

Masterseal[®]300H

Decorative, flexible, anti-carbonation and waterproof protective coating for concrete

Description

Masterseal[®]300H is a flexible, elastomeric coating based on acrylic co-polymers. Applied as a liquid it cures to form a durable, protective, waterproof membrane. It is a single component emulsion containing inert pigments and has a brushable consistency. Masterseal[®]300H exceeds all the requirements of a coating that resists carbonation and prevents chloride ion ingress.

Primary uses

Masterseal[®]300H is designed for the protection of concrete structures against carbonation and chloride ingress. The product is also suitable as a seamless and elastomeric waterproofing coating for timber, asbestos / fibre cement and zinc sheets, asphalt, built-up felt and tiles.

Areas of application are:

- Multi storey car parks.
- Underpasses.
- Bridge, soffits, wing walls.
- Concrete repairs.
- Commercial buildings.
- Industrial buildings.
- Waterproofing a variety of substrates.
- Flat roofs

Advantages

- Easily applied by roller, brush or airless spray.
- Flexible - capable of bridging cracks.
- Protective - barrier against salts and atmospheric gases.

- High-build - masking imperfections in substrates.
- Waterproof - protects concrete from waterborne salts.
- U.V. stable - maintains its appearance.

Packaging

Masterseal[®]300H is supplied in 20 litre pails.
Masterseal[®]300H Filler: 25kg bags

Typical properties

Relative density:	1.35 at 25°C
Water vapour transmission:	45gms/m ² per 24 hours - Taywood
Chloride ion diffusivity:	4.98 x 10 ⁻¹⁰ cm ² /s
Reduction in chloride ion ingress @ 28 days	97%
Carbon dioxide diffusion:	R value at 325 microns greater than 161m
Application temperature:	5°C to 50°C
Chemical resistance:	resistant to spillage of gasoline, diesel, sewage, weak acids and alkalis
Elongation:	>400%
Colours:	grey and white

Application procedure

Masterseal[®]300H can be applied by brush, roller or airless spray equipment. For airless spray application dilute with 7% (1.4l/20l unit) by volume of potable water. Use a tip size of 19-23 mm.

Surface preparation: concrete

All concrete surfaces should be treated to achieve a sound, clean surface free from laitance, oil, grease, mould release agent, residual curing compound, dust or other contaminants that could impair adhesion.



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Masterseal[®]300H

Priming

All surfaces should be primed with Masterkure[®]181 applied at a rate of 5m²/litre, to eliminate excessive suction and promote adhesion. For placed concrete, cure with a single coat application of Masterkure[®]181 applied at 5m²/litre. In temperatures >25°C, application should be made a minimum of three hours before applying the Masterseal[®]300H coating. In cold, humid conditions 24 hours is required to ensure full solvent release.

Coating the concrete at an early stage prevents penetration of deleterious salts.

Filler/scrape coat

Surface depressions, blow holes, aggregate pop-outs etc., should be rectified with Masterseal[®]300H mixed with Masterseal[®]300H Filler added at 0.5-1kg / litre. The filler addition rate being dependent on surface and ambient conditions.

The mixed filler is tightly scraped onto the surface to be overcoated, paying particular attention to ensure blemishes are filled. Deeper aggregate pop-outs may require filling in two layers or with a slightly stiffer mix.

The treated surface should be left to cure until the deepest depressions are dry to the touch before overcoating.

Application

Apply in one or more coats ensuring a continuous even film. The finish may be textured if desired.

Surface preparation: roof waterproofing

Surfaces to be treated should be clean and dust free. All traces of oil, grease, mould release agent and residual curing compounds should be removed together with any other contaminant that could impair adhesion. Previous waterproofing treatments should be either completely removed or put in order. Cracked, broken, slipped or missing tiles, sheets, slates or other forms of covering must be replaced or refixed. Cracks in asphalt or built-up felt systems should be filled with mastic and allowed to cure.

Masterkure[®]181 as a primer, is required on all cement based and other porous substrates. It should be applied at 5m² / litre and permitted to dry before proceeding.

Application

Masterseal[®]300H is applied to the prepared surface in two coats, the first being allowed to dry, before the second is applied.

In hot dry climates, application will be assisted by dampening brushes.

Where the roof is in poor condition, or where substantial movement is expected in the roof structure, apply a sandwich system incorporating reinforcing fabric.

In this application, the fabric is bedded into the wet film of the first coat of Masterseal[®]300H using a charged brush. Ensure that full contact is achieved and there is no air entrapped. Apply a second coat of Masterseal[®]300H when the first has dried, at right angles to the first.



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Weather conditions

Masterseal[®]300H is not resistant to rain until the film has dried. This may take less than 30 minutes in hot dry climates and up to 24 hours in temperate humid conditions. Generally the product should not be applied in rain or if rain is forecast. Similarly, Masterseal[®]300H will freeze in its wet state so should not be applied to frozen substrates or when the temperature is below 5°C or likely to fall during application.

Coverage

Depending on application requirements, please contact BASF Construction Chemicals SA for technical guidance.

Specification clause

Coating

The protective / decorative coating shall be BASF Construction Chemicals SA Masterseal[®]300H. Surface preparation and application shall be strictly in accordance with the manufacturer's recommendations.

Preparation

All concrete surfaces shall be sound, clean and free of any loose material, non-compatible curing compounds, dirt and dust. If Masterseal[®]380 is to be used as the primer the surface must be grit blasted to open up the surface and remove all laitance.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.

Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Note

For professional use only

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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