

DuroFlex®M 900

Protection of concrete from Silage

DuroFlex®M 900 is a special developed highly efficient coating membrane for concrete. The special latex compound protects concrete from the aggressive contents of silage. DuroFlex®M 900 could be easily applied and is physiological harmless.

Application

- Silage container
- Bathrooms / damp room
- Balconies (under the flooring)
- Terraces (under the flooring)

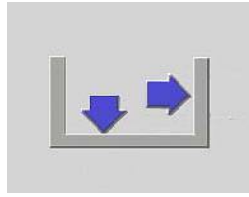
Silage - green fodder which is prepared by fermentation. Fermentation is a form of lactic acid fermentation. The unavoidable by-products of this process are acidic, aqueous leachates containing lactic acid, but also butyric acid and acetic acid. These organic acids are extremely aggressive, they attack concrete surfaces and destroy them on prolonged contact. The leachates escaping from the silage silos also contaminate the ground water.

Coatings made of DuroFlex®M 900 protects concrete parts safely and avoids dripping of contaminated silage water.

DuroFlex®M 900 is an emulsion of a self-crosslinking, caoutchouc-like polymer, acid-resistant silicate fillers, colour pigments, additives and water. After application, the product dries very quickly to form a homogeneous, liquid-tight film (membrane) with very good resistance to alkalis, acids and weathering. Seamless and joint-free, highly elastic, sealing films made of DuroFlex®M 900 bridge cracks in the substrate.

Advantages

- High resistance to silage
- Flexible and elastic membrane
- Waterbased compound that can be applied even to damp undergrounds
- Tough abrasion resistant coating
- Non hazardous and solvent free, low odour
- Non staining
- Crack bridging
- Bonds well to suitably prepared concrete
- Quick drying. Typically touch dry in 1 hour.
- Alkali resistant, can be applied to alkaline surfaces
- Various colours available



DuroFlex®M 900

- protects concrete
- protects ground water
- protects the underground against the fermentation products of silage

Application Processing

The DuroFlex®M 900 is ready to use with a light viscosity and slight shear thinning consistence. The application is similar to normal dispersion colours, painting or spraying.

DuroFlex® membranes should be applied at least 600 µm /0.6 mm thick (dry), corresponding to a wet coating thickness of 1 mm and a consumption of 1200 gr./m².

The application should be done always in two layers applied in cross-coat. Two different colours are helpful.

quick + efficient

**Aireless spaying
high pressure**



The underground should be dry, clean and free from all separating substances. Pinholes, air porous and crack more than 0,1 mm width as well as other damages in concrete surfaces need special treatments e.g. with UP®-Steinspachtel 1013 which is highly recommended for this application.

Stonewalls must be clean and joints must be filled properly if not we recommend the use of a elastic slurry coating such as Cembond®M-947 Flex or the plastering with a cement mortar group III with Cembond®956 additive.

For smooth concrete or plaster surfaces we recommend the use of a primer, DuroFlex®M 900 primer. Silage containers or other ambitious objects should be primed with Silox®EPW 856.

Intensive sucking undergrounds must be primed to avoid a burn up of the coating.

If necessary, DuroFlex®M 900 can be diluted with water (up to 10 %, z. e.g. to adjust the spray viscosity). To improve the abrasion resistance and for a non-slip surface, the first DuroFlex®M 900 M coating can either be mixed with quartz sand - grain size e.g. 0.3 - 0.6 mm - or the freshly applied coating can be sprinkled with it. DuroFlex®M 900 must not be applied at temperatures below 7° C, not in rain or extremely high humidity.

Precoats need to be completely dry before next application to avoid tension cracks in the surface.

Working joints or joints in precast elements could be additionally saved with HydroFlex®Dichtband 275, a special joint tape. The joint tape is applied in advance and afterwards overworked with DuroFlex®M 900 coating.

Undergrounds with high risk of crack creation could be reinforced with glass textile or textile fibre which is embedded into the membrane.

Properties

Product as delivered

Binding agent	Copolymer
Density	Approx. 1,2 gr/ml 20°C
Viscosity	Shear thinning consistence
Odour	Weak, specific for Butadiencoutchouc
PH	Approx. 9,5
Colour	Light grey (other colours possible up to 500 kg)
Solvent	Not applicable



Features of the membrane

Water absorption	11% after 28 days
Tear resistance	1 N/mm ²
Elongation at break	≥ 600%
Vapour diffusion equivalent	50 (mtr. air layer)
Consumption	1,2 kg/m ² for 600 µm dry film layer



DuroFlex®M 900

**Shear thinning consistence
and therefore easy
application in thick layers**

Storage Handling Disposal

DuroFlex®M 900 is sensible to frost. Storage and transport below 0°C is not allowed. DuroFlex®M 900 is not dangerous but it is to keep away from children and unauthorised people. Once opened cans must be closed immediately and used in short time.

DuroFlex®M 900 is dilutable with water and tool and equipment cleaning could be done with fresh water as well before hardening. Once hardened material is chemical resistant and difficult to remove.

Liquid material leftovers are special waste. If mixed with sand or cement the hardened product could be disposed as normal waste.

Recommended Accessories

UP®-Steinspachtel 1013

Spatle-, glue and repair mortar with quick hardening

Silox®860 D

High-Quality, stable repair and nd filling compound based on Epoxy. With excellent adhesion, even on damp concrete. Recommended for reprofiling and restoration of damaged concrete surfaces.

Silox®EPW 856

Epoxy Primer with excellent adhesion on nearly all undergrounds. Used as primer on intensive sucking undergrounds. Diffusion open, application on moist concrete.

Cembond®M-947 Flex

Highly flexible, mineral surface sealing. Can be applied as a slurry coat or thin-layer filler, for substrate preparation on masonry walls.

DuroFlex®Primer 900-P

Primer and bonding Bridge for Silox® and DuroFlex® Membranes. Prevents burning on absorbent surfaces.

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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ARCAN Waterproof

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passion to invent 