



X-Tech EpoxyFloor SLU

High strength load bearing self leveling base layer

Product Description

X-Tech EpoxyFloor SLU consists of special resins and graded aggregates formulated to withstand chemical attack and impact. The product is supplied as a 3 component system. X-Tech EpoxyFloor SLU provides a surface ready to receive applications of other X-Calibur flooring systems. It is available in two grades X-Tech EpoxyFloor SLU, which is suitable for thicknesses 3 to 10mm and X-Tech EpoxyFloor SLU1 which is suitable for thicknesses 1 to 3mm

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Cost effective
- High strength
- Durable
- Quick and easy to lay
- Seamless

Uses

Provides an economical method of levelling floors prior to laying epoxy screed, toppings or coatings such as X-Tech EpoxySeal FLR55, X-Tech EpoxySeal FLR100 and X-Tech EpoxyFloor SL.

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2

Laboratory Test Data

The values given below are typical figures achieved in laboratory tests. Actual values obtained on-site may show minor variations from those quoted.

Property	Typical Results at 20C
Compressive strength (BS 6319)	>50 N/mm ² at 28 days
Flexural strength (BS 6319)	>15 N/mm ² at 28 days
Tensile strength (BS 6319)	>10 N/mm ² at 28 days
Water absorption (BS 1881)	Nil

Application Properties at 20C

Pot life	90min
Initial hardness	24h
Full cure	7d
Adhesion	Greater than the tensile strength of concrete

Fire Performance

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

Service Temperature

0 to 60C

Volatile Organic Content

VOC = <75 g/L

Theoretical Coverage

1L per each mm thickness

Packaging

X-Tech EpoxyFloor SLU : 12L packs
X-Tech EpoxyFloor SLU1: 17L packs
X-Shield Solvent: 5L packs.

Shelf Life

X-Tech EpoxyFloor SLU has a shelf life of 18 months when stored in a dry place below 35C in its original, unopened packs.

Installation Guidelines

X-Tech EpoxyFloor SLU should be applied by experienced flooring 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 to produce a lightly exposed aggregate surface i.e. a ICRI CSP 4 or 5 surface profile.

Moisture Testing

The concrete slab should be tested for moisture with the Rapid RH system following the procedure in ASTM F2170. If the humidity reading is greater than 80% then conduct moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (Both test kits are available for purchase from X-Calibur). If the MVER is under 3lbs/1000ft²/24h use X-Prime SF. If the MVER is 3 to 5 lbs/1000ft²/24h use a single coat X-Prime MT100 at 165 microns wft. If the MVER is 5 to 12 lbs/1000ft²/24h use two coats of X-Prime MT100 at 200 microns wft per coat.

Priming

The base and hardener have to be mixed using a slow speed drill and approved mixing paddle until homogeneous. The mixed primer should then be applied to the prepared substrate with a stiff brush or roller. Do not over apply or allow puddles of primer to form. If the primer is absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack-free. Allow the primer to become tack-free before application of the layer. Apply next layer within 24 hours of priming.

Mixing

It is important that X-Tech EpoxyFloor SLU is mixed correctly. Suitable mixing equipment must be used, such as equipment being defined as either a heavy duty variable speed drill and X-Calibur Mixing Paddle (MR3), or forced action mixers such as Creteangle or similar. Empty the entire contents of the hardener component into the can containing the resin base component and mix until homogeneous. Place the mixed resin components into the mixing vessel and while mixing slowly add the fillers. Mixing of all components shall continue for a further 3 to 5 minutes, until such time that a homogeneous mix is achieved.

Application

The mixed X-Tech EpoxyFloor SLU should be spread to uniform thickness on the prepared surface using either a squeegee or a notched trowel. The subsequent use of a spiked roller, eliminates air entrapment.

The material must be applied within the pot life after mixing (see "Properties"). After this time unused material should be discarded.

If a trowelable consistency is required add 1 bag of Filler 5L per pack of X-Tech EpoxyFloor SLU while mixing. Add Filler 5L after adding the SLU Filler and mix for a further 2 minutes or until fully dispersed.

Overcoating

Overcoating of the X-Tech EpoxyFloor SLU with any other X-Calibur floor system should not start until the X-Tech EpoxyFloor SLU is at least 18 hours old, but not later than 48 hours.

Note: When over-coating carry out a trial to ensure the topcoat has sufficient hiding power to cover the dark color of X-Tech EpoxyFloor SLU.

Expansion Joints

Expansion joints in the existing substrate should be continued through the X-Tech EpoxyFloor SLU and any subsequent topping, and filled to the required level with a suitable sealant - contact the local X-Calibur office for further details.

Design Criteria

X-Tech EpoxyFloor SLU is designed for application in the range of 1 to 10 mm. Use X-Tech EpoxyFloor SLU1 for thicknesses of 1 to 3mm and X-Tech EpoxyFloor SLU for

thicknesses of 3 to 10mm. Greater thicknesses can be achieved by the addition of graded aggregate- consult the local X-Calibur office for more details. Substrates should be surface dry and not suffer, or be likely to suffer, from rising dampness. If necessary, suitable damp-proof membranes should be installed to prevent this. Substrates should not have a moisture content greater than 5% at any time during the installation.

Cleaning

All tools and equipment should be cleaned immediately after use with X-Shield Solvent S.

Limitations

May change color when exposed to direct sunlight.
Do not use in immersed conditions.
Do not be applied within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.
Avoid skin contact.
Do not discard into the water system.
Protect from chemical and water spillage until fully cured.
If any dust is present during application "fish eyes" may occur.

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 ATSSs.

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 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.