



Technical Data Sheet

ChromoTile Ultra S1

For smooth, non-porous surfaces

Cement and polymer-based flexible adhesive mortar with high adhesion, reduced slip, and extended working time.

Product Description

ChromoTile Ultra S1 a cement and polymer-based tile adhesive with reduced slip, extended working time, and high adhesion performance. Designed for all climatic conditions, it is suitable for indoor and outdoor applications, both horizontal and vertical. Its long-lasting, flexible formula is ideal for fixing ceramics, tiles, porcelain, and natural stone materials.

Complies with **EN 1:2017-12004 C2TES1**

C2: Improved cement-based adhesive with high performance

T: Reduced slip

E: Extended open time

S1: Highly flexible

Usage Areas

- For adhering tiles, ceramics, porcelain tiles, and natural stone materials to cement-based substrates such as concrete, plaster, and screed in both indoor and outdoor horizontal or vertical applications.
- For fixing tiles, ceramics, porcelain tiles, and natural stone materials to gypsum-based surfaces in indoor horizontal and vertical areas.
- Suitable for bonding tiles, ceramics, porcelain tiles, and natural stone materials over insulation layers in wet areas such as bathrooms, kitchens, and balconies.
- Recommended for use in swimming pools, Turkish baths, water tanks, industrial floors, and cold storage areas.
- Ideal for tile-over-tile applications, exterior cladding of buildings, and renovation or repair works.

Key Benefits

- Easy to prepare – mixes with water only
- Long working time saves time and effort during application
- Non-slip formulation ideal for vertical installations
- Smooth and comfortable to apply
- Highly flexible – absorbs substrate movement and vibrations
- Excellent freeze-thaw resistance
- Non-shrinking formulation
- Exceptional resistance to stress and cracking caused by temperature variations, thanks to its S2-class flexibility

Technical Data

Structure of Material	Special cement, mineral fillers, polymer additives
Density	1,76 kg/lit
Color	Gray, White
Splice Strength 28 days	≥1,0 N/mm ²
Start	≥1,0 N/mm ²
After immersion in water	≥1,9 N/mm ²
After aging with heat	≥1,0 N/mm ²
After the Freeze-Thaw cycle	≥1,6 N/mm ²
Application Thickness	3-8 mm
Application Surface Temperature	+5°C / +35°C
Service Temperature	-20°C / +80°C
Ripening Time	3-5 minutes
Usage Time	2 hours
Usage Time on Surfaces	30 minutes
Slip (mm)	None
Walking Time on the Surface	24 hours later
Joint Application	24 hours later
Reaction to Fire Class	A2

Directions Of Use

Surface Preparation

Cement-Based Surfaces

Ensure surfaces are clean, solid, and free from dust or debris. Any damaged areas should be repaired using **ChromoFix Systems and Solutions** series mortars at least one day prior. If surface temperature exceeds +20°C, lightly dampen before application.

Other Surfaces

For porous surfaces such as aerated concrete, gypsum plaster, particleboard, and lime-based plasters, prime the surface using **ChromoTile P1** diluted 1:1 with water. Allow at least 8 hours for the primer to dry before applying the adhesive.

Mixing Instructions

The specified amount of water indicated on the packaging is poured into a clean mixing container. ChromoTile Ultra S1 is then slowly added to the water and mixed with a low-speed mixer (400–600 rpm) for 3–4 minutes until a smooth, lump-free, and homogeneous consistency is achieved. After allowing the mixture to rest for 3 minutes, it should be remixed for an additional minute before application.

Mixing Ratio

For a 25 kg bag of ChromoTile Ultra S1 Gray, use approximately 0.25 ± 7.5 liters of water.

For a 25 kg bag of ChromoTile Ultra S1 White, use approximately 0.25 ± 8.0 liters of water.

Application Method

Apply a 1 mm thick layer of ChromoTile Ultra S1 onto the substrate using the flat side of a trowel. Then, with the notched side, spread the adhesive evenly in one direction over an area that can be tiled within 30 minutes – the product's open time.

For tiles of varying thicknesses, it is recommended to apply an additional 1 mm layer of ChromoTile Ultra S1 to the back of each tile to compensate for surface irregularities. When placing the tiles, press and slide them slightly to ensure full contact with the adhesive.

Maintain the recommended joint spacing based on tile size. ChromoTile joint fillers should be used to fill the joints, which can be applied approximately 24 hours after installation.

Applicability Test

To check the open time of the adhesive before applying tiles, perform a simple finger test. Press your fingers lightly onto the adhesive layer – if adhesive transfers to your finger, tiling can proceed. If no adhesive sticks to your finger, the open time has expired. In this case, remove the old adhesive from the surface and apply a fresh layer of ChromoTile Ultra S1 before continuing.

Coverage

Consumption varies based on trowel size: approx. 4–6 kg/m²

Packaging

25 kg polyethylene-reinforced kraft bags

Important Notes

- Apply only when ambient and substrate temperatures are between +5°C and +35°C.
- Avoid use in direct sun, rain, or strong wind.
- Protect freshly applied adhesive from weather for the first 24 hours.
- Working time is affected by temperature:
- High temps reduce working time
- Low temps extend working time
- Ensure surface and ambient temperature remain above the minimum threshold until full cure.

Tool Cleaning

All tools and equipment should be cleaned with water immediately after application. Once ChromoTile Ultra S1 has hardened, any remaining material can only be removed mechanically.

Storage Guidelines

Store in original, unopened packaging in a cool, dry place protected from frost.

For short-term storage, stack a maximum of 3 pallets and follow a first-in, first-out rotation.

For long-term storage, pallets must not be stacked.

Shelf Life

When stored correctly at room temperature (+5°C to +30°C) and out of direct sunlight, ChromoTile Ultra S2 has a 12-month shelf life from the date of manufacture.

Once opened, reseal tightly and use within 1 week.

Safety Precautions

- Wear protective clothing, gloves, goggles, and masks during handling and application.
- Avoid contact with skin and eyes. In case of contact, rinse thoroughly with soap and water.
- If ingested, seek medical advice immediately.
- Keep food and drinks away from application areas.
- Store out of reach of children.
- For detailed health and safety instructions, refer to the Material Safety Data Sheet (MSDS).

Quality Assurance and Responsibility

Chromo Building Solutions products adhere to rigorous standards certified by an independently verified management system, ensuring compliance with our quality, environmental, and occupational health and safety standards, as outlined in Chromo Building Solutions ESHQ recommendations.

Properties listed are based on laboratory controlled tests.

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