

X-Tile STA

Thin bed flexible adhesive for natural stone and low porosity tiles

Product Description

X-Tile STA is a cementitious flexible single component adhesive for use with natural stone low porosity tiles and for use with X-Shield SoundStop Mat.

Composition

X-Tile STA consists of white Portland cement, specially graded aggregates and polymer additives.

Advantages

- Meets SCAQMD Rule 1168 & LEED VOC Limits
- Formaldehyde free
- High polymer content
- Flexible
- Easy to use
- Provides superior bond
- Water resistant
- Single component
- Non-staining.

Uses

Internal and external fixing of:

- Natural stone
- Glass mosaic
- Glass brick
- Ceramic tiles
- Porcelain tiles

Specification Compliance

SCAQMD Rule 1168
LEED NC2009 IEQ 4.1
Estidama LBi-2.1
BS 5890 (Type 1, AA)
EN 12004 (C1)
ANSI A118.4

Laboratory Test Data

Property	Typical Results
Compressive strength(EN 102004 C1)	20MPa at 28 days
Flexural strength (EN 102004 C1)	3MPa at 28 days
Bond strength (EN 102004 C1)	1200 KN at 7 days

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

Application Properties

Application temperature	5 to 40C
Min. application thickness	3 mm
Max. application thickness	
Thin set application	5mm
Thick set application	15mm
Max. temp. of mixed material	30C
Working time	30 minutes at 30C
Open time	10 minutes at 30C
Mixing water	
Thin set application	6.5L per bag
Thick set application	5.8L per bag

Volatile Organic Content

VOC = <20 g/L

Color

White & Grey.

Coverage

One bag of X-Tile STA yields 16 liters. This provides an approximate coverage of 5.33m² at 3mm thickness and 3.2m² at 5mm thickness.

Packaging

25kg bags.

Shelf Life

12 months in sealed biodegradable plastic bags.
6 months in paper bags.

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.

Natural stone should be sealed with X-Shield BondSeal.

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

Mixing

X-Tile STA 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 STA 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.

Fixing

X-Tile STA 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 0.5m² 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

Do not apply if greater than 5mm thickness.

Protect from direct exposure to sun, wind and rain during application.

Do not apply to wood, steel or painted surfaces.

Tiling in newly constructed buildings should not begin until all shrinkage movement is completed.

Portland cement based renders, plasters and floor screeds should have hardened before tiling commences.

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

Authorized Technical Specialist

Please note that only NCC 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.ncc.com.eg for a full list of NCC X-Calibur ATSSs.

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 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 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 Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.