

# X-Shield FlexCoat

**High performance waterproof cement coating for concrete.**

## Product Description

X-Shield FlexCoat is a high performance, multi-function cement coating used for waterproofing, resurfacing and concrete protection.

## Composition

X-Shield FlexCoat is a two component cementitious coating manufactured using selected cements, fillers and an acrylic co-polymer.

## Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Waterproof
- UV stable
- Can be used above and below grade
- Breathable
- Can be applied to one day old concrete
- Can be used in contact with potable water
- WWWO Certified

## Uses

- Wet area waterproofing
- Roof waterproofing
- Tile/stone waterproof backing
- Water tank coating
- Sea walls
- Concrete protection
- Resurfacing

## Laboratory Test Data

Property	Typical Results
<b>Nature</b>	Compound A: liquid Compound B: powder
<b>Specific gravity</b>	1.90 ± 0.05 g/cm <sup>3</sup>
<b>Compressive strength (ASTM C 109)</b>	>20MPa
<b>Flexural strength (BS 6319)</b>	>5 MPa
<b>Tensile strength (ASTM C 307)</b>	>1.5MPa

The above data relates to X-Shield FlexCoat after 28 days curing. Refer to test reports for actual test procedures.

## Color

Compound A: White

Compound B: Grey, white and custom colors is available

Mix : Grey, white and custom colors is available.

## Specification Compliance

SCAQMD Rule 1113  
LEED NC2009 IEQ 4.2  
Classified under BS EN 1062-1:2002 as Class C1 carbon dioxide permeability.  
ANSI A118.10  
BS 6920

## Packaging

25kg Kits.  
20kg powder & 5kg liquid

## Theoretical Coverage

1 – 1.5 kg/m<sup>2</sup> for first coat.  
0.8 – 1 kg/m<sup>2</sup> for second coat.  
Minimum 2 coats apply on the surface.  
Practical consumption depend on surface nature, thickness and wastage of technical.

## Yield

13 liters per kit.

## Shelf Life

12 months when stored below 35C (95F) under shade in a dry environment.

## Installation Guidelines

X-Shield FlexCoat should be applied by experienced applicators. 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 light grit blasting or high pressure water blasting to produce a lightly exposed aggregate surface. Any bug holes should be filled with X-Shield FlexCoat, mixed using a small amount of the filler component and the liquid polymer component, to produce a paste that can easily be applied using the 'scrape on, scrape off' technique with a steel scraper or steel trowel. The surface should be primed using water to achieve a saturated surface dry (SSD) surface prior to application of X-Shield FlexCoat.

## Mixing

X-Shield FlexCoat is supplied as a two component pack consisting of filler and liquid polymer. Both components are pre-measured and no addition of water is necessary. Place the liquid polymer component into a suitable container and slowly add the filler component while mixing with a slow speed drill fitted with an approved mixing paddle. Mix for approximately 3 minutes until a lump-free creamy consistency is achieved. Mix only sufficient material for application within 45 minutes.

## Application

Apply using brush, roller or hopper spray. First coat should be applied at 1 liter per m<sup>2</sup>; subsequent coats at 0.5 to 1.0 liter per m<sup>2</sup>. Apply subsequent coats once the coat beneath has dried. The coating can be reinforced using X-Shield Reinforcing Fabric, X-Shield CrackMat or X-Pruf Roof Scrim.

## Limitations

Do not add water to the material.  
Temperature of the mixed coating should be less than 30C at time of application.  
Do not apply to substrates that have free water on them.  
Do not water test until the coating has cured for 7 days. Do not immerse until the coating has cured for 7 days. Not suitable for use with acids.  
Do not apply below 5C.  
Avoid excessive application.  
Avoid skin contact.  
Do not discard into the water system.

## 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 ('ATSSOs) 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 ATSSOs.

## 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 over 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 Chemistry. **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 Chemistry. 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.