

# STRUCTURE SHIELD

ELASTOMERIC ANTI CARBONATION PAINT

WATERBORNE INTERIOR – EXTERIOR 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 3 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
- Crack bridging
- Dirt pick-up resistant
- High hydrophobicity
- No roller spatter
- 100% acrylic with UV cross-linking DOW technology
- Excellent barrier to chlorides

## Physical Properties

<b>Solvent Type</b>	Waterborne	
<b>Finish Type</b>	Available in Flat – Gloss Level 1,	ASTM D 523
<b>Gloss values</b>	(20/60/85) = 0.4/2.3/2.1	Based on ASTM D523
<b>Spreading Rate</b>	Approximately 9-12 m <sup>2</sup> /Kg	Depending on surface porosity and application techniques
<b>Average Dry Time</b>	Touch-dry in 30 minutes	Based on ASTM D 1640
<b>Full cure</b>	72 hours	
<b>Recoat</b>	After 2 to 4 hours	
<b>Flash Point</b>	Not Applicable	
<b>Dry Film Thickness</b>	50 to 100 microns depending on application	
<b>Thinner</b>	0% to 5% clean water	
<b>Tensile Strength</b>	2 N/mm <sup>2</sup>	
<b>Scrub Resistance</b>	Higher than 10,000 cycles	Based on ASTM D2486
<b>Dirt pickup resistance</b>	Passes	ASTM D3719
<b>Contrast ratio (dry opacity)</b>	97.5% ±0.3 at 100 micron WFT 99.1% ±0.3 at 200 micron WFT	ASTM D2805
<b>Adhesion</b>	4B	ASTM D3359
<b>UV resistance</b>	Passes 8 hours UVA and UVB at 60°C	ASTM G154
<b>Density</b>	W0 = 1.37 g/cm <sup>3</sup> , W1 = 1.31 g/cm <sup>3</sup> , N = 1.33 g/cm <sup>3</sup>	
<b>Solids</b>	~55%	
<b>Stormer viscosity</b>	100 KU ± 5	
<b>Bases</b>	W0, W1 and N	
<b>Colors</b>	Can be tinted to all colors	

## Certifications & Compliance

This product is compliant with the following standards

- Masters Paint Institute MPI# 10 Latex, Exterior Flat (MPI Gloss Level 1)

COLORTEK®  
Wall and Floor Fashion  
[info@colortek.eu](mailto:info@colortek.eu)  
[www.colortek.eu](http://www.colortek.eu)



# STRUCTURE SHIELD

ELASTOMERIC ANTI CARBONATION PAINT

## WATERBORNE INTERIOR – EXTERIOR PAINT



- 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# 143 Latex, Interior, Institutional Low Odor/VOC, Flat (MPI Gloss Level 1)
- GS 11

### 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

Prime with diluted Colortek STRUCTURESHIELD coat

### 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

	W0	W1	N
1 US Quart (kg)	1.10	1.03	1.00
1 US Gallon (kg)	4.39	4.11	4.00
1 US Drum (kg)	22.0		

### 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.

---

# STRUCTURE SHIELD

ELASTOMERIC ANTI CARBONATION PAINT

## WATERBORNE INTERIOR – EXTERIOR PAINT

---



### 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](mailto:info@colortek.eu) or check our website [www.colortek.eu](http://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.