

ELASTOCEM

ELASTOMERIC ACRYLIC ANTI-MOULD EMULSION PAINT FOR CONCRETE

series 390

DESCRIPTION

ELASTOCEM is a highly washable, anti-algae water-based decorative coating with a flat finish. It can be used to paint exterior cement walls which require an effective anti-carbonation barrier and a high degree of protection against the weather and chemical substances. The product is CE marked, it respects regulation EN 1504-2 which lays out the performance requirements for products used to repair and protect concrete structures. ELASTOCEM has been tested in line with EN 1062-7 standard (Determination of crack bridging properties). The binder is an elastomeric acrylic polymer that gives the product the proper elasticity needed to protect surfaces with hairline cracks or crevices up to 500 µm and to withstand eventual expansion of the substrate.

INSTRUCTIONS FOR USE

The product can be applied on the following surfaces: reinforced concrete, whether made on site or prefabricated. exterior cement, even exposed to harsh conditions.

TECHNICAL SPECIFICATIONS

-Type of Binder: elastomeric acrylic copolymers

Performance characteristics relative to CE marking

- * Classification EN 1504-2: protection against ingress (PI) - coating (C) – system of conformity attestation 4 (data refers to concrete, for a dry film thickness of 150 µm).
- * CO₂ Permeability per UNI EN 1062-6: Sd>50 m (obtainable with a thickness of 110 µm)
- * Water vapour transmission rate per UNI EN ISO 7783-2: class I, Sd<5 m
- * Liquid water permeability per UNI EN 1062-3: w<0.1 kg/m²h^{0.5}
- * Bond strength by pull-off per UNI EN 1542: >1 MPa
- * Crack-bridging per UNI EN 1062-7: class A1 (23 °C)
- * Crack-bridging per UNI EN 1062-7: class A3 (-10 °C) (with a dried thickness of 550 µm)

Classification per UNI EN 1062-1: (paints for exterior)
.Gloss per EN ISO 2813: class G₃ (<10 matt)
.Dry film thickness per ISO 3233: class E₂ (50-100 µm)
.Grain size per EN ISO 1524: class S₁ (<100 µm fine)
.Water vapour transmission rate per UNI EN ISO 7783-2: class V₂ (0,14≤Sd<1,4 m medium)
.Liquid water permeability per UNI EN 1062-3: class W₃ (W≤0,1 low)
.Crack-bridging per UNI EN 1062-7A: class A₃ (-10 °C)
.CO₂ permeability per UNI EN 1062-6: class C₁ (<5 g/m²d, Sd>50 m)

Other characteristics

- Specific gravity per UNI EN ISO 2811-1: 1,39±0,05 kg/l
- Viscosity per UNI 8902: 29600 ± 2400 cps at 25 °C (Brookfield viscometer)
- Wet-scrub resistance per UNI 10560: >10000 cycles, excellent
- Mould and algae resistant per UNI EN 15457 and UNI EN 15458

- Drying time (at 25 °C and 65% R.H.): to touch in 1 hour; to recoat after 8 hours.

PREPARING THE SURFACE

Concrete surface:

- Make sure that the surface is thoroughly dried and aged. Resurface or consolidate using specific products if necessary.
- If mold is present, treat the surface with COMBAT 222 cleanser code 4810222, and with COMBAT 333 reconstruction code 4810333. To protect the masonry from the formation of mold, add the sanitizer COMBAT 111 code 4810111 to the product.
- Brush or wash to remove any efflorescence and any old peeling paint. Completely eliminate any raised layers of lime-based or tempera paints.
- Remove any dust, smog or other deposits by brushing.
- Remove any crumbling structural cement.
- The metal reinforcement disks visible on the surface must be carefully brushed and treated with BETOXAN PRIMER 9490125 passivating agent.
- Restore the missing parts with the smoothing coats BETOXAN 400 or BETOXAN 300 Non-shrinking thixotropic fiber-reinforced mortar 9490140/130; perform the final smoothing with BETOXAN 200 Non-shrinking anti-carbonation smoothing coat 9490120.
- Make sure that the support is completely dry and apply a coat of ISOMARC 4410111 solvent-based wall fixative or micronized solvent-free fixative ATOMO 8840001.
- Apply ELASTOCEM as described in the application instructions.

