supplied ready to use. It is available in black or white with a consistency similar to that of thick emulsion paint. The product is applied in two coats. **Drybase® Liquid-Applied DPM** is suitable for use on solid floors, embedded timbers and floor-to-wall junctions. It is not suitable as a bond coat on walls where Drybase® Flex Membrane or Drybase® Bondaid Plus (SBR) can provide a suitable alternative, contact our technical team for further information.

Once applied, the product cures to form a membrane that is flexible and elastic. **Drybase® Liquid-Applied DPM** is water-based and can be applied to damp substrates by brush, roller, or spray. The applied product is typically touch-dry in one hour.

**Drybase® Liquid-Applied DPM** provides a barrier to damp and ground gases (including radon, carbon dioxide, and methane).

## Benefits

- Damp-proof barrier
- Gas and radon barrier
- Water-based single pack system
- Easy to apply
- Wet to dry colour change (Drybase® black)

## Properties

Appearance	Dark blue <sup>[1]</sup> or white thick liquid
Recipe Type	Water-based
Density	1.0 g/cm <sup>3</sup>
Size(s) & Packaging	1 litre tins and 5 litre plastic buckets
Coverage for Vapour Barrier	4.5 m <sup>2</sup> per 5 litres <sup>[2]</sup>
Coverage for general purpose DPM	7 – 9 m <sup>2</sup> per 5 litres <sup>[3]</sup>
Active Ingredient(s)	Styrene butadiene latex
Water (liquid) Resistance	20 metre head (positive pressure)



Water Vapour Permeability	< 4 g/m <sup>2</sup> /24 hours at 25 °C/75 % RH following BS 3177	
Methane Resistance	10 times more resistant than LDPE	
Radon Resistance	Radon barrier at 2 mm thickness <sup>[4]</sup>	
Tensile Strength	4 N/mm <sup>2</sup>	
Elongation at Break	350 %	
Bond strength	Fletton bricks	2.5 N/mm <sup>2</sup>
	Timber	> 1.0 N/mm <sup>2</sup>
	Concrete <sup>[5]</sup>	> 1.0 N/mm <sup>2</sup>
Cleaning of tools	Use warm soapy water	
Storage	Dry conditions between 5 and 35 °C	
Shelf Life	18 months	

## Application Information

### Preparation

Proper preparation of the background substrate is essential to ensure product performance. All contact surfaces must be sound, clean and smooth with a trowelled or brushed finish. Any masonry should be flushpointed and defects in existing surfaces made good. Remove all laitance, dust, dirt, grease, paint, old coatings, loose material or surface water. For new screed and concrete, allow sufficient time for the substrate to cure before applying **Drybase® Liquid-Applied DPM** – at least 28 days.

<sup>[1]</sup> Dark blue dries to black. <sup>[2]</sup> See application section for details <sup>[3]</sup> Coverage will vary depending upon the substrate to be treated.

<sup>[4]</sup> Ref. University of Saarland. <sup>[5]</sup> After 3 month soak.

## Priming

### Sound Surfaces

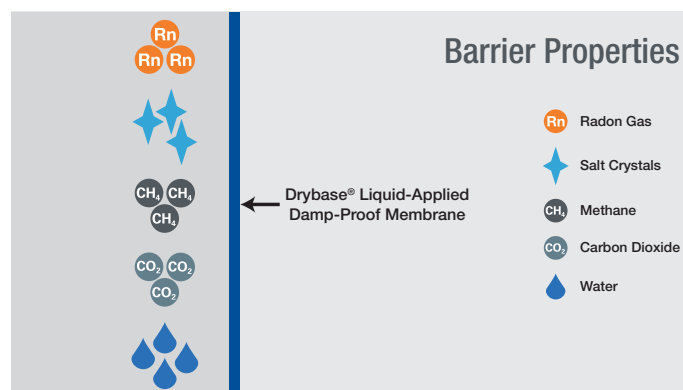
For sound surfaces no priming is necessary. To assist the membrane in fully wetting out the substrate the background should be dampened with clean water. There should not be any standing water.

### Weak, Friable Surfaces

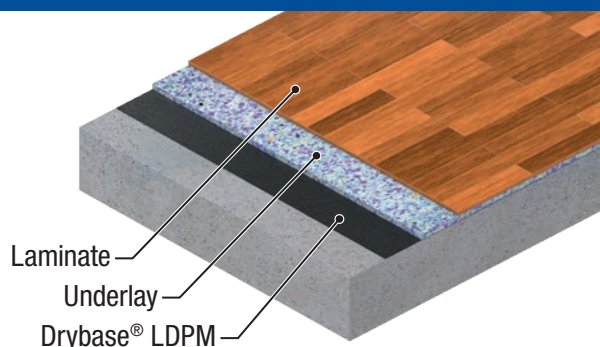
For surfaces with laitance and loose material there are two options to prime the surface before **Drybase® Liquid-Applied DPM** application:

*Option 1* – Remove the weak top surface by scabbling the floor and sweeping/vacuuming up all dust and loose material. Apply 2 coats of **Drybase® Liquid-Applied DPM**.

