

 **velosit**



semper velox



Waterproofing Systems

www.velosit.de

VELOSIT® WP 120

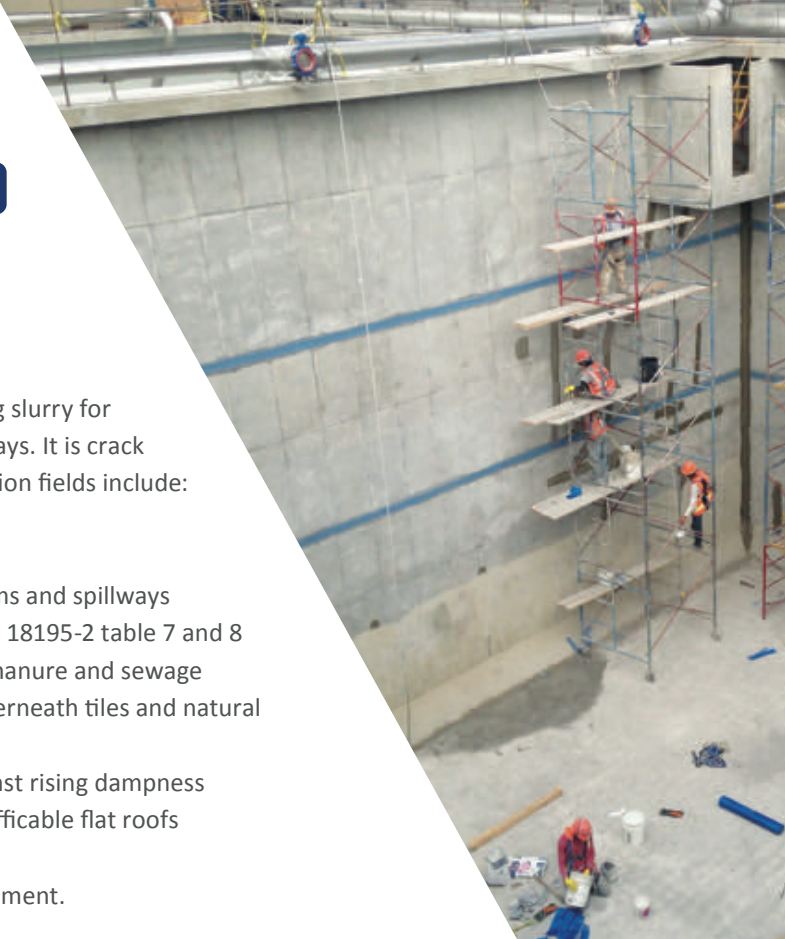
Highly Flexible Cementitious Waterproofing Slurry

Application fields

VELOSIT WP 120 is a polymer modified cementitious waterproofing slurry for concrete and masonry. It is a good substrate for coatings and overlays. It is crack bridging and a good barrier against carbon dioxide. Typical application fields include:

- Waterproofing of
 - basements
 - below grade parking structures
 - potable water structures
 - swimming pools
 - green roofs
- Protective coating on dams and spillways
 - Waterproofing acc. DIN 18195-2 table 7 and 8
 - Coating of tanks for manure and sewage
 - Waterproofing underneath tiles and natural stones
 - Protection against rising dampness
 - Coating of trafficable flat roofs

VELOSIT WP 120 is applied by brush, trowel or suitable spray equipment.



Properties

- Crack bridging
 - Highly flexible, tensile elongation > 100%
 - Easy to apply
 - Resists 50 m (160 ft.) water pressure acc. to EN 12390-8
 - 60 min. working time
 - Final strength is achieved within 5-7 days
 - 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
 - Good resistance against aggressive media with a pH range of 3-12 and against soft water with low ion content
 - Good weathering and UV resistance
 - Potable water approved
 - Good sulfate resistance



VELOSIT CW 111

High Strength Crystalline Waterproofing

Application fields

VELOSIT CW 111 is a crystalline waterproofing slurry for concrete substrates. It is very economic and easy to apply. **VELOSIT CW 111** becomes part of the concrete and creates a waterproof layer inside the concrete itself. It is especially strong against negative side water pressure.

Typical application fields include:

- Waterproofing of
 - basements
 - below grade parking structures
 - potable water structures
 - sewage structures
 - tunnels and pipelines
 - elevator pits
- Protection of dams and spill-ways
- Slab waterproofing (dry shake application)

VELOSIT CW 111 can be applied by brush, dry-shake or suitable spray equipment.



