Carbo Detect™ System



Test Well. Build Well.

A simple colored dye field test to detect Carbonation

Product Information

Carbo Detect™ is a simple colored dye field test for detecting carbonation. The single reagent is sprayed on the surface to be checked. The reagent will change to pink in uncarbonated concrete and remain colorless when sprayed on carbonated concrete.

Technical

Carbonation is one of the two main causes of corrosion of steel in concrete, the other is chloride attack. The result of the interaction of carbon dioxide gas in the atmosphere with the alkaline hydroxides in the concrete, the carbonation process effectively drops the pH of the concrete to a level where the steel will corrode. The carbon dioxide dissolves in water to form carbonic acid, which can migrate to the reinforcing steel if the concrete cover is low or if the concrete is of poor quality (open pore structure, low cement content, high water cement ratio, or poor curing of the concrete). Carbonation is more common in old structures, particularly buildings.



Carbo Detect Core

Features & Benefits

- Test can be carried out completely on site.
- Gives depth of carbonation.
- Minimal operator training and no special equipment required.
- Utilizes only one environmentally safe dye.
- Results obtained in less than five minutes are easy to interpret.
- Economic, fast and easy to use.

Strength Locators Ultrasonics Corrosion Moisture

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Method

Carbo Detect™ reagent is a type of pH indicator which will indicate the change of pH on a freshly exposed concrete surface. The indicator is simply sprayed on the surface to be checked. The indicator will change to pink in uncarbonated concrete and remain colorless when sprayed on carbonated (low pH) concrete. If the concrete test area is very dry, a light misting with water will help show the color.

By spraying the indicator along a core drilled from the top surface down to the reinforcement bar it can be readily seen how far the carbonation has progressed and therefore the outlook for corrosion, which will only occur after carbonation reaches the reinforcement bar.

Care should be taken to prevent drilling and coring dust from contaminating the surface to be tested.

Sales Numbers

I-CB-6000 Carbo Detect™ system

What's included:

- 200 ml of reagent sufficient for approximately 100 tests
- Sprayer
- Carrying Case

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