

# X-Tile CTA

Cementitious water resistant tile adhesive.

## Product Description

X-Tile CTA is a polymer modified cementitious tile adhesive that can be used with the simple addition of water or can be modified with X-Roc Latex to improve adhesion.

## Composition

X-Tile CTA consists of ordinary Portland cement, specially graded aggregates and polymer additives.

## Advantages

- Meets SCAQMD Rule 1168 & LEED VOC Limits
- Formaldehyde free
- Easy to use
- Provides superior bond
- Water resistant
- Can be used as single component or with the addition of liquid latex

## uses

Bonding the following types of tiles:

- Ceramic / Earthenware

## Bonding tiles for the following applications:

- Balconies / Bathrooms / Kitchens •Residential environment / Terraces / Wet areas .

## Specification Compliance

SCAQMD Rule 1168  
LEED NC2009 IEQ 4.1  
Estidama LBI-2.1  
EN 12004 (C1a)

## Laboratory Test Data

| Property                         | Typical Results               |
|----------------------------------|-------------------------------|
| Nature                           | Powder                        |
| Color                            | Grey – white                  |
| Specific gravity of paste        | 1.85 ± 0.05 g/cm <sup>3</sup> |
| Compressive strength (ASTM C109) | > 17.24 MPa at 28 days        |
| Flexural strength (ASTM C580)    | > 2 MPa at 28 days            |
| Shear strength                   | > 2 MPa at 28 days            |

The above data was obtained under laboratory conditions when mixed with water and will vary in the field as a result of different factors.

## Volatile Organic Content

VOC = <20 g/L

## Application Properties

|                         |                      |
|-------------------------|----------------------|
| Application temperature | 5 to 40C             |
| Initial set             | 6 - 8 hours at 25°C  |
| Final set               | 12- 14 hours at 25°C |
| Open time               | 50-70 min at 20°C    |
| Mixing water            | 5 – 5.5 L per bag    |

## Yield

One bag of X-Tile CTA yields 16.670 liters when used as a thin set mortar.

## Coverage

25 kg X-Tile CTA / 5.5 – 9 m<sup>2</sup> depend on trowel type:

8.55m<sup>2</sup> for trowel 6mm<sup>2</sup> and  
7m<sup>2</sup> for trowel 8mm<sup>2</sup>

And all of these consumption depend on surface nature, water rate, thickness and wastage of technical.

## Packaging

50kg bags.

## Shelf Life

12 months when stored below 35°C under shade in a dry environment.

## Installation Guidelines

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

Suitable substrates are Portland cement based renders, concrete and screeds, and moisture resistant gypsum board. The substrate must be sound, clean and free of any contamination such as form oil, dust, paint etc.

## Priming

After surface preparation has been completed, the substrate should be soaked with water and not allowed to dry out. At the time of placing the tile adhesive, the substrate has to be in a saturated surface dry (SSD) condition with no free water present.

If the surface is allowed to dry out prior to application of the mortar, the bond may be reduced.

When tiles are being applied to gypsum plasterboard or calcium silicate board or when the adhesive is being used as a thick set adhesive prime using X-Roc BondCure applied as a uniform consistent coat until fully absorbed. Apply the tile when the substrate is "sticky" when touched. (Refer NCC X-Calibur Technical Note 005.07)

In thick set applications also prime the rear face of the tile using X-Roc BondCure or X-Shield BondSeal as described above.

Prime with X-Roc BondCure when being applied to cementitious waterproofing membranes.

### **Mixing**

X-Tile CTA should only be mixed in full packs. Place pre-measured clean cool water in a clean mixing vessel of adequate size, such as a plastic bucket. Slowly add the X-Tile CTA powder to the water while starting to mix with a slow speed drill and suitable mixer. Mix for three minutes and allow to stand for five minutes. Mix again for one minute before using the material. No further water should be added to the mixed mortar which must be used within 30 minutes. Stiffened mortar should not be re-mixed or used.

When using with X-Roc Latex, add one liter of X-Roc Latex to the water and mix as detailed above. Reduce the total water added by 0.5 liter.

### **Fixing**

X-Tile CTA is applied in one coat at a thickness of 3 to 5mm when used as a thin set adhesive, and 3 to 15mm when used as a thick set adhesive. To achieve a uniform thickness, the mortar should be spread with a serrated trowel. Do not spread more than 0.5m<sup>2</sup> at a time. Spreading larger areas may result in the mortar drying out before tiles can be stuck to the adhesive, resulting in poor adhesion. The actual open time will vary according to the porosity of the surface and ambient conditions. Leave a minimum 2mm gap around every tile.

### **Joints**

Ensure that movement and perimeter joints are incorporate as per the relevant Code of Practice (Refer to NCC X-Calibur Technical Note 006.07).

### **Trial Area**

Due to the wide variety of substrates, tiles and methods of tile fixing used in construction it is recommended that a trial area be carried out prior to commencement of tiling works and pull off tests carried out. The trials should be carried out using the adhesive mixed with the actual water content that will be used throughout the project.

### **Grouting**

Grouting should be carried out at 24 to 48 hours after completion of tiling.

### **Limitations**

Not suitable for use with glass mosaic or porcelain tiles or other low absorption (< 15%) tiles, unless used with X-Roc Latex.

Do not apply at thicknesses outside the range quoted on this datasheet.

Do not apply to wood, steel or painted surfaces.

Tiling in newly constructed buildings should not begin until all shrinkage movement has occurred.

Portland cement based renders, plasters and floor screeds should be 14 days old before tiling commences. Do not apply to dry substrates or in rain or on a surface where free water is present.

### **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 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 Chemicals **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 Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.