



ard f.lli raccanello s.p.a. industria vernici e smalti

TECHNICAL SHEET **75**

CODE 0.554

beton decor coprente

Anti-carbonation hiding waterproofer for exterior concrete

GENERAL PROPERTIES

BETON DECOR COPRENTE proves suitable for protecting and decorating interior & exterior cement structures, such as concrete and asbestos cement. It impedes peeling, lends a low degree of water absorption together with a notable water-repellent effect. Consequently, it inhibits ingress on the surfaces exposed to water, thus avoiding the formation of efflorescence.

BETON DECOR COPRENTE features a powerful barrier against the passage of carbon dioxide & sulphur dioxide preventing the acidification of concrete, which causes reinforcement corrosion.

Its specific broad-spectrum biocides lend an effective protection against the spreading of algae, fungi & mould.

“White” BETON DÉCOR COPRENTE, requires three coats in order to guarantee an optimum coverage.

INSTRUCTIONS

Substrate preparation:

- Remove any unsound paintwork, brush thoroughly to remove filth, flaky paintwork & efflorescence. Treat mould with ARDSAN RISANANTE MURALE 0.916. Ensure the substrate is perfectly dry and apply two coats of BETON DECOR.
Protruding reinforcing bars must be sanded and cleaned thoroughly. Use the anti corrosion product BOIACCA PASSIVANTE and ARD MALTA RAPIDA for renovation work.
Particularly chalky substrates and asbestos cement must be treated with a layer ISOLEX W, ISOLEX or PAINTGUM 7 FONDO COPRENTE (consolidating sealers). The latter is particularly suitable to avoid the floating of rusty patches.

Application:

Apply BETON DECOR as follows:

- Brush: stir well & apply the first coat, thinning BETON DECOR at 60-65% in water volume. Allow 4-6 hours before applying the second coat, thinning at 50-55% in water volume.
- Roller: thin the product at 35-45% in water volume.
- Do not apply at ambient or substrate temperature below +5°C or above + 35°C. Avoid applying in direct sunlight.

After application, exterior surfaces must be protected from rain until completely dry, normally after approx. 48 hours at 20°C.

- Wash equipment immediately after use with water.
- If different batches are used, we recommend mixing the various products thoroughly to avoid (even if slight) differences in shades.
- Store in cool, frost free premises.
- Surfaces with salt efflorescence or subject to rising damp must be restored before application in order to guarantee adherence.
- BETON DECOR is included in the 16COLOURS tinting system. Surfaces with an irregular thermal conductivity (sandwich panels) should not be painted with colours featuring a reflection index below 25.
- Use products in compliance with current Health & Safety Regulations. Dispose of spent material/containers according to the local regulations. Do not empty excess material into water tables.

Refer to the PSDS for further information.

TECHNICAL PROPERTIES

| | | | |
|---|---|--------------------|--|
| COLOUR | White, show card & 16Colours tinting machine hues | | |
| ASPECT | Satiny | | |
| MASS VOLUME | 1380-1440 g/l | | |
| DYNAMIC VISCOSITY | 11.000 ± 14.000 cP | | |
| DRYING AT 20°C | TOUCH DRY | 4 hrs | |
| | THROUGH DRYING | 48 hrs | |
| RECOATABLE | 12 hrs min. | | |
| PERMEABILITY (CARBON DIOXIDE) | EN 1062-6 | Sd CO ² | 134 m |
| | | s | 100 microns |
| | | μ CO ² | 1340000 |
| | | RESULT | Complies (Sd CO ² > 5m) |
| PERMEABILITY (WATER VAPOUR) | EN ISO 7783-1 & 2 | Sd | 0,1158 m |
| | | s | 100 microns |
| | | μ | 1158 |
| | | Class | L (Sd < 5m) |
| CAPILLARY ABSORPTION & WATER PERMEABILITY | EN1062-3 | W | 0,048 kg/m ² √t |
| | | RESULT | Complies (w<0,1) |
| ADHERENCE FOR DIRECT TRACTION | EN 1542 | RESULT | Complies (adherence ≥ 0,7 Mpa) |
| THERMIC CYCLES WITHOUT THAWING SALTS | EN 13687-3 | RESULT | Complies (adherence ≥ 0,7 Mpa) |
| EXPOSURE TO ARTIFICIAL ATMOSPHERIC AGENTS | EN 1062-11-2002 | | No peeling |
| | | | No fixtures |
| | | | No flaking |
| | | | Yellows slightly, loses gloss & chalks |
| | | RESULT | Complies |
| HAZARDOUS SUBSTANCES | | RESULT | Complies |

In compliance with the EN 1504-2 Certification – products & systems for the protection/restoration of concrete surfaces. BETON DÉCOR COPRENTE is homologated against risks deriving from ingress (principle PI) & moisture control (principle MC).

