



**1.0 Description:**

- Micro-porous structure that hinders the entrance of Carbon Dioxide, Chlorides, and other acid gases which are harmful to the concrete.
- Allows the passage of water vapor from the substrate, thus allowing the substrate to breath without any cracks, peeling or failure in the coating.
- Free of any carbonate salts.
- High quality Pure Acrylic based coat thus providing non yellowing, high resistance to weathering and ultraviolet paint.
- Elastomeric nature that ensures dynamic crack bridging properties, especially during structural movement.
- Excellent adhesion to the substrate.

**2.0 Uses:**

- Anti-carbonation emulsion paint for garages, bridges and other places subjected to high concentration of Carbon Dioxide, Sulphur Dioxide, Oxides of Nitrogen, Chlorides, Sulphates and UV radiation.
- Flyovers, Elevated Expressways, Railway Bridges, Metro Rails, Commercial and Industrial buildings, Bridges, Subways, parking, High rise flats, etc.
- High quality pure acrylic paint that resists uv light thus suitable for both interior and exterior application.
- Water proofing paint to substrata subjected to high humidity due to its breathability, elasticity, and high adhesion property

**3.0 Approval & Certification:**

Permeability to CO2	: EN 1062-6:2002
Permeability to water vapor	: BS EN 7783:2011
Weathering resistance for 300hrs	: ES 1539 (2021)
UV Resistance for 7 days	: ES 1539 (2021)

**4.0 Colours:**

Shall be produced in different colours according to color chart or as required.

**5.0 Product Data:**

Non-VOC	: 48.1	% by weight
VOC	: 51.9	% by weight
Binder	: 25.9	% by weight
Filling	: 22.2	% by weight
Carbonate salts	: 0.0	% by weight
Density	: 1.1	gm/ml
Pull off	: 2.1	Mega Pascal
Elongation on Breakage	: 380	%
Crack Bridging ability	: 1.8	On dry film thickness 200 microns
Weathering resistance for 300hrs for the Grey Color	: no blistering, chalking, cracking nor change in color	

**CO<sub>2</sub> permeability test:**

Testes on film thickness 200 microns after 7 days of application according to EN1062-6 2002:

Parameter	Result	Classifications
Paint dry film thickness	200	Class C1
CO <sub>2</sub> permeability (gm/m <sup>2</sup> /day)	1.88	
Air layer thickness S <sub>D</sub> (m)	>50	

Water Vapor Transmission Rate:

Tested on film thickness 200 microns after 7 days of application according to EN1062-6 2002

Parameter	Result	Classifications
Paint dry film thickness, ((μm)	200	Class V1 (HIGH)
Water vapor transmission rate (permeability) gm/m <sup>2</sup> /day	368.9	
Air layer thickness S <sub>D</sub> (m)	< 0.14	

*Note: Above values are subjected to slight changes depending on colour and temp.*

**6.0 Film Thickness per coat:**

Wet film Thickness	: 90 - 110	microns
Dry Film Thickness	: 45 - 55	microns

*Note: Film thickness shall vary and is calculated as average*

**7.0 Consumption per coat:**

Consumption	: 100 – 110	gm/m <sup>2</sup>
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*Note: Consumption depends on film thickness applied, type of texture, surface condition, defects, temperature, etc.*

**8.0 Surface Preparation:**

- Substrate recommended can be Cement plaster, concrete, block work, rendered surfaces, gypsum board etc.
- Substrate should strong enough to receive the paint.
- All weak or separated layers in concrete should be removed.
- Any defects in the substrate like cracks, pin holes should be repaired before painting.
- Smooth the surface by sanding.

**9.0 Application Methods:**

**9.1 As Anti-carbonation paint:**

1. Ensure that substrate is clean & free from foreign materials.
2. Smooth substrate if required using only cement paste, recommended SUMBENT
3. Mix CARBOGUARD well in the container before application.
4. Priming using diluted CARBOGUARD 25% water.

5. Apply successive coats of CARBOGUARD (*at least 6 hours difference*) by brush, roller or airless spray till a according to the following required functions:

Function	Required Rate gm/m <sup>2</sup>	Required No of successive coats	Attained DFT microns
Anti-carbonation	400 – 450	4	200-225
Crack bridging	500 - 600	5-6	250-300
Luxury Pure acrylic paint	100 -110	2	50-60

6. Clean tools immediately after application using water.  
7. Close container tightly after application.

### 9.2 As Luxury Pure acrylic paint:

1. Ensure that substrate is clean & free from foreign materials.
2. Apply Primer VERSASEAL to ensure good adhesion.
3. Paste the substrate for smoothing recommended SUBCOAT/FILLCOAT.
4. Mix CARBOGUARD well in the container before application.
5. Recommended to paint corners and edges using a brush.
6. Apply 2 coats of CARBOGUARD using a roller (wool or sponge).
7. CARBOGUARD can be diluted up to 15% with water for the first coat.
8. Clean tools immediately after application using water.

#### Notes:

- *The temperature of substrate should not exceed 40°C during application & it is recommended to damp the surface using water, especially in summer.*
- *Masking tape must be removed immediately after application of the topcoat.*

### 1.0 Product weight:

Total Weight	: 3, 9	lit
	: 20	Kg
Container	: Sealed pre weighed plastic Containers	

### 2.0 Drying time:

Touch Dry	: 30 min	at 25°C
Hard Dry	: 60 min	at 25°C
Recoating	: 6 hours	at 25°C

*Note: drying time depends on air circulation, temperature, film thickness and number of coats, and will be affected correspondingly.*

### 3.0 Recoating:

- Duration between any two successive coats should be at least 6 hours with the same base.
- Recommended to recoat with the same base type of previously applied paint
- In case of multi-coat application, drying times will be affected by the total thickness of previously applied coats.
- The surface should be dry and free from any contamination prior to application of the subsequent coat.

#### 4.0 Disclaimer:

- The information in this document is given to the best of our knowledge, based on laboratory testing and practical experience. We cannot guarantee anything but the above-mentioned quality of the products themselves. Minor product variations may be implemented to comply with local requirements. We reserve the right to change the given data without further notice. Users should always consult us for specific guidance on the general suitability of this product for their needs and specific application practices.
- Samples of any approved delivered materials shall be retested after delivery.
- These products are for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to our technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to our responsible representative for approval before commencing the work.

#### 5.0 Handling of Emulsion Products:

- Avoid contact with eyes and skin. Emergency showers and eyewash stations should be readily accessible.
- Adhere to work practice rules established by government regulations.
- Use personal protective equipment.
- When using, do not eat, drink, or smoke.

#### 6.0 Compatibility:

- Primers applied prior to specified product shall always be acrylic based products.
- For Repairing and fixing defects, products shall always be cement-based products
- Recoating shall be acrylic products.

#### 7.0 First aid Measures:

- General advice: Seek medical advice. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
- Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible, to do so without delay. Initiate and maintain gentle and continuous irrigation.
- Take off contaminated clothing and shoes immediately.
- Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- Inhalation: Move to fresh air.

#### 8.0 Storage:

- Store above ground and surrounded by dikes to contain spills or leaks.
- Do not store in humid or extra hot weathering conditions.
- Keep containers tightly closed away from heat & in dry, cool, and well-ventilated place.