

# KUT FLEXI GUARD

## High Performance Elastomeric & Waterproof Protective Coating For Concrete

PPC-21-0512



### DESCRIPTION

**KUT FLEXI GUARD** is a flexible, elastomeric, decorative protective coating based on acrylic co-polymers. Applied as a liquid it cures to form a durable, protective, waterproof membrane. It is a single component emulsion containing inert pigments and has a brushable consistency. **KUT FLEXI GUARD** exceeds all the requirements of a coating that resists carbonation and prevents chloride ion ingress. It is available in a wide range of colours.

### ADVANTAGES

- **High Performance** : It acts as a comprehensive barrier against carbon dioxide, water, sulphates and chloride ions.
- **Durability** : It maintains its appearance and elastomeric performance with high recovery even after long term UV weathering.
- **Application** : Easily applied by roller, brush or airless spray.
- **Flexibility** : It is capable of bridging cracks and withstands substrate cracking up to 2 mm and cyclic movement up to 1 mm.
- **Protection** : It acts as a barrier against salts and atmospheric gases.
- **High Build** : Masking imperfections in substrates.
- **Water Proofing** : It protects concrete from waterborne salts.
- **Breathable** : Water vapour can escape from the structure.
- Resistance to Microbial Activities
- Resistance to spillage of gasoline, diesel ,sewage, weak acids & and alkalis

### USES

- **KUT FLEXI GUARD** is designed to protect atmospherically exposed, reinforced concrete structures (above any splash zones) from attack by chloride ions, oxygen and moisture ingress, especially where there is danger of subsequent cracks appearing within the substrate.
- Typical uses include, but are not necessarily limited to new and existing structures, concrete storage tanks – external

surfaces, bridge structures and coastal environments.

### TYPICAL PROPERTIES

- **Relative Density:** 1.27 at 25°C.
- **Water Vapour Transmission:** < 0.4meters @  
(Taywood Method) 400 microns dft
- **Chloride Ion Diffusivity:** 4.98 x 10-10 cm2/s.
- **Reduction in chloride ion ingress:** 97% @ 28 days.
- **Accelerating weathering:** No cracking or  
5736 hours (BS 3900) Crazing
- **Carbon Dioxide diffusion resistance**  
**Equivalent thickness of air:** >300 meters  
(Taywood Method)
- **Carbon dioxide diffusion resistance**  
**Equivalent thickness of:** >700 mm  
30N/mm<sup>2</sup> conc.  
(Taywood Method)
- **Static crack spanning capability @ 200 microns dft @ 23°C**  
**(Modified ASTM C836 :** 2 mm.
- **Reduction in water absorption (ASTM D412) :** >82%.
- **Tensile Strength : (ASTM D412):** 5 N/mm<sup>2</sup>.
- **Tear Resistance : ( ASTM D 624):** 7.5 KN/m
- **Solids by weight:** 65%
- **Volume Solids:** 58%
- **Application Temperature:** 5°C to 50°C.
- **Chemical Resistance:** Resistant to spillage of gasoline, diesel, sewage, weak acids and alkalis.
- **Elongation:** > 400%.
- **Adhesion (BS 1881):** > 1 N/mm<sup>2</sup>.

### INSTRUCTIONS FOR USE

#### For Concrete

**Surface Preparation:** All concrete surfaces should be prepared to achieve a sound, clean surface free from laitance, oil, grease, mould release agent, residual curing compound, dust or other contaminants that could impair adhesion.

This is best achieved by lightly grit blasting the surface to the point where the fine aggregates are exposed but not polished. Where moss, algae or similar growths have occurred, treatment with a proprietary biocide should be



مصنع التخصصية لكيموايات البناء  
SPECIALITIES CONSTRUCTION CHEMICALS FACTORY

Marketed by: Alghanim Specialities Co. W.L.L.  
Amghara Industrial Area, P.O.Box: 23595 Safat, 13096 Kuwait  
Tel: 1802550 – 400 - Fax: +965 24582548 - Email: sales@spec-kw.com



carried out after the grit blasting process. It is essential to provide an unbroken coating of **KUT FELXI GUARD** thus, all blowholes and similar surface irregularities should be filled using **KUT FAIRING COAT** and should be allowed to cure properly prior to application of **KUT FLEXI GUARD**.

**Priming:** All surfaces should be primed with **KUT AQUASIL WB** or **KUT AQUASIL SB** applied at a rate of 5 m<sup>2</sup>/ltr. to eliminate excessive suction and promote adhesion. For placed concrete, cure with a single coat application of **KUT AQUASIL WB/SB** applied at 5 m<sup>2</sup>/ltr. In temperatures > 25°C, application should be made a minimum of three hours before applying **KUT FLEXI GUARD** coating. In cold, humid conditions 24 hours is required to ensure sufficient penetration. Any areas of glass should be masked. Plants, grass, joint sealants, asphalt and bitumen, painted areas should be protected during application.

**Application:** Apply two coats at a rate of 0.2 litres per square meter per coat of **KUT FLEXI GUARD** to achieve a minimum wft of 200 microns .the second coat should be applied only after the first coat has been cured and before 24 hours. ensuring a continuous even film. The finish may be textured if applied by brush.

### For Water Proofing

**Surface Preparation:** All surfaces to be treated should be clean and dust free. All traces of oil, grease, mould release agent and residual curing compounds should be removed together with any other contaminant that could impart adhesion.

Previous water proofing treatments should be either completely removed or put in order. Cracked, broken, slipped or missing tiles, sheets, slates or other forms of covering must be replaced or refixed. Cracks in asphalt or built – up systems should be filled with mastic and allowed to cure. **KUT AQUASIL WB/SB** as a primer, is required on all cement based and other porous substrates. It should be applied at 5 m<sup>2</sup>/ltr. and permitted to dry before proceeding. Any areas of glass should be masked. Plants, grass, joint sealants, asphalt and bitumen, painted areas should be protected during application.

**Application:** **KUT FLEXI GUARD** is applied to the prepared surfaces in 2 to 4 coats depending on thickness,

the first being allowed to dry before the second is applied. In hot dry climates, application will be assisted by dampening brushes. Where the roof is in poor condition, or where substantial movement is expected in the roof structure, apply a sandwich system incorporating reinforcing fabric. In this application, the fabric is bedded into the wet film of the first coat of **KUT FLEXI GUARD** using a charged brush.

Ensure that full contact is achieved and there is no air entrapped. Apply a second coat of **KUT FLEXI GUARD** when the first one has dried, at right angles to the first.

For more coats follow the same instruction as above.

## PACKAGING & COVERAGE

### Packing

**KUT FLEXI GUARD** is available in 20 kg. drums.

**KUT AQUASIL WB/SB** is available in 20 & 200 ltr. drums.

### Coverage

**KUT AQUASIL WB** - 5 m<sup>2</sup>/ltr.

**KUT AQUASIL SB** - 5 m<sup>2</sup>/ltr

**KUT FLEXI GUARD** - 5m<sup>2</sup>/litre@200micron wft/coat  
(2 coat application recommended)

## PRECAUTIONS

**Cleaning:** All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage systems but should be disposed off according to local regulations.

**Protection:** All work must be protected from rain, frost until fully hardened and shaded from direct sunlight exposure.

**Storage:** Shelf life is 12 months when stored in dry conditions at moderate temperature and humidity.

## HEALTH & SAFETY

**KUT FLEXI GUARD** should not come in contact with skin and eyes. Wear goggles while applying. Provide adequate ventilation. Wear face masks during application.

**ASPEC** endeavours to ensure that any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

**Distributor**