

Tile Adhesive - Ultra Strength

ST-TA(US)

High strength, polymerized thin bed tile adhesive with efflorescence resistance complying with Class C2TE of BS EN 12004 for both interior and exterior wall and floor tile fixing application.



PRODUCT DESCRIPTION

ST-TA(US) is a proprietary premixed, high performance, water resistant and single component cementitious tile adhesive specially designed for fixing porous and vitreous tiles including granite, artificial granite tile, ceramic and homogeneous tiles. Product characteristics of ST-TA(US) fully complies with the requirement of BS EN 12004 Type C Class 2TE (Improved cementitious adhesive C2 grade) with ultra high adhesion strength, reduced-slip and extended open time properties. ST-TA(US) has excellent effect in preventing efflorescence. Best result for combating efflorescence can be achieved by employing Score Tech's render/plaster and tile grout products in the entire system.

SUBSTRATE PREPARATION

The substrate must be sound, even, well-aligned, clean and free from loose particles, grease and any other unwanted contaminants. Tile fixing works can be commenced after the substrate attains adequate maturity especially in shrinkage movement.

For tiles with ultra-low water absorption (very close to zero) or bearing a coating at the tile's back, priming tile's back with bond coat slurry (ST-BCL : OPC = 1 : 1.5 - 2 by vol.) at least one day prior to tile installation is highly recommended to enhance the interfacial adhesion between tile adhesive and tile.

FEATURES & BENEFITS

- ◆ Premixed in factory
- ◆ Ultra strong adhesion to substrate
- ◆ Suitable for both interior & exterior use
- ◆ Sustainable to seasonal cycles
- ◆ Extended open time for application
- ◆ Non-slip properties
- ◆ Thixotropic characteristics
- ◆ Extremely low shrinkage
- ◆ Non-toxic to human beings when contact with potable water
- ◆ Anti-efflorescence

AREAS OF APPLICATION

- ◆ Suitable for fixing both wall and floor tiles at interior/exterior environments and water retaining structures, e.g. water tank, swimming pool, etc.
- ◆ Fixing large size (e.g. 300x300mm, 600x600mm, etc) ceramic tiles, homogeneous tiles, natural stone, granites, etc. Consult Score Tech staff for fixing tiles in larger size.
- ◆ When tiling on highly absorptive substrates such as gypsum board, cement board, dry wall panels, etc., priming the substrate surface with diluted Score Tech Supreme Primer (ST-SP) in advance is highly recommended.
- ◆ Able to fix tiles on cementitious based waterproofing materials such as Score Tech Waterproofing Series.

MIXING & INSTALLATION

1. Pre-wet the substrate surface with clean water moderately before application of tile adhesive.
2. Mix the tile adhesive with mechanical mixer for 5 - 7 minutes until a lump-free homogeneous paste is obtained. Allow the mixture to stand for 10 minutes and remix gently for 30 seconds before use.
3. Apply the well mixed tile adhesive directly onto the substrate and notch with a notched trowel to control the application thickness over the tiling area. The open time of tile adhesive may vary at different weather conditions and absorptive substrate will also reduce the open time of tile adhesive.
4. Back-butter is required for the tiles with deep groves, ridges or in large size.
5. Place and press the tiles firmly onto tile adhesive bed by gently tapping on the tiles to ensure good contact. Regular check is recommended to ensure full bedding.
6. Remove any excessive tile adhesive before it becomes dry. Tile grouting work can be commenced 24 hours after tile installation.

CURING

Under normal circumstances, natural air curing for ST-TA(US) is proven adequate.

PRODUCT INFORMATION

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| ρ Colour | Grey / White |
| ρ Maximum Grain Size | 1.0 mm |
| ρ Water Demand | Grey : ~ 11.6 ± 0.4L / 40 kg bag White : ~ 12 ± 0.4L / 40 kg bag |
| ρ Pot Life | ~ 2 hours |
| ρ Coverage | ~ 1.2 kg/m ² /mm |

PRODUCT PERFORMANCE

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| ρ Initial Tensile Adhesion Strength | BS EN 1348 | 1.9 N/mm ² |
| ρ Tensile Adhesion Strength after Water Immersion | BS EN 1348 | 1.3 N/mm ² |
| ρ Tensile Adhesion Strength after Heat Ageing | BS EN 1348 | 2.0 N/mm ² |
| ρ Tensile Adhesion Strength after Freeze-thaw Cycles | BS EN 1348 | 1.9 N/mm ² |
| ρ Open Time: not less than 30 minutes | BS EN 1346 | 1.4 N/mm ² |
| ρ Slip Resistance | BS EN 1308 | ≤ 0.5 mm |
| ρ Adjustment Time | BS 5980 | 10 minutes |
| ρ Shear Adhesion Strength | BS 5980 | 25.4 kN |
| ρ VOC Content | ASTM D3960 | ≤ 10 g/L |
| ρ Resistance to Mould Growth | BS 5980 | No Mould Growth |
| ρ Resistance to Efflorescence | JC/T 1024 | No efflorescence after 21 cycles |
| ρ Suitability for Use in Contact with Potable Water | BS 6920 | Suitable for use in potable water tank |

* Note: The test standards for the product performance stated above refer to laboratory test only.

DISCLAIMER

Note: As the application condition may vary from site to site and may not be identical to the same condition under which the parameters in the brochure are drawn, the information provided on this Technical Data Sheet is for general guidance only. Warranty will not be given to the ultimate performance and application results of this material when the material is not kept, mixed, applied or cured strictly in accordance with the requirements and/or instructions listed out in this brochure or in other supplementary document.

PACKAGE

40 kg bag

SHELF LIFE

ST-TA(US) has a shelf life of 12 months if well kept in dry condition on lifted floor.

HEALTH & SAFETY

Wear NIOSH approved face mask or equivalent personal protective equipment when handling the material. ST-TA(US) contains cement which may cause an allergic effect or irritation to eyes and skin. When contact with eyes, flush immediately with large quantity of water.

REFERENCE STANDARDS

- ◆ European Standard: BS EN 12004
- ◆ British Standard: BS 5980; BS 6920
- ◆ Hong Kong Standard: HKHA FIN5.M1010;
Product Certificate PCCS-TA
- ◆ American Standard: ANSI A118.4; ASTM D3960
- ◆ Chinese Standard: JC/T 547; JC/T 1024
- ◆ Water Regulation Advisory Scheme (WRAS)
- ◆ CIC Green Product Certification - Platinum



CIC GREEN
PRODUCT CERTIFICATION
CICGPC-L-20011(A&S)

SCORETECH
MASTERING TECHNOLOGY AND PRACTICALITY

Tel: 852-2165 0900
Fax: 852-2590 0511
Email: enquiry@scoretech.com.hk
Website: www.scoretech.com.hk

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