Properties

- Self healing properties of up to 0.4 mm static cracks
 - Unsurpassed strength development with more than 20 MPa (2900 psi) after 24 h and more than 50 MPa (7250 psi) after 28 days
 - Extreme adhesive strength (concrete failure)
 - Shrinkage compensated, no spider-web cracking
- Water curing only under hot and dry conditions required for 4 hours
 - Good resistance against aggressive media with a pH range of 3-12 and against soft water with low ion content
 - Potable water approved
 - Ready for water filling or backfill after 24 hours



VELOSIT WP 101 and VELOSIT WP 102

High Strength Cementitious Waterproofing Slurry

Application fields

VELOSIT WP 101 is a cementitious waterproofing slurry for concrete and masonry. It is a good substrate for coatings and overlays. It is especially strong against negative side water pressure. Typical application fields include:

- Waterproofing of
 - basements
 - below grade parking structures
 - potable water structures
 - elevator pits
- Waterproofing against rising dampness in walls
 - Negative side waterproofing underneath flexible waterproofing membranes
 - Prime coat to fill blow holes, honeycombs and surface roughness

VELOSIT WP 101 is applied by brush, trowel or suitable spray equipment.

Properties

- Resists 130 m (400 ft.) water pressure acc. to EN 12390-8
- 45 min. working time and 12 MPa compressive strength after 4 hours
- Final strength of more than 50 MPa (7250 psi) after 28 days
- Ready for water pressure after 24 h
- Very good adhesion to concrete and masonry
- Water curing only under hot and dry conditions required for max. 4 hours
- No cracking if applied too thick

Additional properties of VELOSIT WP 102:

- 15 min. working time and 12 MPa compressive strength after 4 hours
- Open to foot traffic after 2 hours
- Water curing only under hot and dry conditions required for max. 2 hours



VELOSIT DB 830

Joint Sealing Tape

Application fields

VELOSIT DB 830 is a waterproof joint sealing tape used for waterproofing of construction and expansion joints.

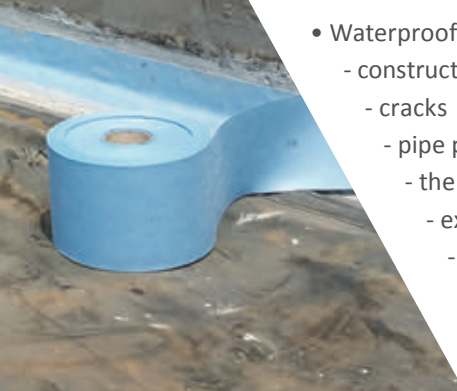
Typical application fields include:

- Waterproofing of
 - construction joints between different concrete pours
 - cracks
 - pipe penetrations
 - the wall-slab joint
 - expansion joints
 - interfaces between substrates with different expansion behaviour

Properties

VELOSIT DB 830 is a highly flexible joint sealing tape with good resistance against hydrostatic pressure. It is applied with a suitable adhesive over cracks, construction or expansion joints.

- > 300% tensile elongation
- Minimal thickness makes it an especially suitable substrate for tile applications
- Resists 50 m (160 ft.) water pressure acc. to EN 12390-8
- Good chemical resistance against many typical media
- UV stable



VELOSIT WP 121

Rapid Flexible Cementitious Waterproofing Slurry

Application fields

VELOSIT WP 121 is a polymer modified cementitious waterproofing slurry for concrete and masonry. Due to its fast curing characteristics it is especially suitable in cool and humid environments. It is a good substrate for coatings and overlays. It is crack bridging and a good barrier against carbon dioxide. Typical application fields include:

- Waterproofing of
 - basements
 - below grade parking structures
 - potable water structures
 - swimming pools
 - green roofs
- Protective coating on dams and spillways
- Waterproofing acc. DIN 18195-2 table 7 and 8
- Coating of tanks for manure and sewage
- Waterproofing underneath tiles and natural stones
 - Protection against rising dampness
 - Coating of trafficable flat roofs

Properties

- Crack bridging
- Highly flexible, tensile elongation > 60%
- Easy to apply
- Resists 50 m (160 ft.) water pressure acc. to EN 12390-8
 - 30 min. working time
 - Final strength is achieved within 2-3 days
 - Open to foot traffic after 2-3 hours (23°C/60% r.h.)
- Ready for water pressure after 1 day
- Very good adhesion to concrete and masonry
- Good resistance against aggressive media with a pH range of 3-12 and against soft water with low ion content
- Good weathering and UV resistance
- Potable water approved
- Good sulfate resistance

VELOSIT WP 121 is applied by brush, trowel or suitable spray equipment.



