

VELOSIT® WP 125

1-comp. FlexibleCementitious Waterproofing Slurry for Tile Applications



Application fields

VELOSIT WP 125 is a 1 component polymer modified cementitious waterproofing slurry for concrete and masonry. It is a good substrate for tile adhesives. It is crack bridging and a good barrier against carbon dioxide. Typical application fields besides others are as follows:

- Interior and exterior
- Wall and floor
- Waterproofing acc. DIN 18534 water load class W0-I to W3-I
- Crack bridging waterproofing in combination with tiles and natural stones
- For damp and wet substrates under installations of ceramic tiles and plates and natural or concrete stones
- For balconies or terraces with a slope > 1.5% acc. gem. DIN 18531-5
- Internal waterproofing in gray water tanks acc. gem. DIN 18535-3 W1-B, W2-B, R1-B
- Suitable for heated substrates

Properties

VELOSIT WP 125 is a highly flexible cementitious waterproofing slurry with quick curing. VELOSIT WP 125 creates a crack bridging coating on the substrate.

VELOSIT WP 125 surpasses the requirements of EN 14891 for class CM O1P and is suitable for load classes A and B, A0 and B0 acc. the German ZDB guideline.

VELOSIT WP 125 can be applied by brush, trowel or suitable spray equipment.

- Crack bridging
- Flexible
- Fiber reinforced
- Watertight
- Breathable

Application

1.) Substrate preparation

VELOSIT WP 125 is designed for mineralic substrates like concrete, masonry or absorptive natural stones as well as Gypsum and gypsum fiber boards and mineral screeds.

Substrate must be pore open and load bearing. Blowholes, honeycombs or other surface defects can be filled with the repair mortar VELOSIT RM 202. Before the application of VELOSIT WP 125, dampen absorptive substrates with clean water to a saturated surface dry (SSD) condition or apply a primer VELOSIT PA 911.

Details:

a.) Negative waterproofing: In case hydrostatic pressure effects VELOSIT WP 125 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 VELOSIT RM 202 or alternatively with a joint tape VELOSIT DB 829 or DB 830 (incl. corner pieces VELOSIT DB 831 and DB 832). The joint tape can be applied with VELOSIT WP 125.

c.) Joints and dynamic cracks must be waterproofed with VELOSIT DB 830. The joint tape may be applied with VELOSIT WP 125.

d.) Pipe penetrations are waterproofed with a sleeve VELOSIT DB 833. Brush plenty of VELOSIT WP 125 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:

Pour 2.5 liters of water into a suitable bucket and mix the powder VELOSIT WP 125 with a slow speed drill (300 – 600 rpm) until a lump-free mix is achieved. Add up to 0.5 liters of water to adjust the desired consistency. Water addition extends the cure time and should be kept as low as possible.

The product is workable for 45 – 60 min. at 23 °C. Processing temperature is > 5 °C to 25 °C.

a.) Brush application: Apply the first coat with a masons brush in a crossing applications to the pre-dampened or primed substrate at the specified rate. Second coat can be applied after the first one has gained sufficient strength which is after 2 hours at 23 °C. Colder temperatures extend, warmer temperatures shorten this time.

Both layers must have a minimum wet layer thickness of 1.2 mm in order to achieve a minimum dry layer thickness of 2 mm.

b.) If building code or specification does not require two coats, VELOSIT WP 125 can be applied in one coat by trowel. Make sure to adjust the consistency to a thixotropic workability without water addition. Apply a scratch coat of VELOSIT WP 125 to the damp substrate to fill surface irregularities. Immediately apply the desired material amount with a notched trowel to the substrate. 2 mm (80 mils) dry film thickness can be achieved with a 6 mm (¼") notch size and application at a 45° angle. Finish the surface immediately afterwards. Make sure all grooves are completely closed without air entrapment.

c.) Spray application: Use suitable spray machines such as:

- Inotec GmbH: INOMAT-M8
- HighTech GmbH: HighPump Small
- Desoi GmbH: Desoi SP-Y

Fill the product into the feed hopper of the spray machine and spray continuously. VELOSIT WP 125 can be applied in one lift if specification allows.

Otherwise spray in two layers with a wait time of approx. 60 min. between coats. Long spray

interruptions may result in clogging of the spray hose. The product may cure a lot faster if the hose is exposed to direct sunlight. Always empty and flush the machine after spraying or before long spray interruptions. VELOSIT WP 125 is a fast curing material and may be hard to remove if left in the machine.

3.) Curing

VELOSIT WP 125 does not require long term curing as it reacts relatively fast with water. Avoid direct sunlight and exposure to air flow, draughts, driving rain and frost after the application.

Estimating

Brush application 2 mm:

1st coat VELOSIT WP 125: approx.1.1 kg/m²

2nd coat VELOSIT WP 125: approx.1.1 kg/m²

Trowel application 2 mm

Scratch coat VELOSIT WP 125: approx. 0 – 0.5kg/m²

2nd coat VELOSIT WP 125: approx.1.7 – 2.2kg/m²

Other thickness requirements: approx. 1.1 kg. VELOSIT WP 125 per m² (2.2 lbs. per 10 ft²) for approx. 1 mm (40 mils) dry film thickness on smooth substrates. Depending on surface roughness application rates can be significantly higher.

Cleaning

VELOSIT WP 125 can be removed in the fresh state with water. Once it has cured mechanical cleaning is required.

Quality features

Color: gray

Water demand: 25– 30 %

Processing time: approx. 60 min.

Crack bridging:

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

S_D-value_{water}, 2mm (80 mils): > 2 m (6'7")

Adhesive strength: > 0.5 MPa (72 psi)

Packaging

VELOSIT WP 125 is available in 10 kg (22 lb.) plastic pails.

Storage

VELOSIT WP 125 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 WP 125 is only available for professional applicators.

Never add water to VELOSIT WP 125 when it has started to set. Stiffened material must be disposed. 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 www.velosit.de.

Manufacturer

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