

## High performance wall and floor coating for concrete

### Product Description

TAL EPOXYAQUA 100 is a high performance, breathable epoxy wall and floor coating that is also decorative and suitable for use in a wide range of applications.

### Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Fast application
- High durability
- High impact and abrasion resistance
- Resistant to wide range of chemicals
- Waterproof
- Long pot life
- Available in wide range of colors
- Easy to clean finish
- Non toxic
- Gloss or matt finish available

### Uses

- Food preparation areas
- Kitchens
- Pharmaceutical plants
- Water tanks and pipes
- Food and beverage facilities
- Showrooms
- Stairwells
- Protection of concrete structures
- Car parks

### Specification Compliance

SCAQMD Rule 1113  
LEED NC2009 IEQ 4.2  
BS 6920  
FDA CFR 21 Section 175.300  
EFNARC Type 2A & B (WVT)  
FeFRA Type 2 LD/MD

### Fire Performance

- UK Building Regulations (Document B): Class O
- BS 476 Part 7: Class 1 Surface Spread of Flame
- BS 6853 CI 9.3 No Flame

### Volatile Organic Content

VOC = <10g/L

### Application Properties

|                    |                              |
|--------------------|------------------------------|
| Dry film thickness | 100 to 200 microns (2 coats) |
| Volume solids      | 60%                          |
| Pot life           | 60 mins. at 30°C             |
| Touch dry          | 8 hours at 30°C              |
| Max. recoat time   | 36 hours at 30°C             |
| Full cure          | 5 days at 30°C               |

### Laboratory Test Data

| Property  | Typical Results       |
|---|-----------------------|
| Abrasion Resistance ASTM D4060 CS10/1000r/1000g | < 100 mg              |
| Impact Resistance ASTM D2794                    | > 3 Joules            |
| Adhesion to Concrete ASTM D4541                 | > 2 MPa (CF)          |
| Adhesion to Steel ASTM D4541                    | > 6.5 MPa             |
| Scrub Resistance ASTM D2486                     | > 5,000 cycles        |
| Scratch Resistance BS3900 Part E2               | No Failure 2.5kg Load |

### Colour

RAL 6027 - Light green  
RAL 1001 - Beige  
RAL 7035 - Light grey  
RAL 3002 - Carmine red  
RAL 5017 - Traffic blue  
Gloss or matt finish available. Other colors available on request.

### Theoretical Coverage

6.6m<sup>2</sup>/L at 150 microns wft.

Actual coverage will depend on wastage and surface profile and can be up to 20% higher than theoretical coverage.

### Packaging

5L kits.

### Shelf Life

18 months when stored at below 35°C under shade in a dry environment.

### Installation Guidelines

Epoxy flooring should only be carried out by experienced contractors. TAL provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work and includes requirements for testing of electrical resistance, earthing of the system and how to deal with day and live joints. The information below is a summary intended for guidance only.

### Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by captive blasting to produce a lightly exposed aggregate surface i.e. a ICRI CSP 4 or 5 surface profile. Any bug holes (blow holes) should be filled with TAL BUGFILL. If substrate is not level or is uneven, level using TAL LEVELCEM HD.

### Priming

Priming is not normally required except in areas subject to high shear stresses such as car parks or in areas where fork lifts operate. Prime using TAL WD PRIMER.

## Moisture Testing

The concrete slab should be tested for moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (test kits are available for purchase from TAL). If the MVER is over 15lbs/1000ft<sup>2</sup>/24h then contact TAL for guidance.

## Mixing

Add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill with a Coating Mixer Paddle for 3 minutes or until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Before using the product, pour the mixed product into a clean container to make sure all the pigment has been dispersed and has not been left in the bottom of the mixing can. Mix only full packs.

## Application

Apply in two coats of 150 micron wet film thickness per coat using brush, roller or airless spray.

## Curing

When applied at an ambient humidity higher than 80% it may be required to blow forced air over the coating to aid water release from the coating.

## Cleaning

Tools should be cleaned immediately after use and before the resin sets, using water. Once the resin has set, it can only be removed by mechanical means.

## Limitations

Will change color when exposed to direct sunlight.  
Do not apply below 5°C or above 35°C.  
Avoid skin contact.  
Do not apply at thicknesses greater than those mentioned.  
Maximum ambient relative humidity of 85%.  
Do not expose the surface to water or cleaning solutions until fully cured.

