

# KEIM Concretal



**Think Concrete, Think Keim**  
**Keim Concretal – Protection and Colour for Concrete**



## Keim Concretal - Protective Paint for Concrete

The Keim Concretal range provides effective protection for concrete while retaining its concrete character. The range of products are highly developed exterior sol silicate paint systems based on a combination of silica sol and potassium silicate binding agents. The Keim Concretal system consists of mineral based concrete repair, decoration and protection materials.

### The Keim Concretal Range

#### **Keim Concretal W:**

Formulated for protection from water, chlorides and weather.

#### **Keim Concretal C:**

Formulated for protection from carbonation, water and chlorides.

#### **Keim Concretal Lasur:**

Formulated for colour equalisation and weather proofing.







## Keim Concretal - Features and Benefits

### Environmentally Friendly

Keim Concretal is water borne, odourless, non-toxic and solvent free.

### Durable

Keim Concretal forms a strong, permanent bond between the paint and the underlying concrete substrate, to create a highly resistant and durable colour coating, offering the benefits of long service life and high resistance to weathering.

### Cleanliness

Keim Concretal has no residual electrostatic charge hence does not attract dust, remaining cleaner over time than oil based paints. The sol-silicate structure is highly stable and able to resist acid and alkali attack, while the inherent alkaline nature of Keim Concretal impedes the growth of fungi and algae spores.

### Colour stability

Keim Concretal contains high quality, lightfast, mineral pigments and binders which exhibit the greatest UV resistance of all paint systems. All Keim colours are unaffected by the action of weathering and UV radiation, ensuring no colour fade, a bright matt appearance and a high level of light reflectance.

### Incombustible

Keim Concretal is inherently non combustible, does not support the spread of flame and gives off no noxious emissions in the event of fire due to its inorganic composition.

### Breathable

The micro-crystalline nature of Keim Concretal allows the free passage of vapour while preventing the ingress of driven rain. This high breathability enables humidity contained in building structures to be quickly released unhindered into the environment.





# Keim Concretal for Reinstatement of Concrete

## Keim Concretal Repair System

The Keim concrete repair system is based on cementitious and mineral constituents and is suitable for all forms of concrete substrate. The system consists of a range of materials that provide protection to both the concrete and steel reinforcing bars.

### Pre Treatment and Preparation

**Keim Concrete Cleaner:** Acidic concrete cleaner for the removal of release agents and surface impurities from concrete.

**Keim Silan Primer:** A silane based water repellent for use as a priming coat with Keim silicate paints to provide maximum resistance to water penetration without impairing the breathability of the substrate.

**Keim Silan 100:** Solvent free silane primer offering very high levels of water repellence.

### Concrete Repair

**Keim Concretal MKH:** Mineral cement based corrosion protector and bonding mortar.

**Keim Repair Mortar:** Pre-bagged non shrink cementitious repair mortar for large scale concrete reparation works.

**Keim Fine Finishing Mortar:** Pre-bagged cementitious fine finishing mortar for crack repair, filling of blow holes and surface equalisation.







# Keim Concretal for Protection of Concrete

## Keim Concretal C

Keim Concretal C is a waterproof sol silicate based paint formulated for protection against carbonation and chlorides.

Carbonation is a major factor in concrete decay, caused by  $\text{CO}_2$  from the atmosphere reducing the alkalinity of concrete, which in turn allows the reinforcing steel to become susceptible to attack by water and oxygen, resulting in corrosion of the steel and spalling of the concrete.

Keim Concretal C protects concrete from penetration of  $\text{CO}_2$  from the air, protects from corrosion and frost damage due to its elevated water repellency and from external chloride corrosion due to the absence of water movement.

Keim Concretal C protects against all causes of decay in concrete, including carbonation, weathering, water absorption and chloride corrosion.





# Keim Concretal for New and Existing Concrete

## Keim Concretal W

Keim Concretal W is a water repellent sol silicate paint formulated for protection against weathering, water and chlorides.

Keim Concretal W has all of the benefits of a classic mineral paint, producing a lightfast mineral matt surface finish, exhibiting minimal soiling due to its antistatic properties. Manufactured from waterglass and natural earth oxides, Keim Concretal W is inherently compatible with concrete substrates and forms a strong permanent bond between the paint and concrete.

When applied onto new and existing concrete, Keim Concretal W protects against steel rebar corrosion and frost damage due to its elevated water repellency and against chloride corrosion due to restriction of water movement. Keim Concretal W provides protection from weathering and wear, and can be used for consolidation of friable concrete surfaces.





## Keim Concretal Lasur

Keim Concretal Lasur is a low pigmentation colour wash available in a wide range of colours and shades. Generically similar to other Keim silicate paint systems, the crystalline structure of Keim Concretal Lasur maintains a very high surface vapour permeability allowing the concrete substrate to breathe, giving rise to the proven longterm performance synonymous with Keim silicate paint systems.

Keim Concretal Lasur acts as a stain that penetrates and bonds to the surface of concrete, equalising colour variations whilst maintaining the structure and appearance of concrete.

Keim Concretal Lasur is a unique product, offering protection against weathering with inherent water repellence and breathability. Keim Concretal Lasur equalises unacceptable variations in colour and appearance of concrete, hides unsightly repairs, reduces surface dusting and increases light reflectivity.







## Key Features and Benefits:

- **Mineral protection for concrete**
- **Enhanced water-proofing**
- **Consolidation of friable concrete surfaces**
- **Effective against concrete decay**
- **Retains the surface finish**
- **Maintains the original concrete appearance**
- **Enhanced water vapour diffusion**
- **Lightfast, long-term colour stability**
- **Greatly reduced soiling**
- **Mineral matt surface**
- **Enhanced carbonation proofing**
- **Environmentally friendly**

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