VELOSIT WP 124

Flexible Cementitious Waterproofing Slurry

Application fields

VELOSIT WP 124 is a polymer modified cementitious waterproofing slurry for concrete, stone and masonry. **VELOSIT WP 124** creates a good barrier against water and carbon dioxide whilst maintaining good crack bridging capabilities.

VELOSIT WP 124 is a good substrate for coatings and overlays with good abrasion resistance. **VELOSIT WP 124** can be processed to a flexible or semi-flexible product depending on the polymer addition. Typical application fields include:

- Basements and below grade structures
- Dams and spillways
- Covered roofs
- Terraces and balconies below tiles and natural stone
- Small & medium sized swimming pools
- Inaccessible and lightly trafficked roofs
- Planted roofs of residential villas

VELOSIT WP 124 can be easily applied by brush, trowel or suitable spray equipment.

VELOSIT CA 115

Liquid Crystalline Waterproofing Concrete Admixture

Application fields

VELOSIT CA 115 is an easy to use, economic, liquid crystalline waterproofing concrete admixture.

VELOSIT CA 115 creates a crystalline “nano” structure within the concrete matrix, reducing the diameter of capillaries and sealing of any micro static cracks (up to 400 microns). Typical application fields include:

- Basements and below grade parking structures
- Potable water structures
- Sewage retaining structures
- Tunnels and pipes
- On grade slabs, rafts and pile caps
- Providing waterproof shotcrete

VELOSIT CA 115 is mixed into the concrete either at the batching plant or in the mixer truck on site.

Properties

- Crack bridging
- High flexibility, tensile elongation > 60% (25A+8B)
- Resists 50 m (160 ft.) water pressure according to EN 12390-8
- 60 min. working time
- Final strength is achieved within 7 days
- Ready for water pressure after 5 days
- Very good adhesion to concrete and masonry
- Good weathering resistance

Properties

- **VELOSIT CA 115**-administered concrete self-seals both existing and futuristic static cracks of up to 0.4 mm
- Properly formulated mix designs result in waterproof concrete resistant against up to 13 bars
- Quick dispersion; easy to mix with no lumping or need for extensive mixing times
- Minimal influence on concrete setting time
- Increased resistance against low-ion soft water and aggressive media with a pH range of 3-12
- Suitable for potable water

Use **VELOSIT WS 801**, re-swellable thermoplastic waterstop (+1000% volumetric expansion in potable water) in all construction joints to complement the water tightness of **VELOSIT CA** range, our crystalline concrete waterproofing concrete admixtures

VELOSIT CA 112

Crystalline Waterproofing Admixture

Application fields

VELOSIT CA 112 is a crystalline waterproofing admixture for concrete. It is very economic and easy to apply. VELOSIT CA 112 creates a crystalline structure inside the concrete reducing the amount and diameter of the capillary pores. Typical application fields include:

- Waterproof concrete for basements and below grade parking structures
- Waterproofing of shotcrete

VELOSIT CA 112 is mixed into the concrete either at the batch plant or on site into the batch truck.

Properties

- Self healing properties of treated concrete of up to 0.4 mm static cracks
- Waterproof up to 13 bars in properly formulated mix designs
- Increased final strength



