# VELOSIT® DF 941

# Liquid Waterproofing Membrane







# **Application fields**

VELOSIT DF 941 is a solvent-free one component waterproofing membrane for all typical construction substrates like gypsum boards, anhydrase and cement screeds, concrete and masonry. It is a good substrate for dispersion based and cementitious tile adhesives. It is crack bridging, watertight and compatible with silicone sealants. Typical application fields besides others are as follows:

- Waterproofing of bath rooms and showers
- Waterproofing behind tile backers in kitchens
- Internal waterproofing for water load classes
   W0-I to W3-I on walls and W0-I to W1-I on floors acc. DIN 18534
- Waterproofing in combination with tiles and natural stones
- Available in gray and blue for easier control of application thickness

# **Properties**

VELOSIT DF 941 is an elastic waterproofing membrane with quick curing. VELOSIT DF 941 meets the GEV criteria for class EMICODE EC1 plus. VELOSIT DF 941 carries a German approval for waterproofing in combination with tiles.

VELOSIT DF 941 is applied by brush, lamb wool roller trowel.

- Ready-to-use
- Crack bridging
- Very flexible, tensile elongation > 100%
- Easy to apply
- Fast curing
- Watertight acc. to EN 13390-8
- Open to foot traffic after 3 4 hours (23 °C/60 % r.h.)
- Ready for water pressure after 5 days
- Very good adhesion to concrete and masonry



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# **Application**

#### 1.) Substrate preparation

VELOSIT DF 941 is designed for mineralic substrates like concrete, masonry or absorptive natural stones. Besides that gypsum boards, gypsum fiber boards, screeds based on cement and anhydrite are suitable substrates.

The residual moisture measured with the CM-method must be equal or less than:

Cement screed, unheated: 2.0 %
Cement screed, heated: 1.8 %
Anhydrite screed, unheated: 0.5 %
Anhydrite screed, heated: 0.3 %

Substrate must be pore open and load bearing. Blowholes, honeycombs or other surface defects must be filled with a repair mortar like VELOSIT RM 202. Absorptive substrates must be primed with VELOSIT PA 911 before the application of VELOSIT DF 941.

#### Details:

- a.) Negative waterproofing: In case hydrostatic pressure effects VELOSIT DF 941 or may effect in the future from the reverse side a negative side waterproofing must be applied with at least 1 mm (40 mils) VELOSIT WP 101.
- b.) The wall-slab-detail can be solved with a cove made with RM 202 or alternatively with a joint tape VELOSIT DB 829 or VELOSIT DB 830 (incl. corner pieces VELOSIT SB 831 and 832). The joint tape can be applied with VELOSIT WP 120 or VELOSIT DF 941.
- c.) Joints and dynamic cracks must be waterproofed with VELOSIT DB 839 or DB 830. The joint tape may be applied with VELOSIT WP 120 or VELOSIT DF 941.
- d.) Pipe penetrations are waterproofed with a sleeve VELOSIT DB 833. Brush plenty of VELOSIT WP 120 or VELOSIT DF 941 onto the pipe and the surrounding area. Pull the sleeve over the pipe push it with a

trowel into the material. Work away from the pipe and take care not to entrap air or create wrinkles.

#### 2.) Processing

#### Mixing:

VELOSIT DF 941 is ready to use. Stir material before use.

- a.) Brush application: Apply the first coat with a masons brush in a crossing applications to the primed substrate at the specified rate. Second coat can be applied according to DIN 18534-3 in a different color (blue/gray) after the first one has gained sufficient strength. That is the case after 2–3 hours at 23 °C and 50 % relative humidity. Colder temperatures extend, warmer temperatures shorten this time.
- b.) If building code or specification does not require two coats, VELOSIT DF 941 can be applied in one coat by trowel. Immediately apply the desired material amount with a notched trowel to the substrate. 0.5 mm (20 mils) dry film thickness can be achieved with a 2 mm (3/32") notch size and application at a 45° angle. Finish the surface immediately afterwards. Make sure all grooves are completely closed without air entrapment.

#### 3.) Curing

VELOSIT DF 941 does not require curing. A low humidity and a good air circulation accelerates the drying process.

#### **Estimating**

Brush application 2 mm:

1<sup>st</sup> coat VELOSIT DF 941, blue: 0.5 kg/m<sup>2</sup> 2<sup>nd</sup> coat VELOSIT DF 941, gray: 0.5 kg/m<sup>2</sup>

#### Cleaning

VELOSIT DF 941 can be removed in the fresh state with water. Once it has cured mechanical cleaning is required.



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# **Quality features**

Color: gray or blue
Density: 1.5 kg/l
Solid content: 73%

Viscosity: approx. 12500 mPas

Substrate temperature: 5 – 35 °C

 $(40 - 95 ^{\circ}F)$ 

Water impermeability:

- Joint bridgring: passed- at penetration: passed

Crack bridging:

Acc. DIN 28052-6: 0.4 mm(16 mils)/24h

 $S_D$ -value<sub>water</sub>, 0.5 mm (20 mils): > 2 m (6'7")

Adhesive strength:

temperature change: > 0.5 MPa (72 psi)
 water resistance: > 0.5 MPa (72 psi)
 Alkali resistance: > 0.5 MPa (72 psi)

# **Packaging**

VELOSIT DF 941 is available in 5 kg (11 lb.) or 15 kg (33 lb.) plastic pails.

#### Storage

VELOSIT DF 941 can be stored in unopened original packs for 12 months at 5-35 °C (40-95 °F) in a dry storage place protected against sunlight.

## Safety

Please observe the actual valid material safety data sheet and follow the described safety measures for handling of the product.

#### Recommendations

VELOSIT DF 941 is only available for professional applicators.

All described product features are determined under controlled laboratory conditions according to the relevant international standards. Values determined under job site conditions may deviate from the stated values.

Please always use the latest version of this data sheet available from our website <a href="https://www.velosit.de">www.velosit.de</a>.

### Manufacturer

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