**Data Sheet: Anti Carbonation Paint**

**Description**  
Anti-Carb has been formulated to confer long term protective and decorative properties to concrete and masonry surfaces. The micro-porous structure of the coating acts as a barrier to the ingress of Chlorides and Carbon Dioxide and other acid gases, but allows the passage of water vapour from the substrate. The elastomeric nature of Anti-Carb ensures good crack bridging properties, in case of structural movement.

**Typical Uses**  
Where new and existing concrete and masonry structures require protection from Water, Carbon Dioxide, Sulphur Dioxide, Oxides of Nitrogen, Chlorides, Sulphates and UV radiation.  
Examples: car parks, commercial and industrial buildings, bridges, subways, high rise flats, roofing.

**Advantages**  
- Easy to clean  
- Excellent UV and weathering resistance  
- Single pack and easy to apply  
- Protects substrates from carbonation  
- Highly resistant to freeze/thaw cycling  
- Elastic nature with crack bridging properties  
- Allows structure to ‘breathe’  
- Water based and non-toxic  
- Range of colours available (to BS4800 or RAL standards)

**Typical Properties**  
| Colour: White or Light Grey  
| BS4800 or RAL colours are available on request  
| Finish: Eggshell  
| Application rate: 3.5 - 5.5m² / litre / coat  
| (2 coats recommended)  
| Volume Solids: 56%  
| Wet film thickness: 180 microns per coat  
| Equivalent dry film thickness: 100 microns per coat  
| Touch dry: 1 to 3 hours  
| (dependant on ventilation)  

**Procedure**  
**Surface Preparation**  
Substrates shall be clean, sound and free from contaminants such as oil, grease, moss, algae, dust and any existing loose or flaking paintwork. Concrete surfaces shall be fully cured and free from laitance, mould release oils and curing compounds. Mould or algae shall be removed with a proprietary fungicidal wash. High pressure water jetting may be deemed necessary for heavily contaminated surfaces. Blow holes or pitting on the surface shall be filled using Surfacer.

**Priming**  
Priming is recommended on porous substrates. Dilute Anti-Carb with up to 20% by volume of clean water and apply by brush, roller or airless spray at a nominal rate of 6-8m²/litre and allow to dry.

**Application**  
Apply Anti-Carb coating by brush, roller or airless spray at a nominal rate of 5m²/litre and allow to dry.  
A second coat may be subsequently applied at the same rate.  
Note: This should achieve the 200 microns dry film thickness necessary for anti-carbonation properties. In applications where crack bridging properties are particularly important, a minimum d.f.t. of over 300 microns is recommended.

**Equipment Cleaning**  
Clean equipment with water or a mixture of water and Toolclean prior to drying of the coating.
Curing
Anti-Carb will be touch dry following 1 - 3 hours, and through dry after 2-16 hours (dependent on ventilation).

Through dry: 2-16 hours
Over coating interval: 16 hours minimum
Tensile strength: 3.7 MPa @ 20°C

Carbon Dioxide Diffusion Coefficient: 965,000
Equivalent air thickness, R: >200m @ 300 microns dft.

Water vapour transmission rate: 12g/m²/day
Service temperatures: -30°C to +80°C
Elongation at break: 350% @ 20°C

Packaging
Anti-Carb is supplied in 10L packs

Coverage
Anti-Carb may be applied at a nominal rate of 5m²/litre/coat.
The recommended two coat treatment will provide an overall d.f.t of 200 microns, which is the minimum for long term anti-carbonation properties.

Storage and Shelf Life
Store in dry conditions, out of direct sunlight, at temperatures between 10°C and 25°C.

Protect from frost.

Anti-Carb has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with manufacturer’s instructions.

Limitations
Do not apply at temperatures of 3°C or less or if there is a risk of frost.

Compatibility testing of Anti-Carb with existing paint coatings must be carried out prior to over coating.