

## RIDEX ANTI-CARBONATION

### BACKGROUND

Carbonation is a major factor in the deterioration of concrete. It is caused by Carbon Dioxide (CO<sub>2</sub>) that is present in the atmosphere that reduces the alkalinity of concrete from typical pH values of 12 to 13, down to a pH equal or lower than 9.5, resulting in exposing the reinforcing steel to water and oxygen, causing corrosion of the steel and spalling of the concrete.

Carbonation also results from the vehicles' exhaust emissions that contribute to the concrete degradation.

### DESCRIPTION

RIDEX Anti-Carbonation paint is a water-based protective coating formulated using a high quality Pure Acrylic polymer specially designed for application on concrete and masonry surfaces, exhibiting excellent adhesion and resistance to weathering and water.

Composition also includes a blend of Titanium Dioxide and UV resistant & functional fillers specifically balanced for maximum protection, exterior durability & to create a barrier effect blocking the penetration of all contaminants that contribute to the carbonation of the concrete.

### RECOMMENDED USES

Ideal for use over new and existing interior and exterior concrete and masonry substrates that require protection from UV weathering as well as from carbonation contaminants such as Carbon Dioxide, Sulphur, moisture, etc...

Typical examples include car parks, commercial and industrial buildings, bridges, subway, beach areas etc...

### COLOUR RANGE

Ridex Anti-Carbonation is available in clear, white, Beton Brut. Special colours are available on request.

### SPECIFICATION DATA

**U-V Resistance:** No oxidation, discoloration, cracking or other defects after 2400 hours/1200 Watt-Lamp.

**Weather Resistance:** Expected durability range from 5 years up to 10 years, depending upon surface absorption, film thickness, proper application and prevailing climate conditions.

**Water Resistance:** Water absorption after 7 days at 90% R.H. amounts to only 4 % wt/wt for a dry film thickness of 700 microns.

**Solid content:** 50 to 51%

**Specific gravity:** 1.30 to 1.35 g/ml

**Finish:** Egg-shell finish

**Spreading rate :** 3.5 – 5.5m<sup>2</sup> per Litre / Coat (2 to 3 coats are recommended for full coverage and protection.

**Volume Solids:** 40 to 42%

**Touch dry:** 1 to 3 hours (depending on ventilation)

**Wet film thickness:** 200 microns per wet coat results in a dry thickness of 90 microns

**SURFACE PREPARATION & APPLICATION**

Before application, all surfaces should be cleaned, must be free from dust, dirt, grease, oil or any other adherent on substrate. Porous or badly weathered surfaces must be cleaned and primed. Dilute Ridex Anti-Carbonation with 70% to 100% clean water for the first coat. Allow to dry 24 hours.

Apply second and third coats as supplied, in a cross direction vis a vis of the previous coat(s) by means of longhaired soft brush, roller or broom, leaving at least 12 hours between successive coats.

200 microns of dry film thickness are necessary for anti-carbonation properties. In applications where crack bridging properties are required, a minimum dry film thickness of 300 microns is recommended..

**ATMOSPHERIC CONDITIONS DURING APPLICATION**

Do not apply *Ridex Anti-Carbonation* when rain or fog can be expected during the first stage of the drying period.

Do not apply as well if temperature is below 10° C .

**CLEANING**

Tools should be cleaned immediately after working with tap water.

**PRECAUTIONS & STORAGE**

STORE IN ITS ORIGINAL SEALED PACKAGING  
AWAY FROM DIRECT SUNLIGHT, FLAME, HEAT  
AND FREEZING CONDITIONS

**PACKING**

- 1 us gallon
- 5 us gallon