

C 285 BETON-E

DATA SHEET

Protective elastomeric finish for concrete



Exteriors



Plastic containers



Roller



Brush



Spray

Composition

C 285 BETON-E is a paint made from special acrylic copolymers in aqueous emulsion, selected inert fillers, titanium dioxide, pigments and specific additives to improve application. Moreover, special molecules provide the product with additional broad-spectrum protection against the growth of algae and mould.

Supply

- 14 l packs and boxes of 6 × 1 l. Depending on the destination country, some sales formats may not be available
- Tints obtainable using the ColorLife paint mixing system

Use

C 285 BETON-E is a one-component water-based paint that creates a film on the surface through exposure to natural light; it is used as a protective and decorative finish on concrete structures, protecting them against carbonation, or as a finish on lime-cement plasters and renders with microcracks (maximum width 0.3 mm). C 285 BETON-E, after drying, features excellent resistance to ageing, frost and de-icing salts; it is compliant with EN 1504-2:2005 (surface protection systems for concrete), for class (C) coatings, in accordance with principles 1.3 (protection against ingress, PI), 2.2 (moisture control, MC), 8.2 (increasing resistivity, IR), system of attestation of conformity 2+, annex ZA.2.

Substrate preparation

The surface being painted must be dry and free from dust, dirt, etc. Any traces of oils, greases, waxes, etc. must be removed beforehand.

If the surfaces are in a state of deterioration due to stains and various types of persistent dirt, before beginning the painting cycle, these should be treated with ACTIVE ONE solution for cleaning walls (see the datasheet). Depending on the state of deterioration, the cleaning treatment may be repeated, with the addition of mechanical brushing.

Any existing crumbling plasters or renders and/or old paint that is flaky or coming loose must be carefully removed mechanically, until obtaining a solid and compact substrate. Smooth over all the irregularities on the substrate and then apply the high-penetration micro-emulsion primer MIKROS 001 or the acrylic-system primer FA 249 (see the datasheets). Alternatively, it may be worth evaluating the use of the solvent-based primer, after appropriate testing.

For new applications of finish, skim coat and smooth coat plasters and renders, wait until these have completely cured before applying the primer to the surfaces. In general, the priming treatment is to be used on all substrates that feature differences in absorption and/or slight surface dusting.

Make sure that the surface treated with primer does not have a glossy appearance after treatment.

Application

The product can be applied by brush, wool roller or honeycomb roller, or airless paint sprayer.

Apply at least two layers (in opposite directions), 24 hours apart. To maximise protection of the substrate being treated, apply without dilution, after suitably mixing the product.

Dilution of C 285 BETON-E by weight with water: from 0 to 15%.

For application by airless paint sprayer, dilution varies according to the equipment used and the operating pressure.

Warnings

- Product recommended for expert users.
- Always read the safety data sheet before use.
- Wear protective gloves and protective clothing, and in the event of contact with the skin wash with plenty of water and soap.
- Use water to clean tools.
- Wash water from tools and any product residues must not be released into the environment or into domestic drains. The container/product/wash water must be disposed of in accordance with national laws.
- Ensure all material for the job is taken from the same batch.
- Avoid application at temperatures below +5°C and above +30°C.
- Avoid applying on surfaces exposed to direct sunlight or strong winds.
- Only apply C 285 BETON-E on cured and dry substrates.
- Do not apply on damp masonry and/or in colder periods, as the substrate may detach and the paint may blister due to the accumulation of moisture inside.
- Do not use when rising damp is present.
- Do not use for waterproofing horizontal surfaces or surfaces intended to be constantly under water.
- Do not use for surfaces that will be walked on.
- Exterior façades coated with C 285 BETON-E, during application and on the days after drying, must be protected against rain or other precipitation and high relative humidity in the atmosphere (fog) to prevent phenomena such as "streaking", washing away, stains, colour alterations, etc. C 285 BETON-E is completely hardened after around 7 days at +20°C.
- Given the large number of mould species and different climatic conditions, in some cases the additives used may not guarantee complete disappearance or stop the spread of certain plant microorganisms over time.
- Incorrect dilution of the material will affect product workability and cause a decline in its technical characteristics.
- Additional note regarding the product packaged in recycled plastic packaging, easily recognisable by the grey colour. The variability of the raw materials making up this type of packaging may mean that the mechanical strength and colour of the packaging is inconsistent. Therefore, pay the utmost care when transporting and handling the product. Store protected from frost and direct sunlight, at a temperature between +5 °C and +35 °C.
- The images and illustrations are purely indicative. The characteristics and qualities of the product specified on the datasheet remain unchanged, regardless of the external appearance of the container.
- The information provided on this technical datasheet is based on our technical and practical knowledge and experience. The technical data refer to the average characteristics of the basic product and are determined under controlled laboratory conditions. The variability of the natural raw materials available on the market and the tinting of the product can lead to slight deviations in the declared values, in the colour and in the aesthetic effects obtained. It is therefore necessary for the purchaser/user to personally verify, before application, the suitability of the product for the intended use, in particular when different lots of the same material are used in the same project/site (this is however not recommended as per point 6 of these warnings).

