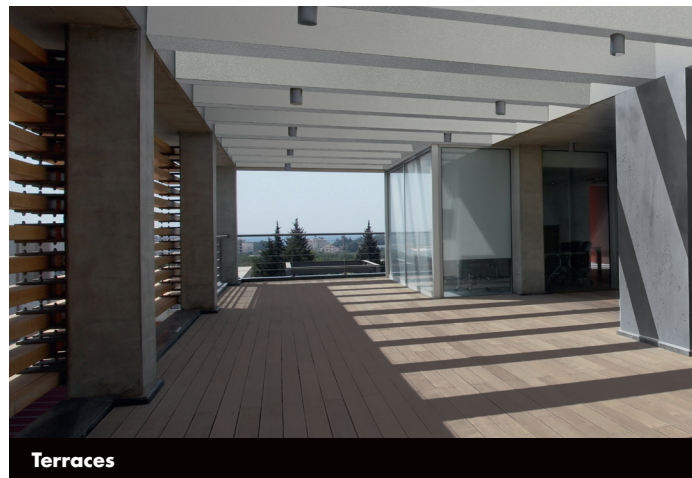




CR 166

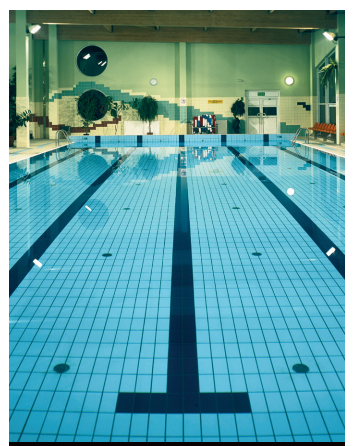
Application areas
 Excellent water resistance and flexibility of CR 166 offers a wide range of applications, also on deformable substrates. Perfect for damp and wet areas, underground constructions and under tiles or wood on balconies & terraces as waterproofing and concrete protection.



Terraces



Balconies



Swimming pools



Water tanks



Foundations



Pillars



Basements



Find out more on:

CR 65 Waterproof CR 90 Crystalizer CR 166 Flexible 2-C



Components	1-C	1-C	2-C
Flexibility	Rigid	Rigid	Flexible
Benefits	<ul style="list-style-type: none"> waterproof high adhesion resistant to positive & negative water pressure vapour permeable frost resistant easy & universal in application 	<ul style="list-style-type: none"> waterproof with crystallising effect seals hairline cracks in the concrete compatible with sealing tapes high chemical resistance easy & universal in application 	<ul style="list-style-type: none"> highly waterproof flexible & reinforced with fibres highly crack bridging dust reduced fast in application high chemical resistance easy & universal in application

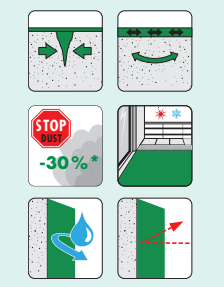
Main characteristics			
Watertightness	++	++	+++
Resistance to positive water pressure	10 m	15 m	70 m
Resistance to negative water pressure	5 m	5 m	70 m
Concrete protection – EN 1504-2	+++	-	+++
Crack bridging ability in 23°C – EN 14891	-	-	≥ 0,75 mm
Crack bridging ability in -5°C – EN 14891	-	-	≥ 0,75 mm
Compatible with sealing tapes	-	+	+++
Waterproofing under tiles	++	++	+++
Tiles application after	7 days	3 days	12 h
Loading after	7 days	5 days	7 days
Frost resistant	+++	+++	+++
Dust reduction	-	-	++

Application areas			
Kitchens	+++	-	+++
Bathrooms	+++	-	+++
Industrial kitchens	-	-	+++
Public bathrooms, wellness, spa areas	-	-	+++
Pools	-	-	+++
Small pools up to 20 m²	-	++	+++
Balconies	-	+	+++
Terraces	-	-	+++
Basements, cellars	+++	++	+++
Foundations, socles	+++	+++	+++
Garages	++	-	++
Bridges, pillars	+++	-	+++
Production halls	+	+	+++
Agricultural objects	+	++	+++
Water tanks (incl. potable water ones)	++	++	+++
Sewage treatment stations	-	++	+++
Critical, deformable surfaces	-	-	+++
Heated floors	-	-	+++
Underground construction	++	++	++
Concrete structures	+++	+++	+++



CR 166 FLEXIBLE 2-C:

