

ANTICARBONATION

SELF PRIMING, ANTI-CARBONATION PAINT

WATERBORNE INTERIOR – EXTERIOR PAINT



Description

AntiCarbonation is a functional coating that provides long-term protection to exposed concrete by restricting the damaging passage of carbon dioxide, Sulfur dioxide, oxides of Nitrogen, Chlorides, sulphates and UV radiation. It is particularly suited for use in car parks, commercial and industrial buildings, bridges, subways, beach resorts, high rise flats, etc.

AntiCarbonation is only available in pastel colors

Recommended For

Interior & exterior applications on concrete, masonry and properly primed metal surfaces for car parks, bridges, subways, high rise flats, etc.

Key Features

- Very good resistance against weathering and ageing
- Resistance of diffusion of Carbon Dioxide
- Very good balance of crack bridging paint properties
- Resists pollution, chemical attack and dirt pick-up
- Flexible and crack bridging properties
- High hydrophobicity
- 100% acrylic with UV cross-linking DOW technology
- Excellent barrier to chlorides

Physical Properties

Solvent Type	Waterborne	
Finish Type	Velvet – Gloss Level 2	ASTM D 523
Spreading Rate	Approximately 4-8 m ² /Kg	Depending on surface porosity and application techniques
Average Dry Time	Touch-dry in 30 minutes	Based on ASTM D 1640
Recoat	After 2 to 4 hours	
Flash Point	Not Applicable	
Dry Film Thickness	50 to 100 microns depending on application	
Thinner	Add up to 10% of clean water	
Tensile Strength	2 N/mm ²	ASTM D6083
Scrub Resistance	Higher than 10,000 cycles	Based on ASTM D2486
Density	1.39 g/cm ³	
Adhesion	~2.0 N/mm ²	ASTM D4641
Dirt Pickup Resistance	Passes	ASTM D3719
Solids by weight	60%	
Solids by volume	37%	
Viscosity	15 000 – 20 000 cP	(Spindle 6/Speed 20) based on ASTM D2196
VOC	Maximum of 30 g/L.	Compliant with Directive 2004/42/EC & LEED V4
Bases	None	
Colors	Pure White	

ANTICARBONATION

SELF PRIMING, ANTI-CARBONATION PAINT

WATERBORNE INTERIOR – EXTERIOR PAINT



COLORTEK®

Anti-Carbonation Properties

Crack bridging ability (mm)	2.1 maximum based on BS EN 1062-7:2004/ASTM C836
Average Carbon dioxide permeability (g/m ² d)	0.586 based on EN 1062-6:2002
Average Carbon dioxide diffusion coefficient (cm ² /s)	7.53 x 10 ⁻⁸ based on EN 1062-6:2002
Average Carbon Dioxide Diffusion resistance number (μ-value)	2.12 x 10 ⁶
Average Carbon Dioxide Air layer thickness (m)	423 (conforms to Klopfer classification for Anti-carbonation paint)
Coating thickness (μm)	200
Average Liquid Water Transmission rate (g/m ² d)	0.18 (according to DIN EN 1062-3(2008-04)) Class II
Average Water Vapor Transmission rate (g/m ² d)	95.8 (according to BS EN ISO 7783:2011) Class II
Average Water Vapor Diffusion coefficient (cm ² /s)	2.27 x 10 ⁻⁴
Average Water Vapor Diffusion resistance number (μ-value)	1100
Average Water Vapor Air layer thickness (m)	0.22 (according to BS EN ISO 7783:2011) Class II
Chloride Ion Penetration - Average charges passed (coulombs)	729 based on ASTM C 1202-97 100-1000 indicates very low chloride ion permeability.
Average Chloride Ingress diffusion coefficient (cm ² /s)	2.35 x 10 ⁻⁹

Certifications & Compliance

This product is in compliance with the following building codes and programs amongst others:

- CHPS 2.2.2: Paints & Coatings, LEED 2008, LEED 2009 and LEED V4

This product is compliant with the following standards

- Masters Paint Institute #38 – Elastomeric coating, exterior, water based, non-flat.