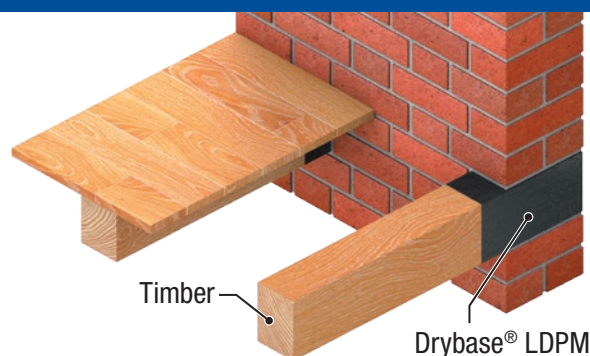
*Option 2* – Remove all dust, previous coatings and loose material by sweeping/vacuuming. For the best adhesion apply a coat of Drybase® Bondaid Plus (SBR) to the surface as a primer and wait 20 minutes, or until tacky before applying 2 coats of **Drybase® Liquid-Applied DPM**. Alternatively, if Bondaid Plus is not available then dilute the first coat of **Drybase® Liquid-Applied DPM** with 30% water for use as a primer. Maximum bond can be achieved by vigorously brushing the primer coat into the floor substrate using a stiff bristled broom. Once dry, apply two coats of **Drybase® Liquid-Applied DPM** as normal.



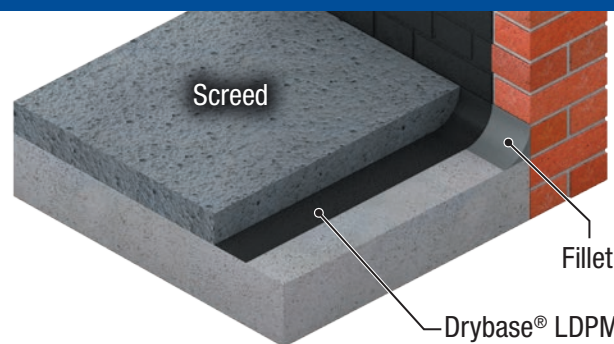
## Laminate Wooden Floor



## Embedded Timbers



## Floor & Wall Junctions



## Test Area

Because of the wide variety of possible substrates and site conditions, it is always advisable to check adhesion to the background by testing on a sample area before starting any job. Limitation: Do not directly bond wooden flooring to **Drybase® Liquid-Applied DPM** coated concrete.

## Application

### Coating and Coverage

The product is applied in two coats by brush, roller or airless spray. Stir well before use. Care should be taken to ensure that the correct dry coat application thickness is achieved and that the drying time is not unacceptably extended. Drying will be delayed by excessively damp, humid or cold conditions which should be avoided.

A minimum dry film thickness of 0.6 mm (1.1 mm wet film) is required to provide a vapour barrier. This should be applied in at least two coats with each at 0.55 litres/m<sup>2</sup> in order to comply with CP102:1973 – Code of Practice for the Protection of Buildings against Water from the Ground. Always allow the first coat to become touch dry (typically one hour) before applying a second coat at right angles to the first. The first coat should not be allowed to dry for more than 24 hours before applying the second coat. Care should be taken to ensure **Drybase® Liquid-Applied DPM** is not too thickly applied, as in line with other paint coatings, over-thick application can lead to surface cracking through uneven drying.

If applying a screed to **Drybase® Liquid-Applied DPM**, the second coat can be used as a primer if the screed is applied while the second coat is still tacky.

Alternatively, a mechanical key for the subsequent application of levelling materials such as a screed can be created by sprinkling fine washed sharp sand or kiln dried graded quartz sand onto **Drybase® Liquid-Applied DPM** while it is still tacky.

If both the first and second coats of **Drybase® Liquid-Applied DPM** have already cured, a further coat can be applied as a primer for the subsequent application of levelling materials such as screeds. In this application, any subsequent layers should be applied while the **Drybase® Liquid-Applied DPM** is still tacky.

## Curing

No special curing is required. Do not apply if the background or air temperature is 7 °C or lower. Ensure there is adequate ventilation for drying. Black **Drybase® Liquid-Applied DPM** will go on as dark blue and dry to black once cured. If the colour remains blue then this is an indication that further drying is required.

## Limitations

**Drybase® Liquid-Applied DPM** is not intended as a trafficable surface and should not be used where it will be externally exposed to direct sunlight.

Not suitable for use in situations under negative water pressure such as basements and other below ground situations. Here, **Drybase® Tanking Slurry** is recommended.

## Other Information

For health and safety information see the Safety Datasheet (available upon request). Keep out of reach of children and animals. Unprotected persons and animals should be kept away from treated surfaces until dry.

**Drybase® Liquid-Applied DPM** is produced in accordance with ISO 9001 and ISO 14001 quality and environmental management systems. **Drybase® Liquid-Applied DPM** has been tested in accordance with the appropriate parts of the following standards:

**BS3177: Determination of water vapour permeability for flexible sheet materials**

**BS8204: Code of practice for polymer modified wearing surfaces**

**BS903: Determination of the permeability of rubber to gases (constant volume method)**

**BS903: Determination of tensile stress-strain properties**

Code of Practice 102:1973: Code of practice for protection of buildings against water from the ground (Code of Practice 102:1973 partially replaced by BS8102:2009).

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