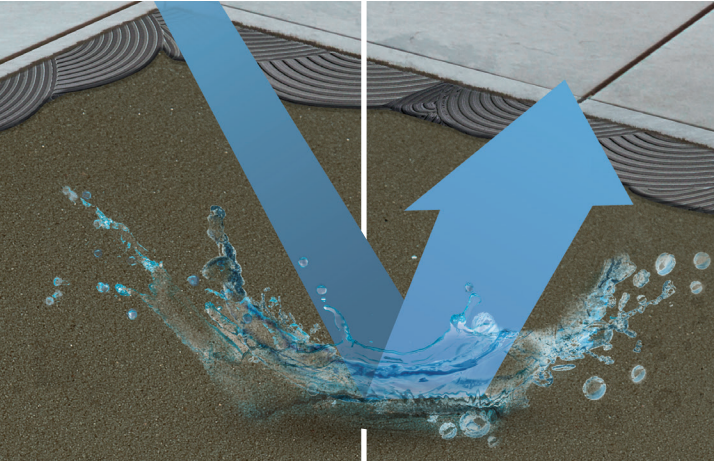
- highly waterproof
- flexible and reinforced with fibres
- crack bridging, even in minus temperatures
- dust reduced
- fast and easy to apply
- trusted solution for any demanding area



* 30% less dust comparing to CR 166 without Fibre Force technology

Working time	Up to 60 min
Consumption	3,5 kg/m² at 2 mm thickness
Mixing ratio	for brush application or spraying: 24 kg of comp. A per 8 l of comp. B plus 2 l of water for roller application: 24 kg of comp. A per 8 l of comp. B plus 1 l of water for trowel application: 24 kg of comp. A per 8 l of comp. B
Base	compound A: a mixture of cement with selected mineral fillers, modifiers and fibres compound B: dispersion of polymers in water
Application temperature	from +5°C to +30°C
Tiles application	after 12 hrs
Crack bridging ability	≥ 0,75 mm in 23°C ≥ 0,75 mm in -5°C
Adhesion	Initial tensile adhesion strength: ≥ 0,5 N/mm² Tensile adhesion strength after water contact: ≥ 0,5 N/mm² Tensile adhesion strength after heat ageing: ≥ 0,5 N/mm² Tensile adhesion strength after freeze-thaw cycles: ≥ 0,5 N/mm² Tensile adhesion strength after contact with lime water: ≥ 0,5 N/mm² Tensile adhesion strength after contact with chlorinated water: ≥ 0,5 N/mm²
Water vapour permeability	class I Sd < 5 m
Capillary absorption and permeability to water	W < 0,1 kg/m²·h0,5
Resistance to positive water pressure	≤ 0,7 MPa
Resistance to negative water pressure	≤ 0,7 MPa
Reaction to fire	class E
CO₂ permeability	Sd CO₂ > 50 m
Adhesion strength by pull off test	system with crack pull-off test: bridging ability or elastic systems with no traffic load ≥ 0,8 N/mm²
Adhesion after thermal compatibility	after thunder shower cycling and after freeze-thaw cycling with de-icing salt immersion ≥ 0,8 MPa, fulfilled
Crack bridging ability (for the coat with fleece inlay)	class A2 ≥ 250µm (-20°C)
Impact resistance	class II ≥ 10Nm, no cracks, scratches and delamination
UV resistance	no bubbles, cracks and delamination after 1000 h exposition to UV radiation and humidity
Certificates	EN 14891 EN 1504-2 GEV Emericode EC1 ^{PLUS} – very low emission PZH certificate for contact with potable water number B-BK-60210-1548/20 valid until 18.11.2023. Proven radon tightness

CR 166
Ready for any water impact



CR 166 FLEXIBLE 2-C
waterproofing flexible slurry:

- highly waterproof
- flexible and reinforced with fibres
- crack bridging, even in minus temperatures
- dust reduced
- fast and easy to apply



Exceptional technology

HYDROSLIDE EFFECT

With Hydroslide technology, **the surface of CR 166 slurry is highly hydrophobic.** It means that water does not easily penetrate it, but stays on the surface in a form of round shape droplets, and then easily falls down.

Thanks to this property, the capillary absorption of water is reduced and the slurry can actively repel water, maintaining an optimal water vapour permeability. As a result, the surface waterproofed by CR 166 **dries out faster** and is **perfectly protected** against not only water itself but also against the penetration of aggressive substances dissolved in water like chlorides, de-icing salt or dirt and biological corrosion development (mold, algae, fungi).