VELOSIT CA 113

Crystalline Hydrophobic Waterproofing Admixture

Application fields

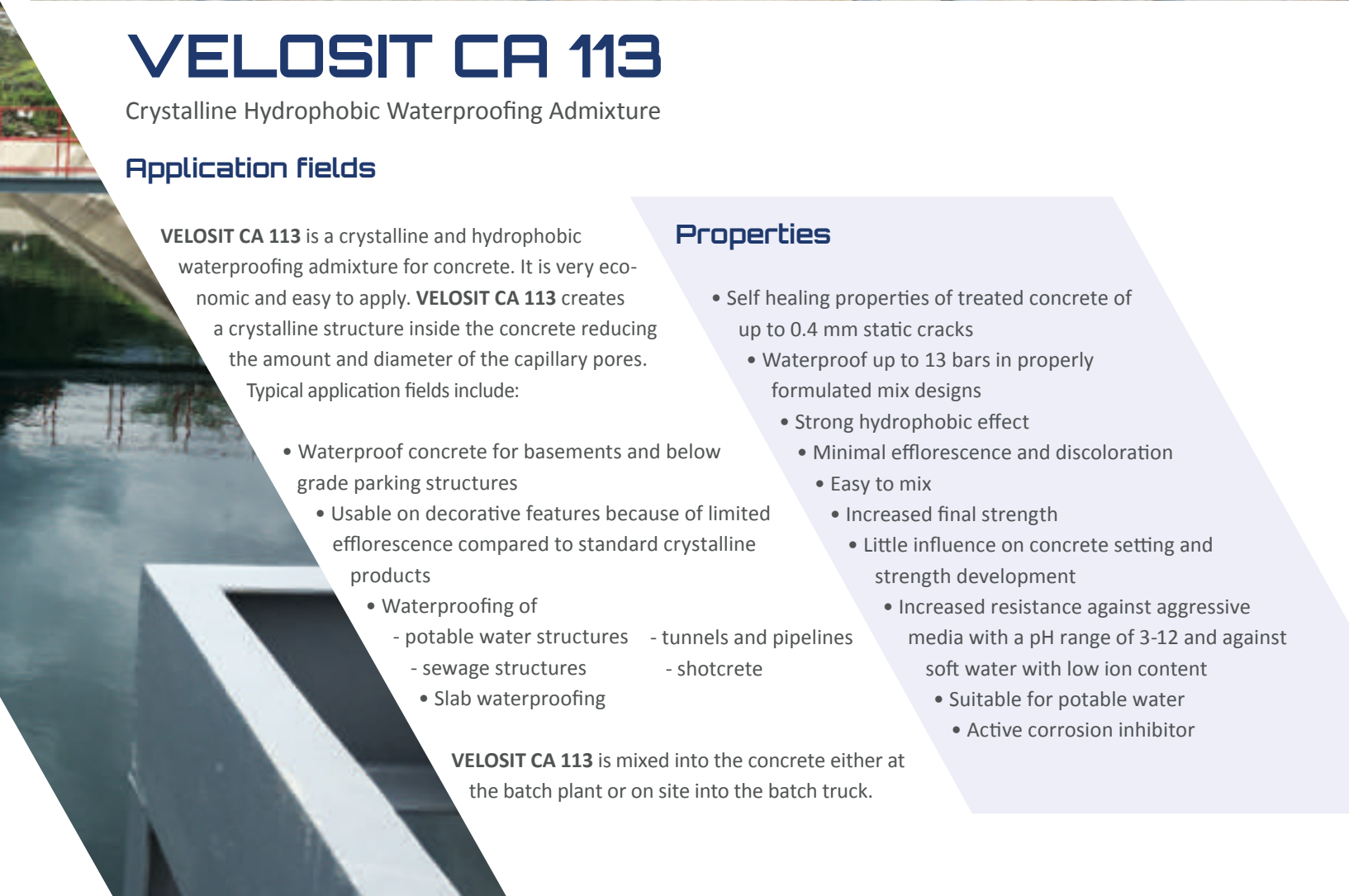
VELOSIT CA 113 is a crystalline and hydrophobic waterproofing admixture for concrete. It is very economic and easy to apply. VELOSIT CA 113 creates a crystalline structure inside the concrete reducing the amount and diameter of the capillary pores. Typical application fields include:

- Waterproof concrete for basements and below grade parking structures
- Usable on decorative features because of limited efflorescence compared to standard crystalline products
- Waterproofing of
 - potable water structures
 - sewage structures
 - tunnels and pipelines
 - shotcrete
- Slab waterproofing

VELOSIT CA 113 is mixed into the concrete either at the batch plant or on site into the batch truck.

Properties

- Self healing properties of treated concrete of up to 0.4 mm static cracks
- Waterproof up to 13 bars in properly formulated mix designs
- Strong hydrophobic effect
- Minimal efflorescence and discoloration
- Easy to mix
- Increased final strength
- Little influence on concrete setting and strength development
- Increased resistance against aggressive media with a pH range of 3-12 and against soft water with low ion content
- Suitable for potable water
- Active corrosion inhibitor





VELOSIT GmbH & Co. KG was founded May 2014 to offer the construction market alternative solutions for time critical projects. We supply high performance systems that allow you to finish your work significantly sooner without compromising on quality. VELOSIT is an innovative start-up organization. It is our mission to accelerate the construction process. You will find decades of experience in R&D, production and consulting of high performance construction materials in our team.

This experience is used to supply products on the latest technological basis for the construction industry. You will find the novel VELOSIT binder technology in our dry mortar products.

The technology allows fast setting products that cure almost without shrinkage and become completely water resistant. All our system components are perfectly aligned as they are based on a “platform technology”. This allows us to create product variants with very predictable and safe properties.

Our waterproofing and protective coating materials are based on the polyurea technology with its extraordinary physical properties.