

# X-Tech UraFloor TF

## Heavy duty polyurethane screed and mortar

### Product Description

X-Tech UraFloor TF is a heavy duty polyurethane based floor screed and mortar designed to provide excellent resistance to abrasion, chemical attack and thermal shock.

### Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- High durability
- Resistant to abrasion, impact and chemical attack
- Able to be steam cleaned at a thickness of 9mm
- Seamless and hygienic finish
- Contains a unique antimicrobial additive
- Excellent chemical resistance
- Resistant to thermal shock
- Low odour during installation

### Uses

Used in heavy duty applications in food processing, medical facilities, dairies, beverage factories, cold stores etc that require a non slip finish that withstands thermal shock.

### 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)	>60 MPa
Flexural strength (ASTM C580)	>40 MPa
Tensile strength (ASTM D638)	>6 MPa
Impact resistance (ASTM D2794)	>19 Joules
Abrasion resistance (ASTM D4060 1000g/1000r CS17)	<40mg

### Application Properties

Application thickness	6 to 9mm	
Application temperature range	5 to 30C	
Pot life	20C 15 min	30C 7 min

### Cure Time at 20C

Light traffic	4 to 6h
Light wheeled traffic	12 to 16h
Heavy duty traffic	24h
Full cure	3 to 5d

### Operating Temperature

-15C to +95C

### Volatile Organic Content

VOC = <5 g/L

### Chemical Resistance

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

### Theoretical Coverage

X-Tech UraFloor TF: 2m<sup>2</sup> per 12L pack at 6mm thick & 1.33m<sup>2</sup> at 9mm thick.

### Packaging

X-Tech UraFloor TF: 12 liters or 26 kg packs.

### Shelf Life

12 months when stored between 10 to 30C under shade in dry conditions.

### Application Guidelines

X-Tech UraFloor TF should be applied by experienced coating crews. NCC 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 NCC X-Calibur). If the MVER is 1.36Kg/93m<sup>2</sup>/24h (3lbs/1000ft<sup>2</sup>/24h) use X-Shield SF Primer. If the MVER is 1.36 to 2.27 Kg /93m<sup>2</sup>/24h (3 to 5 lbs/1000ft<sup>2</sup>/24h) use a single coat X-Shield MT Primer at 165 microns wft. If the MVER is 2.27 to 5.44 Kg/93m<sup>2</sup>/24h (5 to 12 lbs/1000ft<sup>2</sup>/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 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. 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/m<sup>2</sup>. 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.

### Mixing

Mixing should only be carried out using a forced action mixer such as a Mixit 25 (available for hire or purchase from NCC 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 min-ute. Once the base and hardener has been mixed, add the filler slowly and mix for a further 3 minutes.

### Application

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.

### 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 TF. Apply at a coverage of 10 to 15m<sup>2</sup>/L.

### Cleaning

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

### Limitations

Can change color in when exposed to direct sunlight.  
Will not accommodate movement cracks.  
Do not apply below 5C.  
Avoid excessive application.  
Avoid skin contact.  
Do not dispose off into the water system.  
Not for use were service temperature exceeds 95C.  
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.ncc.com.eg](http://www.ncc.com.eg)**

### Authorized Technical Specialist

Please note that only NCC 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.ncc.com.eg](http://www.ncc.com.eg) for a full list of NCC X-Calibur ATs.

### Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on [www.ncc.com.eg](http://www.ncc.com.eg) to ensure you have the latest version.

### Warranties

NCC 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. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC 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.** NCC X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.



Quality Statement  
All Products manufactured by NCC X-CALIBUR or imported from X-CALIBUR companies world-wide are manufactured to procedures certified to conform the quality, environment, systems described in the ISO 14001:2004 , ISO 9001:2000.



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