Water stays on top of CR 166 surface



Water flows freely without soaking in

FIBRE FORCE TECHNOLOGY

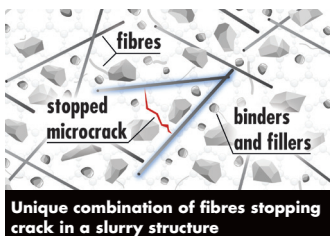
Fibre Force technology used in CR 166 is a synergistic mix of mineral and natural fibres which **provides additional reinforcement and ensures better flexibility, strength parameters and crack bridging properties.**

Fibres together with the dispersion, binders and fillers they create the reinforced matrix, durable and ready to stand high impacts, with excellent compressive, tensile and shear strength while bending. When performing under stress in changing weather conditions, the **slurry is more flexible and more resistant** to thermal tensions.

The fibres help to improve the post cracking behavior by mechanical bonding the microcracked material and **block further crack propagation.**



Visible fibres for strength and flexibility



Unique combination of fibres stopping crack in a slurry structure

- Stronger reduction of capillary absorption of water
- Lower penetration of aggressive substances dissolved in water
- Higher protection against dirt and biological corrosion
- Durable waterproofing and concrete protection
- Long lasting aesthetic effect

- Strong and reinforced surface
- Excellent flexibility
- Crack bridging and crack resistance
- Reduced dusting during application
- Excellent application parameters

Discover CR 166 features

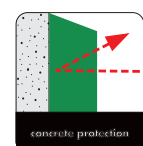
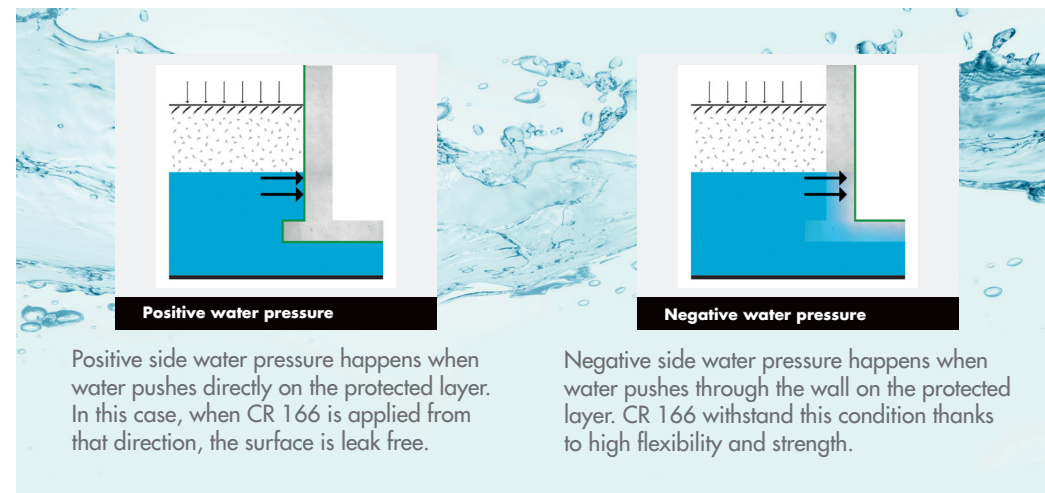


HIGHLY WATERPROOF

CR 166 is 2 component polymer-cementitious slurry, which acts as light, medium and heavy waterproofing. Can be used as a **final coating for concrete protection** (on substrates without mechanical impact) or **under the tiles.**

It **protects against water with positive pressure** of even 0,7 MPa, which allows for waterproofing of such areas / buildings like underground constructions, foundations, swimming pools or water tanks up to 70 m deep! **Thanks to adhesion strength it is also resistant to negative water pressure** up to 0,7 MPa, and this way can be used as hydro insulation of walls / floors from the opposite side to the water pressure (like underground spaces-cellar).

At the same time CR 166 secures high vapour permeability, and can be applied on damp substrate.



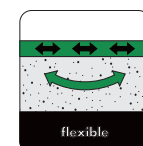
CONCRETE PROTECTION

CR 166 acts as a concrete protection layer too, **reducing capillary absorption of water and penetration of aggressive substances** (e.g. de-icing salts, sea water, chlorides, salts). Thanks to hydrophobic properties it reduces dirt pick up and humidity of the surface, this way minimizing conditions for biological corrosion development (mold, fungi, algae). It also delays carbonization process and shows high chemical resistance as well as resistance to UV.

This way CR 166 prevents deterioration and damage of concrete and reinforced concrete constructions and keeps buildings structures durable and long lasting.

It is recommended for concrete protection in case of bridges, pillars, garages, water tanks, potable water tanks, sewage treatments stations and other objects.