YIELD

A two-coat painting cycle implies a yield of 6-6.5 m²/l on substrates with average absorption. The coverage on mineral substrates depends on the porosity, we therefore, recommend testing.

**TENDER
SPECIFICATION ITEM**

ANTI-CARBONATION HIDING WATERPROOFER FOR EXTERIOR CONCRETE

Two coat application on pretreated concrete of protective paint like BETON DECOR COPRENTE, based on acrylic copolymers in aqueous dispersion & lightfast outdoor-resistant pigments, mould/algae resistant in compliance with the EN 1504-2 with a minimum consumption of 0.15 l/m².

€/m²

DEPARTMENT OF ENVIRONMENTAL SCIENCES
University of Venice

*Register N° SA/515
Venice, 20/03/95*

CERTIFICATE N° 5

Applicant: ARD F.lli Raccanello S.p.A. - Padua - Italy

Tested samples:

"Painting cycle involves applying BETON DECOR COPRENTE series .554". The samples were supplied pretreated by ARD F.lli Raccanello.

Test description and results:

The values shown refer to the average of the measurements taken on the three samples.

1) CAPILLARY WATER ABSORPTION (DIN 52617 standard).

The products were applied according to the methods and in the quantities specified in the technical sheet, on a mineral substrate measuring 10x10x3 cm with a mean capillary absorption of $W=8 \text{ kg/m}^2 \sqrt{t}$.

MEASURED VALUE $W = 0.023 \text{ kg/m}^2 \sqrt{t}$

2) WATER VAPOUR PERMEABILITY (DIN 52615 Wet-cup standard)

The products were applied on filter paper according to the methods and in the quantities specified in the technical sheet.

MEASURED VALUES

| | |
|--|-----------------------------------|
| Water vapour permeability | WDD = 151.6 g/m ² 24 h |
| Thickness of the equivalent layer | Sd = 0.142 m |
| Thickness of the applied film | = 80 microns |
| Water vapour diffusion resistance factor | μ = 1,775 |

The measured data give the following result: $W.Sd = 0.0033 \text{ kg/m} \sqrt{t}$

Director

Analyst

CSI RPR

093C/LI/AT/95

Viale Lombardia, 20 - 20021 BOLLATE (MI) Italy

Entered on the register of qualified laboratories.

Registered with the national research registry office Official Certification:

Fire - Extinguishers - Heat engineering - Isothermal Tests - Crash helmets - Taps and Valves - Auto Fittings

Test report

Applicant: ARD F.lli Raccanello S.p .A. - Padua - Italy

Tested product: **.554-series BETON DECOR COPRENTE cycle**

Sample received on: 19/04/95

Tests started on: 05/06/95

- Identification of reference standards: ASTMD 1434
- Carbon dioxide permeability and MU calculation
- Identification of testing procedures and techniques
- Test condition: 23 ± 1°C range RH 0%
- Standardized internal procedure: YES
- Deviation from test methods: NO
- Calculation and data transfer check: YES

DECLARATION

- The test results included in this report refer only to the tested samples.
- This report may not be reproduced in part without the authorization of the Laboratory Manager.

RESULTS

The permeability values measured are given in the table below:

| CO ₂ TR 23°C RH 0% | MU x 10 ⁶ | R Metres | Test piece thickness μ |
|----------------------------------|----------------------|---------------|------------------------|
| 270-220 | 15.5 - 17.8 | 3,050 - 3,700 | 240 - 170 |

Since R is obtained by multiplying MU by the thickness of the test pieces, multiplying the MU value calculated by a thickness of 80 μ we get an R value in the range 1,240 to 1,424.

Date: 28/06/95

Chemistry-Physics Lab. Manager
Area Manager
S. Nestori

Centre Manager
Managing Director
P. Cau

The data herein were correct at the time of Quality Control & refer to standardized environmental conditions. The same are to be considered as a guide.

Revision 2014/10



ard · f.lli raccanello s.p.a. · industria vernici e smalti

35129 PADOVA – Zona Ind.le Nord 1ª Strada, 13 – Tel. 049.8060000 (5 linee)

Fax 049.773749 – www.ard-raccanello.it - E-mail: ardsipa@ard-raccanello.it