

Formerly known as
X-Shield EpoxySeal FLR55

Technical Data Sheet

X-Tech EpoxySeal FLR55

High performance coating for concrete and steel

30241015

Product Description

X-Tech EpoxySeal FLR55 is a high performance epoxy coating that is also decorative and suitable for use in a wide range of applications.

Composition

X-Tech EpoxySeal FLR55 is a solvented epoxy resin containing fillers, pigments, adhesion promoters and wetting agents.

Advantages

- High abrasion resistance
- Resistant to wide range of chemicals
- Long pot life
- Available in wide range of colors
- Easy to clean and maintain.

Uses

- Process areas
- Storage areas
- Stairwells
- Steel piles
- Steel shutters

Application Properties

Finish	Glossy
Dry film thickness	135 to 165 microns
Volume solids	63%
Specific gravity	1.4 ± 0.05
Pot life	2 hours at 30C (86F)
Touch dry	3 hours at 30C (86F)
Recoat time	6 to 24 hours at 30C (86F)
Full cure	5 days at 30C (86F)

Volatile Organic Content

VOC = 320 g/L

Fire Performance

UK Building Regulations (Document B): Class O
BS 476 Part 7: Class 1 Surface Spread of Flame

Service Temperature

0 to 80C

Chemical Resistance

X-Tech EpoxySeal FLR55 has excellent resistance to the following chemicals:

10% Lactic acid	Petrol
50% Sulphuric acid	Greases
Concentrated bleach	Xylene
Saturated sugar solution	10% Ammonia
Saturated urea solution	10% Citric acid
White spirit	20% Hydrochloric acid
Oils	

Color

RAL 7001 Silver Grey	RAL 5017 Traffic Blue
RAL 6029 Mint Green	RAL 1001 Beige
RAL 7035 Light Grey	RAL 3002 Carmine Red
Others colours available on request.	

Theoretical Coverage

X-Prime SP: 10m² per liter.

X-Tech EpoxySeal FLR55: 10 to 12.5m² per liter per coat.

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

Packaging

X-Prime SP: 5 and 18 liter packs

X-Tech EpoxySeal FLR55: 15 liter pack.

Shelf Life

18 months when stored below 30C under shade in a dry environment.

Application Guidelines

X-Tech EpoxySeal FLR55 should be applied by experienced coating crews. X-Calibur provides detailed method statements on 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 X-Shield BugFill.

Priming

On good, sound, non porous, grit blasted concrete substrates a primer is not normally required. It is recommended that a trial area be prepared and 'pull off' tests conducted to determine if a primer is required or not. If priming is required, then prime with X-Prime SP and allow to dry before applying X-Tech EpoxySeal FLR55. 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

Mix X-Prime SP and X-Tech EpoxySeal FLR55 using the following technique. Add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500 rpm) 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. Mix only full packs.

Application

Apply in two coats of 80 to 100 micron (3.2 to 4mils) wet film thickness using brush, roller or airless spray. When using airless spray, tip size should be 0.015" to 0.0018" at a pressure of 2200psi. Recoat after 6 to 24 hours at 30C. Clean equipment using X-Shield Solvent S.

Slip Resistant Finish

A slip resistant finish can be achieved by broadcasting X-Tech Anti Skid Grains (fine) onto the surface of the first coat while still wet. The broadcast rate will depend on the surface texture required but will generally be in the range of 0.2 to 0.4kg/m².

Limitations

Will change color when exposed to direct sunlight.
Will not accommodate movement cracks.
Do not use in immersed conditions.
Do not apply below 5C.
Do not be apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.
Avoid excessive application.
Avoid skin contact.
Do not discard into the water system.
Apply only on to slabs that have a waterproofing system installed in order to prevent blistering due to osmosis.
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

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