

Mulseal DP



Bitumen/rubber latex waterproofing emulsion

Uses

Mulseal DP is a bitumen rubber/latex compound designed for use in waterproofing applications. Mulseal is suitable for uses such as waterproof membrane to retaining walls, as a vapour barrier to panels and repairing fine cracks in asphalt surfaces.

Advantages

- Excellent adhesion to most common building materials
- Low water vapour permeability
- Can be applied to "green" concrete
- Resistant to sulphates and ground salts
- Dries to a flexible film
- Simple to apply by brush

Standards compliance

DTp specification for Highway Works March 1998 series 2000 clause 2004.

Description

Mulseal DP single part bitumen latex emulsion is applied by brush or squeegee. The incorporation of rubber latex imparts elasticity to the dried coating. Mulseal DP is suitable for use on most building materials such as concrete, brickwork, metals and stone. It is easily applied and may be used on damp surfaces, provided that no free water is present. It can also be applied to "green" concrete immediately shuttering has been struck. Where it is used as a sandwich membrane in floors, Mulseal DP should have continuity with the damp courses.

Technical support

Fosroc offers a comprehensive range of high performance, high quality technical products. In addition Fosroc offers a technical support package to specifiers and contractors which includes computer-aided design (CAD) standard details as well as on site technical advice from staff with unrivalled experience in the industry.

Design criteria

For guidance, a two coat application of Mulseal DP over a smooth surface should average around 0.7 mm dry film thickness.

Properties

Form:	Thixotropic liquid
Solids content:	60%
Density:	1.00 kg/litre
Application temperature:	5 to 50°C
Drying time:	4 to 6 hours. 24 hours should be left between coatings. Mulseal should not be applied in enclosed spaces unless there is adequate circulation of air to allow for evaporation of water
Coverage:	Typically 1.1 - 1.4 m ² /litre per coat, but will depend upon the nature of the surface being treated

Maintenance

No special requirements, any damage identified during normal inspections should be repaired or replaced as appropriate.

Specification clauses

Where shown on the drawings, the waterproofing/vapour barrier membrane shall be Mulseal DP from Fosroc. Surfaces shall be prepared and the product applied in accordance with the manufacturers current data sheet.

Application instructions

Preparation

Surfaces shall be clean and free from dust, dirt, oil, grease, moss and loose material. Mulseal DP may be used on damp surfaces such as green concrete, brick or block work but there must be no standing water. Metal and timber surfaces should be dry and primed with one coat of Fosroc Primer 3. All other surfaces should be primed with a coat of a 1:1 mixture of Mulseal DP and water.

Application

Mulseal DP may be applied by brush or squeegee. For most purposes two full coats should be considered a minimum requirement. Where required Mulseal DP may be reinforced by a bedding layer of bitumen saturated glass fibre into the first full coat prior to application of subsequent coats. When used as a sandwich damp course to ground slabs, the final coat should be blinded with clean sharp sand passing through a 3 mm sieve to provide a key for the second concrete pour. Limestone should not be used. Mulseal DP is water based and remains soluble until thoroughly dry. It is therefore important that it should not be applied during rain or when rain is expected.

Priming

Porous surfaces such as concrete or block work must be treated with a priming coat made up of a solution of Mulseal DP and clean cold water mixed in equal parts.

Metal and timber surfaces must be primed with a coat of Primer 3 before applying Mulseal DP.

Mulseal DP can be applied by brush or squeegee. It must be thoroughly stirred before use. For efficient waterproofing, a minimum of two full coats must be used.

For horizontal surfaces, a squeegee or a cheap, soft bristle broom is satisfactory. For vertical surfaces, use a cheap expendable brush. A useful technique that may be employed to keep brushes clean when using Mulseal DP is as follows:

Mix a strong solution of detergent and water, minimum 5 litres. Soak the brush in the solution and shake out before use. As work progresses, rinse the brush at intervals to prevent it clogging and shake out surplus detergent solution before resuming. Mulseal DP should be laid on to the surface using the brush in one direction and not brushed out. During a break in work or when it is completed, the brush should be cleaned in a strong detergent solution and then in running water. Any Mulseal DP remaining should be cleaned off with white spirit, but the spirit must be allowed to evaporate before re-using the brush. Brushes should be of an inexpensive type and considered as expendable. Paint brushes are not suitable. On the larger job, it is preferable to maintain several brushes in use.

Mulseal is supplied ready for use. If, however, after thorough agitation the product appears unduly thick it can, as an exception, be thinned with not more than 0.25 litre of clean water per 5 litres of Mulseal DP.

Cleaning

A proprietary hand cleanser such as "Kerocleanse 22" or "Swarfega" may be used for removing Mulseal DP from the hands. Splashes of Mulseal DP on paintwork, etc, should be wiped off at once with a damp cloth.

Ancillary materials

Fosroc Primer 3.

Limitations

Protect from frost during storage. Mulseal is damaged by freezing.

Mulseal DP should not be used if rain or frost is expected, but frost will not affect the dried film.

Estimating

Packaging

Mulseal DP is supplied in 5 litre tins, 25 and 200 litre drums.

Guide to quantity used per coat

Mulseal DP 1.1 to 1.4 m²/litre.

Guide to quantity of Mulseal in 1.1 priming coat

2.0 to 2.5 m²/litre.

Guide to quantity of Fosroc Primer 3

12 to 15 m²/litre.

Storage

Store in original unopened packaging, in cool dry conditions, away from sunlight.

Precautions

Health and safety

Mulseal DP: There are no known health hazards associated with Mulseal DP in normal use. However, the wearing of suitable gloves is recommended.

Fosroc Primer 3: Highly flammable liquid. Keep away from sources of ignition — No Smoking. Harmful by inhalation and in contact with skin. Avoid contact with skin and eyes and inhalation of vapours. Wear suitable protective clothing, gloves and eye/face protection. Use only in well ventilated areas.

For additional information see relevant Safety Data Sheet.

Additional information

Technical data — ancillary materials

Fosroc Primer 3

Flash point:	-1°C
Density:	0.8 kg/litre
Coverage:	12.5 m ² /litre
Application temperature:	5 to 50°C
Drying time:	1 to 4 hours
Pack size:	5 and 25 litre

As well as joint sealants and ancillary products, Fosroc also manufactures a wide range of complementary products which includes waterstops, waterproofing membranes, grouting, anchoring and specialised flooring materials. In addition a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete is available. This includes hand placed and spray grade repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings.



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