This product has been accredited in conformity with EU Construction and Coatings Products Regulation by the National Technical University of Athens for the following (certification documentation available upon request):

- Determination of Crack Bridging Ability. Test report No: MSEL / CE 143 according to BS EN1062-7:2004“Paints and varnishes. – Coating materials and coating systems for exterior masonry and concrete. Determination of crack bridging properties”.
- Determination of Carbon Dioxide Permeability. Test report No: MSEL/CE 140 according to prEN 1062-6:2001“Paints and varnishes – Coating materials and coating systems for exterior masonry and concrete – Part 6: Determination of carbon dioxide permeability”.
- Determination of Chloride Ion Permeability. Test report No: MSEL/CE 141 according to ASTM C1202-97 “Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration”.
- Determination of Liquid Water Penetration: Test report No: MSEL/CE 142 according to DIN EN 1062-3 (2008-4) “Paints and varnishes – Coating materials and coating systems for exterior masonry and concrete - Part 3: Determination of liquid water permeability”.
- Determination of water-vapor Transmission Rate. Test report No: MSEL/CE 139 according to BS EN ISO 7783:2011 “Paints and varnishes – Determination of water-vapor transmission properties. Cup method”.

Surface Preparation

All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, or any other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth and dusted clean. Even though it is self-priming, due to the high resin content, it is important to prime with dilute Colortek ANTI-CARBONATION. New plaster or masonry surfaces must be allowed to cure (28 days) before applying base coat.

Cured plaster should be hard, have a slight sheen and a maximum pH of 10. A soft, porous or powdery plaster indicates improper cure. Never sand a plaster surface; knife off any protrusions and prime the plaster before and after applying patching compound. Poured or pre-cast concrete with a very smooth surface should be etched or abraded to promote adhesion, after removing all form release agents and curing compounds. Remove any powder or loose particles.

COLORTEK®

Wall and Floor Fashion

info@colortek.eu

www.colortek.eu



The Solution Inside



ANTICARBONATION

SELF PRIMING, ANTI-CARBONATION PAINT

WATERBORNE INTERIOR – EXTERIOR PAINT



CAUTION: Scraping or sanding surfaces of older buildings may release dust containing lead or asbestos. **EXPOSURE TO LEAD OR ASBESTOS CAN BE VERY HAZARDOUS TO YOUR HEALTH.** Always wear appropriate personal protective equipment during surface preparation and finish cleanup of any residues by water-washing all surfaces.

Primer Systems

This product is self-priming

Application Conditions

Do not apply at temperatures below 5 °C or when rain is expected. Stir well. Apply using brush, roller or airless spray.

Application Method

Stir well. Apply using brush, roller or airless spray.

Pack Size

- 1 US Quart – 1.07 kg
- 1 US Gallon – 4.5 kg
- 1 US Drum – 22.5 kg

Shelf Life

24 months from the date of production.

Storage and Handling

Care should be taken to avoid spillage. Store in a dry area. Protect from freezing. Extreme temperatures may cause paint to become unusable. For example: freezing and thawing may cause paint to gel, and high heat may cause solid skin to form.

Safety

Use under well ventilated conditions. Do not breathe or inhale spray mist or sanding dust. Avoid skin contact; spillage on the skin should immediately be removed with suitable cleanser, soap and water. In case of eye contact, flush immediately with water for at least 15 minutes and seek medical attention immediately. If you have trouble breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

Cleaning

Remove as much leftover product as possible from the application equipment before cleaning. Clean equipment immediately after use with warm soapy water and rinse thoroughly. Do not empty product into drains or watercourses.

Technical Assistance

Available through your local COLORTEK® Design Center or through your COLORTEK PAINTS® authorized distributor. For the location of the retailer nearest you, email us at info@colortek.eu or check our website www.colortek.eu.

Disclaimer

Product batches are subject to stringent quality control checks in conformity with ISO 9001:2008, Certificate CH12/1128. The information submitted in this manual is correct to the best of our knowledge & experience. No liability whatsoever can be accepted based on the information supplied herein.