C 285 BETON-E must only be used as supplied without the addition of other materials, except for dilution with water.

Storage

Protect from frost. Store at temperatures between +5 °C and +35 °C. If stored in a cool, dry place, away from sources of heat and sheltered from direct sunlight, in its sealed original packaging, the material has a shelf life of 12 months from the date of production stated on the label. Once the product has expired, it must be disposed of in accordance with current legislation.

Quality

C 285 BETON-E undergoes accurate and continuous checks in our laboratories. The raw materials used are rigorously selected and controlled.

Technical Data

Specific weight (EN ISO 2811-1)	1.40 ± 0.05 kg/l
Recommended consumption (**)	Approx. 200 - 400 g/m ² (0.14 - 0.29 l/m ²) per coat
Recommended yield (**)	Approx. 1.7 - 3.6 m ² /l when applied (two coats)
Overcoatable (20°C and 65% R.H.)	approx. 24 hours
Classification EN 1062-1	
Gloss (EN ISO 2813)	Class G3, matt (≤ 10 GU at 85°)
Dry film thickness (EN 1062-1)	Class E2 at a consumption of 0.16 l/m ² (50 µm < E ≤ 100 µm)
Dry film thickness at a recommended average consumption of 0.5 l/m ²	Class E4 (200 µm < E ≤ 400 µm)
Grading (EN ISO 1524)	Class S1, fine (S < 100 µm)
Water vapour transmission rate (EN ISO 7783)	Class V2, medium (0.14 m ≤ Sd < 1.4 m)
Liquid water permeability (EN 1062-3)	Class W3, low (W ≤ 0.1 kg/m ² ·h ^{1/2})
Crack bridging (EN 1062-7)	Class A3 (23 °C)
Permeability to CO ₂ (EN 1062-6)	Class C1 (Sd > 50 m)
Performance in accordance with EN 1504-2	
Permeability to CO ₂ (EN 1062-6)	Compliance (Sd > 50 m)
Water vapour permeability (EN ISO 7783)	Class I (Sd < 5 m)
Capillary absorption and water permeability (EN 1062-3)	Compliant (W < 0.1 kg/m ² ·h ^{1/2})
Thermal compatibility: freeze-thaw cycles with de-icing salt immersion (EN 13687-1)	Compliant (Adhesion strength ≥ 0.8 N/mm ²)
Thermal compatibility: storm cycles (EN 13687-2)	Compliant (Adhesion strength ≥ 0.8 N/mm ²)
Direct tensile adhesion strength (EN 1542)	Compliant (Adhesion strength ≥ 0.8 N/mm ²)
Crack bridging (EN 1062-7)	A3 (23°C), A1 (-20°C)
Reaction to fire (EN 13501-1)	Euroclass F
Exposure to artificial weathering (EN 1062-11)	Compliance
(**) The values refer to white product applied on smooth substrates of average absorbance; these should be verified by preliminary tests on the specific substrate, in relation to the chosen colour.	
EU limit value of VOC content (Directive 2004/42/EC)	Category A/c, WB: VOC maximum 40 g/l product VOC <40 g/l

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: area.tecnica@fassabortolo.com, PT: assistencia.tecnica@fassabortolo.com, FR: bureau.technique@fassabortolo.fr, UK: technical.assistance@fassabortolo.com).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.