

DESCRIPTION

SHIELDEMULSION 150® is a highly flexible and elastomeric acrylic based Anticarbonation paint for Exterior and Interior concrete wall coating with high resistance to UV. Its chemical composition ensure resistance to Chloride penetration and water vapor diffusion, as well as characterized for being an air barrier.

USES

SHIELDEMULSION 150® is suitable to be applied over:

- ☐ Car parking walls and columns.
- ☐ Bridges & Tunnels
- ☐ Subways
- ☐ Sea Resort buildings
- ☐ Commercial Building

ADVANTAGES

- ☐ UV Resistant
- ☐ Weather Resistant
- ☐ Air Barrier
- ☐ Highly Flexible and elastomeric
- ☐ Crack bridging up to 2mm
- ☐ Solvent free
- ☐ Easy to clean
- ☐ Low VOC

Compliance

LEED V4.1 for low emitting material VOC | LEED V4 – 2013 for Building product disclosure and optimization.

MATERIAL DATA

Type	Acrylic emulsion
Colors	Clear & wide range of RAL Colors
Packing	1 USG & 5 USG
Application	Brush, Roll, Trowel or Airless Spray Machine
Storage	24 months at 25°C in dry conditions.

TECHNICAL DATA

Property	Value	Test Method
Solid By Volume	45% + 2	ASTM D 1353
Specific Gravity	1.25 + 0.05	ASTM D 70
VOC Content	<34 gl	EPA 24
Bonding Strength	>0.5	ASTM D 624
Water Absorption	0.08%/day/m ²	BS EN 12390
Tensile strength	>4N	ASTM D 412
Elongation	120% + 10%	ASTM D 412
Rapid Chloride Permeability	Nil	ASTM C 1202
SRI (Solar Reflectance Index)	>102	ASTM E 1980
Solar Reflectance %	>90	ASTM C 1549
Corrected Normal Emissivity	0.87	ASTM E 408
UV Resistance @ 2000 hours	Pass	ASTM D 822

APPLICATION DETAILS

Surface Preparation

Substrate should be sound, clean and free from dirt, dust, laitance and all loosely adhering particles. All cracks up to 1mm and Pinholes should be filled with Cement based concrete repair.

APPLICATION

➤ Over Nonporous or Chalky Surfaces

Priming Stage: Apply 1 coat of **CARBOSHIELD PS®** clear primer or Apply Self Priming **SHIELDEMULSION 150®** diluted with 50% Potable Water.

Topcoat: Apply 2 Coats of **SHIELDEMULSION 150®** at a rate of 50-100 microns per coat.

➤ On Porous or Chalky Surfaces

Priming Stage: Apply **CARBOSHIELD SB®** (Alkali resistant sealer) at a rate of 50-70 microns

Base coat: Apply **SHIELDEMULSION 150®** diluted with 25% water and apply at a rate of 75-100 microns

Topcoat: Apply **SHIELDEMULSION 150®** rate of 100-150 microns

Remark: Other systems can be specified depending on the type of surface to be coated or recoated.

Steel surface

The surface should be grit blasted then clean by solvent and kept to dry, priming also is recommended prior to applying the **SHIELDEMULSION 150®** to ensure proper bonding and proper adhesion.

MIXING PROCEDURE:

- ☐ Mix **SHIELDEMULSION 150®** using a slow speed mixer for 1-2 min to achieve a homogeneous flow

THEORETICAL SPREADING RATE

- ☐ 4m² / ltr @ 120 microns DFT in two coats
- ☐ Maximum Thickness Per coat recommended 200microns
- ☐ Maximum Thickness per system (recoating) 500 microns

DRYING & CURING

- ☐ Touch Dry: 1 hour @ 24°C
- ☐ Hard Dry: 24 hours @ 24°C
- ☐ Recoating period: 5-8 hours @ 24°C

Note: Drying period will be affected with relative humidity variation and weather temperature.



SAFETY

Protection Measures

SHIELDEMULSION 150® is waterborne and there is risk of cauterization in the event of contact with the eyes; will lead to dehydration and thereof irritation in case of contact with skin. So while mixing and applying the product, protect with safety goggles and protective gloves

☐ Splashes to skin must be washed off with water and Soap
Splashes to the eyes must be rinsed with clean warm water.
Seeking medical attention is highly recommended and mandatory

Remarks

Empty cans should be disposed as per the rules and regulations of the country where the material is used. And in **NO case** should empty cans be used for food stuffing.

ANTICARBONATION COATING

Important Notice:

The above data is based on our experience and extensive laboratory tests. It may be considered to be a general advice only and cannot be granted to meet the requirements for all the intended uses. It is the responsibility of the end user to ensure that the product is suitable for the purpose for which he wishes to use it. In view of many varying factors that are encountered during the application of the product it does not exclude the end users from not conducting their own test before actually using the product. We are thus only responsible for the quality of the product itself and not responsible for its performance, nor would we accept any liability whatsoever or howsoever arising from the use of this product. Any such matters should be specifically agreed to in writing by us. Bayshield reserves the right to modify the contents of the data sheet from time to time without notice as a system requirement in updating our products from time to time.