

Formerly known as
X-Shield EpoxySeal WDE

Technical Data Sheet

X-Tech EpoxyAqua 100

High performance wall and floor coating for concrete



30290815

Product Description

X-Tech 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

Service Temperature

10 to 60C

Application Properties

Dry film thickness	100 to 200 microns (2 coats)
Volume solids	60%
Pot life	60 mins. at 30C (86F)
Touch dry	8 hours at 30C (86F)
Max. recoat time	36 hours at 30C (86F)
Full cure	5 days at 30C (86F)

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

Volatile Organic Content

VOC = <10g/L

Color

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

6.6m²/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

4.5 and 19L packs.

Shelf Life

18 months when stored at 35C or less in a frost-free, dry and shaded area.

Installation Guidelines

Epoxy flooring should only be carried out by experienced contractors. X-Calibur 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 X-Shield BugFill. If substrate is not level or is uneven, level using X-Tech 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 X-Prime WD.

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 X-Calibur). If the MVER is over 15lbs/1000ft²/24h then contact X-Calibur for guidance.

Mixing

Add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill with an X-Shield 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 5C or above 35C. 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.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Systems Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.