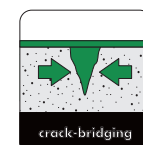
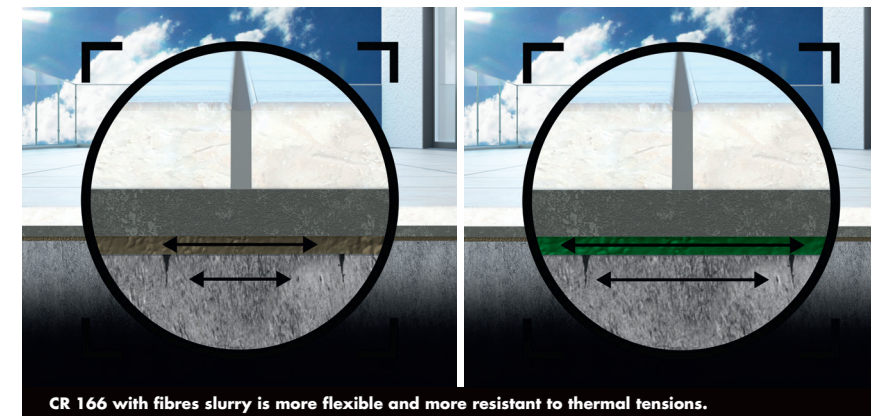
CR 166 is certified acc. to concrete protection norm EN 1504-2.



STRONG AND FLEXIBLE, REINFORCED WITH FIBRES

Due to additional reinforcement with fibres and formula with special polymer dispersion, carefully selected cements, binders and fillers, CR 166 offers high flexibility and strong adhesion to different substrates. It helps to counteract the impact of changing temperature, weather conditions that may cause deformation, as well as sustains various tensions and compensates thermal stresses.

CR 166 produces a waterproofing layer, which is durable and ready to withstand high impacts, with **excellent compressive, tensile and shear strength.**

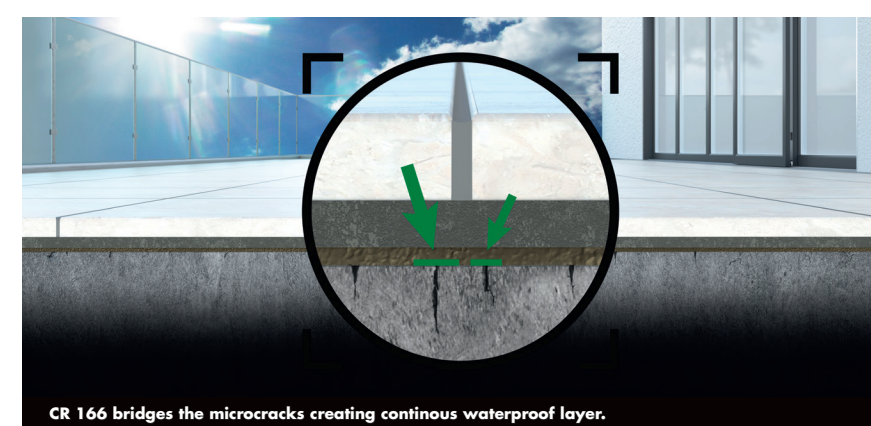
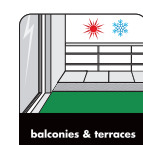


CRACK BRIDGING

Thanks to high flexibility, **CR 166 slurry is able to compensate cracks, even in minus temperatures.** Despite microcracks appearing in a substrate, CR 166 keeps coating's continuity, creating a "bridge" over the crack, to successfully protect the surface from water penetration and further damages.

It makes it a perfect choice while waterproofing on critical deformable substrates, where structural movements can cause microcracks, like outside, on balconies, terraces, under the tiles.

Crack bridging properties of CR 166 are confirmed with norm EN 14891.

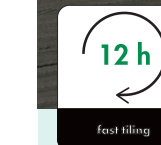


FAST AND CONVENIENT IN APPLICATION



Universal:

- Manual application with a trowel, brush or roller
- Sprayable
- For horizontal and vertical surfaces
- Compatible with a sealing tape



Fast:

- Fixing tiles after 12 hrs
- Possibility of water loading after 7 days
- No need for special reinforced mesh usage or special priming
- Darkening of the colour indicates drying



Easy:

- Reduction of dusting while mixing the components by 30%
- Excellent plasticity
- Easy and smooth mixing and application
- More healthy and convenient application for the craftsmen
- Environmentally friendly

CR 166



Safety & reliability

- Excellent waterproofing and concrete protection preventing deterioration of covered areas and construction elements
- Effective protection against damages caused by water and delamination of tiles layer
- CR 166 gives you total peace of mind

Cost effectiveness

- No need for new tiles installation followed by costly renovation
- Lower overall maintenance costs
- Higher property value due to great preservation

Time saving & convenience

- Universality of application
- Fast progress of application
- Short overall time of work completion

Sustainability

- Environmentally friendly
- Reduced dusting – safer application
- High durability and longer life-cycle of the building or construction object