

# -AHEAD®-

## Ax/ECH

**Advanced, two-component, diffusion-open wearing course for topside of floorslabs in multistorey car parks, with, and without ZEBRA anode for cathodic protection**



## TECHNICAL INFORMATION

### USES

AHEAD Ax/ECH is a major advancement in flooring technology incorporating the benefits of copolymer and epoxy resin technologies into a self smoothing, water based, cementitious system. These chemically combine to give a hard, durable 2-7mm thick coating with excellent resistance to abrasion, water, chloride ions and aggressive chemicals for the protection of concrete floors in the most demanding internal and external environments. The AHEAD Ax/ECH is particularly used to protect Camur ZEBRA Cathodic protection systems on top-side of concrete floorslabs, for more information: see application manual for Camur ZEBRA system .

### ADVANTAGES

**SIMPLE:** Materials are pre-packaged in a convenient and easy to handle size, requiring only mixing on site.

**HIGH FLOW:** A unique blend of surfactants enables fast and easy application.

**RESISTANT:** Excellent abrasion and impact resistance. Very high resistance to a wide range of aggressive chemicals.

**TOLERANT:** Can be applied to wet substrates, or floors with no effective waterproofing membrane, without risk of osmotic blistering.

**ADHESIVE:** Excellent adhesion to dry or damp cementitious substrates.

**RAPID HARDENING:** Hydrates to give high early strengths, enabling rapid reinstatement of traffic.

**SAFE:** Water based product which cures without the release of hazardous solvents. Equipment easily cleaned with water.

**LOW PERMEABILITY:** Dense matrix offers low permeability to water, even at 10 bar pressure, and very high diffusion resistance to chlorides and oxygen.

### PRODUCT DESCRIPTION

AHEAD Ax/ECH is a two component epoxy and cementitious modified polymer coating for the protection of concrete floors in demanding environmental conditions. It incorporates advanced cement chemistry, metakaolin, fibre, epoxy and styrene acrylic copolymer technology to provide multi-functional protection. When mixed, it exhibits a high degree of flow to enable ease of application by pouring or pumping techniques to give a smooth surface finish. It hydrates to form a dense, highly alkaline coating, which exhibits both polymeric and resinous properties giving low permeability to water and providing very high chemical and abrasion resistance to ensure long term performance. It is specially formulated to harden rapidly to form a hard wearing and durable surface.

### TECHNICAL DATA

Basis: Cement and epoxy modified, styrene acrylic copolymer. Mixed Colour: Standard: Grey and Special: Green.

Mixed Density: 1850-1900kg/m<sup>3</sup>. Min. Application Temp: 5°C. Max. Application Temp: 35°C. Working Life: 30 minutes at 20°C.

Drying Time: 2-3 hours. No. of Coats Required: Normally one, at a minimum of 2mm thickness, maximum 8 mm, environment and temperature dependent.

**MECHANICAL CHARACTERISTICS (TYPICAL)** Compressive Strength: BS 4551 Tested at 20°C: 4 hours : 3-6N/mm<sup>2</sup>.

1 day: 15-20N/mm<sup>2</sup>, 7 days: 25-30N/mm<sup>2</sup>, 28 days: 40-50N/mm<sup>2</sup>. Flexural Strength: BS 4551 Tested at +20 degrees C:

1 day/ 5.0N/mm<sup>2</sup>, 28 day 14.0N/mm<sup>2</sup>, Adhesive Strength: BS 1881 Part 207 ,3N/mm<sup>2</sup>. (including primer) Water Permeability Coefficient:

Taywood Test 7 day cure : 1.12 x10-16 m/sec. i.e. 2mm Ax/ECH 2310mm of typical concrete.

Abrasion Resistance: BS 8204 Part 2 Category Special for severe abrasion.