

# **Technical Data Sheet**

# X-Shield EpoxySeal AR100

# Abrasion resistant 100% solids light reflective epoxy coating

20270213

# **Product Description**

X-Shield EpoxySeal AR100 is high wear resistant, pigmented, gloss, epoxy coating with excellent light reflectivity. The product is highly decorative and is suitable for use in a wide range of applications on concrete and wood floors and walls.

## **Advantages**

- High abrasion resistance
- Excellent light reflectivity
- Resistant to wide range of chemicals
- Fast turnaround
- Available in wide range of colors
- Easy to clean and maintain
- Excellent dust eliminator

#### Uses

- Showrooms
- Airplane hangers
- Food preparation areas
- Kitchens
- Pharmaceutical plants
- Warehouses
- Food and beverage facilities
- Stairwells

#### **Laboratory Test Data**

Property	Typical Results
Compressive strength ASTM C882	13,800 psi
Flexural strength ASTM D790	10,200 psi
Tensile strength ASTM D638	9700 psi
Bond to concrete ASTM C882	>300 psi
Abrasion resistance ASTM D4060	Loss 0.075 gm loss/1000 cycles
Impact resistance MIL D3134	Passes

# **Application Properties**

Pot life	15 minutes at 86F (30C)
Tack free	8 hour at 86F (30C)
Hard cure	24 hours at 86F (30C)
Recoat window	8 to 24 hours at 86F (30C)

#### **Colors**

Standard: light grey, battle ship grey tan, green tile red

blue yellow and off-white

Finish: Gloss

Other colors available on request subject to minimum

order.

# **Theoretical Coverage**

X-Shield ProPrime GP: 300ft² per gallon X-Shield EpoxySeal AR100: 150ft² per gallon per coat

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

# **Packaging**

4 gallon kits (3 gal pail Part A resin 1 gal pail Part B hardener)

# **Shelf Life**

18 months when stored at below 86F (30C) under shade in a dry environment.

#### **Installation Guidelines**

X-Shield EpoxySeal AR100 should be applied by experienced coating crews. X-Calibur provides detailed method statements for all its products for use in various applications. These must be referred to prior to starting work. 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 light grit blasting or high pressure water blasting to produce a lightly exposed aggregate surface. Any bug holes should be filled with an X-Shield BugFill.

# **Priming**

Prime substrate with X-Shield ProPrime GP and allow to dry before applying X-Shield EpoxySeal AR100. Ensure that no ponding of the primer occurs and that it is not applied too thick. If the primer is left to dry for more than 24 hours the surface will have to be

re-primed. Porous substrates may require a two coat application.

# **Mixing**

Add the hardener 'Part B' in to the base 'Part A' and mix using a slow speed drill (350 rpm) with an X-Shield Coating Mixer Paddle for 1 to 2 minutes 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 at a rate of 150ft²/gal (11mils wet film thickness) using squeegee and immediately back roll with a ¼" nap roller. If desired recoat after 8 to 24 hours at 30C. Clean equipment using X-Shield Solvent.

## Slip Resistant Finish

A slip resistant finish can be achieved by broadcasting dry sand onto the surface of the first coat while still wet. When the first coat has dried a second coat should then be applied at a rate of  $150 {\rm ft^2}$  per gallon. The grain size (Fine or Coarse) and broadcast rate will depend on the surface texture required but will generally be in the range of 10 to  $20 {\rm lbs}/100 {\rm ft^2}$  (0.5 to  $1 {\rm kg/m^2}$ ).

#### Limitations

Will change color in when exposed to direct sunlight. Will not accommodate movement cracks. Do not use in immersed conditions. Do not apply below 40F (5C) Avoid excessive application. Avoid skin contact. Do not dispose off into the water system. Protect from chemical and water spillage 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 ('ATSs') 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 ATSs.

# **Datasheet Validity**

X-Calibur makes modifications to its product datasheets on a continuous basis. Please 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 Chemistry 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 Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.