

STRUCTURESHIELD

ELASTOMERIC ANTI CARBONATION PAINT



DESCRIPTION

StructureShield 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. Structure shield is available in 4 bases and can be tinted to the full color spectrum.

RECOMMENDED FOR

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

KEY FEATURES

- Excellent resistance against weathering and ageing
- Resistance to Algae, Fungi and bacterial growth
- Crack bridging
- Self Cleaning
- Dirt pick-up resistant
- Water vapor permeability
- High hydrophobicity
- No roller spatter
- Excellent barrier to chlorides
- 100% acrylic with UV cross-linking DOW technology

PHYSICAL PROPERTIES

Solvent Type	Waterborne	
Finish Type	Available in Flat – Gloss Level 1,	ASTM D 523
Gloss Values	(20/60/85) = 0.4/2.3/2.1 - Flat 2	Based on ASTM D523
Dry Film Thickness	50 to 100 microns depending on application	
Spreading Rate	Approximately 7-9 m ² /Kg/coat 2-3 coats recommended depending on surface porosity and application techniques N bases might require additional coats depending on color	
Flash Point	Not Applicable	
Average Dry Time	Touch-dry in 30 minutes	Based on ASTM D 1640
Recoat	After 2 to 4 hours	
Full Cure	72 hours	
Thinner	5% to 10% clean water	
Adhesion	4B	ASTM D3359
Scrub Resistance	Higher than 10,000 cycles	Based on ASTM D2486
Dirt Pickup Resistance	Passes	ASTM D3719
Contrast Ratio (Dry Opacity)	97.5% ±0.3 at 100 micron WFT 99.1% ±0.3 at 200 micron WFT	ASTM D2805
UV Resistance	Passes 8 hours UVA and UVB at 60°C	ASTM G154
Density	W0 = 1.37 g/cm ³ , W1 = 1.31 g/cm ³ , N = 1.33 g/cm ³	
Solids By Weight	~59%	
Solids By Volume	~47%	
Viscosity	10000 cP – 15000 cP (spindle 6/ speed 20)	
Bases	W0, W1, N and Black.	
Colors	Tintable in all colors	
VOC	72 g/L as per EPA method 24	

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CERTIFICATIONS & COMPLIANCE

This product is compliant with the following standards

- Masters Paint Institute MPI# 10 **Latex, Exterior Flat (MPI Gloss Level 1)**
- Masters Paint Institute MPI# 40 **Latex, Exterior, High Build**
- Masters Paint Institute MPI# 53 **Latex, Interior, Flat (MPI Gloss Level 1)**
- Masters Paint Institute MPI# 113 **Elastomeric, Pigmented, Exterior, Water Based, Flat**

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 diluted Colortek STRUCTURESHIELD.

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.

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

SURFACE TYPE	RECOMMENDED COLORTEK PRIMER
Drywall	Colortek Primer
Porous Masonry	Colortek AntiCarbonation Primer, Colortek Sealer, Colortek Primer
Non-Porous Masonry	Colortek Primer, Colortek Undercoat
Wood	Colortek Undercoat, Wood Primer
Metal	Colortek SX47 StopRust, Adhero, Adhero Quick Dry, Aquazinc

Notice:

For maximum effectiveness, porous and absorbant surfaces should be primed/sealed using colortek Anticarbonation Primer before applying colortek Structureshield.

APPLICATION CONDITIONS

Do not apply at temperatures below 5 °C or when rain is expected.

APPLICATION METHOD

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

PACK SIZE

	WO	WT	N	Black
1 US Quart (kg)	1.10	1.16	1.00	
1 US Gallon (kg)	4.39	4.66	4.00	4.3
1 US Drum (kg)	22.0	23.3	20	21.5

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.

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info@colortek.eu

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The Solution Inside



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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 9001:2015, Certificate LB18/234269.

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.