

VELOSIT® EA 332

Epoxy Bonding Bridge For Concrete



Application fields

VELOSIT EA 332 is a epoxy resin based adhesive for concrete, masonry and steel. It is designed as a bonding bridge for new concrete on existing surfaces or the VELOSIT RM repair mortars on critical substrates. Typical application fields besides others are as follows:

- Priming of concrete and masonry for following concrete pours
- Prime coat for concrete repair systems of the VELOSIT RM range
- Can be used for vibrated floor systems as a bonding bridge between tiles and mortar bed

Properties

VELOSIT EA 332 is a 2 component solvent free epoxy adhesive and bonding bridge.

VELOSIT EA 332 can be applied by brush, roller or suitable spray equipment.

- Long pot life for best adhesion between new and old concrete
- 60 min. working time a
- Final compressive strength of more than 60 MPa (8700 psi) after 28 days
- Very good adhesion to concrete and masonry
- Good resistance against aggressive media with a pH range of 1-12 and against soft water with low ion content
- Excellent adhesion on damp substrates

Application

1.) Substrate preparation

VELOSIT EA 332 is designed for substrates like concrete, masonry and steel.

a.) Steel must be prepared to a purity of SA 2 acc. SIS 05 5900.

b.) Concrete substrates must be prepared with sand blasting, shot blasting or ideally high pressure water blasting (>100 bar/1450 psi) to remove all bond breaking substances.

Remove all carbonated concrete. Test with Phenolphthalein or other suitable indicator until concrete with sufficient alkalinity for rebar protection is reached. If rebar is exposed remove concrete at least 6 mm (¼") behind rebar to fully embed the steel into VELOSIT repair system.

Substrate must be rough, open porous and load bearing. The minimum requirement for adhesive strength is 2.0 MPa (290 psi) and for the compressive strength 30 MPa (4350 psi). Active water leaks must be treated and fully stopped with VELOSIT PC 221. Leaking cracks need to be sealed with a PU injection material.

2.) Processing

Mixing: VELOSIT EA 332 is supplied in two packs with the A- and B-component in the correct mixing ratio. Make sure the material is between 15 and 28°C (59-82°F) before mixing. Hot material may react very fast whereas too cold material has a higher viscosity and will not penetrate into the substrate as desired.

Open the A-component and stir it with a slow speed drill to evenly distribute all fillers throughout the resin. Then add the full amount of B-component and continue stirring for approx. 2 min.

Fill the mixed material into a clean pail and re-stir for another 30 sec. The mix must be completely streak-free.

Brush application: Apply one coat with a brush or roller in crossing applications to the substrate at the specified rate. Concrete or VELOSIT RM repair mortar must be applied within the pot life while the material is still tacky. This is up to 2 hours at 23°C. Colder temperatures extend, warmer temperatures shorten this time.

3.) Curing

VELOSIT EA 332 does not require curing as it reacts by itself.

Estimating

Brush, roller or spray application:

VELOSIT EA 332: 0.3 - 0.8 kg/m² (1-3 oz/ft²)

Cleaning

VELOSIT EA 332 can be removed in the fresh state with solvents. Once it has cured only mechanical removal is possible

Quality features

Color:	gray
Mixing ratio by weight:	100 : 50
Density:	1.64 kg/l
Substrate temperature:	5 – 35°C* (40-95°F)

Compressive / flexural strength:	
7 days :	65 / 34 MPa (9425/4930 psi)
Adhesive strength:	3.3 MPa (479 psi)

Packaging

VELOSIT EA 332 is available in 10 kg (22 lb.) kits.

Storage

VELOSIT EA 332 can be stored in unopened original packs for 24 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.

Used product containers must be emptied completely after use. They can be returned to VELOSIT GmbH & Co. KG on request.

Recommendations

VELOSIT EA 332 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 www.velosit.de.

Effective date

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Manufacturer

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