

X-Tech UraFloor HT

Heavy duty polyurethane screed and self leveling flooring

Product Description

X-Tech UraFloor HT is a heavy duty solvent free polyurethane flooring system which is available as both in screed and self leveling forms.

Advantages

- Formaldehyde free
- High durability
- Resistant to abrasion, impact and chemical attack
- Able to be steam cleaned at a thickness of 5mm
- Seamless and hygienic finish
- Excellent chemical resistance
- Resistant to thermal shock
- Low odour during installation

Uses

X-Tech UraFloor HT is used in heavy duty applications such as chemical processing, food processing, brewing, engineering process areas, joint nosing and bedding applications.

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2
EFNARC Type 6A (>4mm) & Type 8A (>6mm)
FeFRA Type 6

Laboratory Test Data

Property	Typical Results
Compressive strength (ASTM C109)	>70 MPa
Tensile strength (ASTM D638)	6.5 MPa
Flexural strength (ASTM C580)	36 MPa
Impact resistance (ASTM D2794)	>19 joules
Bond strength (ASTM D4541)	Failure in concrete
Abrasion resistance (ASTM D4060 1000g/1000r CS17)	<40 mg

Operating Temperature

-15C to +120C subject to thickness.

Volatile Organic Content

VOC = <50 g/L

Theoretical Coverage

1L/m² per mm thickness

Application Properties at 20C

Application thickness	Screed: 3 to 7mm SL: 3 to 5mm
Pot life	30 to 45 min
Light traffic	8 to 12h
Light wheeled traffic	24h
Heavy duty traffic	24 to 48h
Fully cure (water resistance)	5d

Chemical Resistance

Excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

Colors

RAL 7035 Light Grey RAL 7001 Silver Grey
RAL 3002 Carmine Red RAL 1002 Sand Yellow

Packaging

X-Shield SF & MT Primers - 1, 5 & 15L packs
Self Leveling Grade - 10L
Screed Grade - 12L

Shelf Life

12 months when stored between 10 to 35C under shade in dry conditions.

Application Guidelines

X-Tech UraFloor HT should be applied by experienced applicators. 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 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 or X-Shield Primer Filler (when using X-Shield MT Primer apply BugFill or Primer Filler after priming).

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-Shield SF Primer. If the MVER is 3 to 5 lbs/1000ft²/24h use a single coat X-Shield MT Primer at 165 microns wft. If the MVER is 5 to 12 lbs/1000ft²/24h use two coats of X-Shield MT Primer at 200 microns wft per coat.

Priming

The base and hardener have to mixed using a slow speed drill and approved mixing paddle until homogenous. 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 cure for at least 12 hours before applying the next layer. Complete application of the next layer within 36 hours of priming. When using the screed version immediately after application of the final primer coat broadcast X-Shield AntiSlip Grain (M) on the surface of the primer at a rate of approximately 200 to 250g/m².

Mixing

Mixing should only be carried out using a forced action mixer such as a Mixit 25 (available for hire or purchase from X-Calibur). Pre-mix the base component and then pour into the clean mixing vessel and, while stirring slowly, add the hardener component and mix for 1 minute. Once the base and hardener has been mixed, add the filler slowly and mix for a further 3 minutes.

Application (Screed)

To control level and surface finish the used of a screed box or screed bars fixed to the required thickness is highly recommended. Place and level the material then carry out initial finishing with a wooden trowel to create an open texture that will allow air release. Once this is done then compact using the same trowel and finish using a steel trowel to tightly close the surface. Do not use solvent as a troweling aid as it will destroy the resin structure. X-Tech TrowelEasy is recommended as a finishing aid. It is applied to the steel trowel to assist with finishing to produce a tight dense uniform finish free from trowel burn.

Application (Self leveling)

Spread the mixed product onto the tack-free primer using a notched vee rake followed by a pin leveller set to achieve the required thickness. Immediately after spreading, roll using a spiked roller to release trapped air and remove trowel marks.

Rolling should be completed within 20 minutes.

Sealing

If the finishing has been carried out to a high standard then a sealer is not normally required. If the surface is required to be sealed then seal using the resin (base and hardener mixed together without filler) component of X-Tech UraFloor HT. Apply at a coverage of 10 to 15m²/L.

Cleaning

Clean with X-Shield Solvent S before the product has cured.

Limitations

Will change color when exposed to direct sunlight.
Do not use solvent to finish the surface.
Do not be apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.
Do not apply below 5C (41F) or above 35C (95F).
Avoid skin contact.
Do not discard 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. E-mail taltech@norcrossa.com or call 0860 000 825 for a copy of the MSDS.

Authorized Technical Specialist

Please note that only TAL X-Calibur Authorized Technical Specialists are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product.

Datasheet Validity

TAL X-Calibur make modifications to its product datasheets on a continuous basis. to ensure you have the latest version, e-mail taltech@norcrossa.com or call 0860 000 825 to ensure you have the latest version.

Important Notice

TAL believes the information on this sheet to be correct - but does not guarantee its accuracy or completeness. Conduct your own tests of this product to determine its suitability for intended use. User assumes all risks and liability during testing and use of this product. The only obligation of TAL shall be to replace any of this product proved to be defective due to manufacturing defects. TAL shall not be liable for any injury, loss or damage, direct or inconsequential, relating to the use or inability to use this product. Except as expressly provided above, all products sold and samples furnished without any warranty of merchant ability or any other warranty, express or implied.

Contact the TAL X-Calibur Technical Advice Centre on 0860 000 TAL(825), or e-mail taltech@norcrossa.com
Johannesburg+27 (0)11 206 9700 Cape Town +27 (021) 386 1810 Durban +27 (031) 579 2263
www.x-calibur.co.za www.tal.co.za

TAL is a registered trademark of Norcros SA (PTY) Ltd and X-Calibur & X-Tech are registered trademarks of X-Calibur Chemistry Inc.
Manufactured in South Africa under license from X-Calibur Chemistry Inc. by TAL - a division of Norcros SA (Pty) Ltd.