(The thinning of the fixative and the quantity to be applied depend on the level of absorption of the surface and should be determined by performing preliminary tests on the specific surface.)

APPLICATION INSTRUCTIONS

- Air and support surface conditions:
Air temperature: Min. +8 °C / Max. +35 °C
Relative environmental humidity: <75%
Support surface temperature: Min. +5 °C / Max. +35 °C
Moisture level of the support surface: <10%
- Avoid applying when surface condensation is present, or in direct sunlight.
- To avoid compromising the optimal appearance and performance of the product, we recommend that it be applied only in the aforementioned climate conditions, and that the surfaces be protected from rain and damp for approximately 48 hours. This will allow the product to dry completely and ensure even polymerization, which takes place in approximately 10 days.
- Surfaces bathed by rainwater during the approximately 10 days, could show translucent vertical lines. Such an occurrence does not compromise the product's performance, and may be removed by high-pressure water cleansing or after subsequent rainfalls.
- Application on surfaces with salt efflorescence or subject to rising damp may interfere with the product's adherence to the support. It is therefore necessary to first reconstruct

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the masonry using dehumidifying plasters, then paint with the NEPTUNUS and SCUDOSIL siloxanic system.

- The protection of anti-mold and anti-algae finishes is of sacrificial nature: the efficacy and durability are strongly influenced by the severity of the environmental and climatic exposure, the building category, and the application system selected.

- Tools: brush, long-bristle wool roller, spraying and airless.

- By brush or roller ELASTOCEM is ready to be used or can be thinned at max. 15% with water.

- By airless spraying, diluting varies according to the unit and operating pressure used.

- Tools should be cleaned immediately after use with water.

- No. of coats: depending on the type of operation to be carried out, according to what is shown in the classification below.

Application of further coats of ELASTOCEM related to the quantity foreseen in the class relative to the operation will not impair the bridging.

Classe A1

For shrinkages with a maximum breadth of 100 µm (0.1 mm)

Apply ELASTOCEM with a total consumption of 3-3.5 m²/l in 2 coats. With this consumption, a 15 l pack will cover up to 50 m².

Classe A2

For cracks with breadth in excess of 100 µm and under 250 µm (0.25 mm)

Apply ELASTOCEM with a total consumption of 2.5-3 m²/l in 2 coats. With this consumption, a 15 l pack will cover up to 40 m².

Classe A3

For cracks with breadth in excess of 250 µm and under 500 µm (0.5 mm)

Apply ELASTOCEM with a total consumption of 1 m²/l in 2 or more coats. With this consumption, a 15 l pack will cover up to 15 m².

TINTING

The product may be tinted by means of the Marcromie Color Matching System.

When using multiple batches it is recommended to remix the various products together to avoid slight differences in shading.

For outdoor tasks it is a good rule of thumb to always use material from the same batch, from corner to corner. For tasks where it is unavoidable to continue on a wall with a different batch, do not place the batches contiguously. For the transition point, use any interruptions in the continuity of the surface: moldings, corners, cables, etc.

STORAGE

Maximum temperature for storage stability: +30 °C

Minimum temperature for storage stability: +5 °C

The product should be preferably used within 2 years from date of manufacture when stored in original unopened

containers and in appropriate temperature conditions.

SAFETY RULES

Limit value EU (Dir. 2004/42/EC)

Cat. A/c: Coatings for exterior walls of mineral substrate (water-base): 40 g/l (2010)

The product contains max: 40 g/l VOC

Harmful to aquatic life with long lasting effects.

The product must be transported, used and stored in accordance with the standards in force regarding hygiene and safety; let the residues dry out completely and treat them as special waste. Consult the safety data sheet for additional information.

SPECIFICATION ITEM

Water-based elastomeric acrylic anti-algae decorative paint for concrete, classified according to EN 1504-2 as protection against ingress (PI) - coating (C).

Applications, on preprepared concrete, of ELASTOCEM Elastomeric acrylic emulsion paint series 390 based on acrylic resin featuring a high level of elasticity, in aqueous solution, in at least 2 coats and in quantities determined by the absorption of the surface.

Supply and application of the material €. per sq m.

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