



Technical Data Sheet

ChromoTile Ultra S2

For smooth, non-porous surfaces

High-Performance, Cement and Polymer Dispersion-Based Adhesive
Very Flexible – Reduced Slip – Extended Open Time

Product Description

ChromoTile Ultra S2 is a high-performance, cement and polymer dispersion-based adhesive designed for superior flexibility and durability. It offers reduced slip, long working time, and excellent adhesion strength, making it suitable for both indoor and outdoor use on vertical and horizontal surfaces. The product performs reliably under a wide range of climatic conditions.

Complies with **EN 1:2017-12004 C2TES2 standards.**

C2: Improved cement-based adhesive with high performance

T: Reduced slip

E: Extended open time

S2: Highly flexible

Recommended Applications

- Ideal for bonding tiles, ceramics, marble, natural stone, pressed brick, and glass mosaic to cement-based substrates, even in areas with frequent temperature fluctuations.
- Suitable for applications on gypsum board, cement particle board, and thermal insulation boards.
- Perfect for wet and demanding environments such as swimming pools, Turkish baths, water tanks, bathrooms, industrial flooring, and cold storage rooms.
- Used in tile-over-tile applications during renovations or exterior cladding projects.
- Durable enough for areas subject to heavy foot traffic or load-bearing movement.

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	1,75 kg/lit
Color	Gray, White
Splice Strength 28 days	≥1,7 N/mm ²
Start	1 MPa
After immersion in water	1 MPa
After aging with heat	1 MPa
After the Freeze-Thaw cycle	1 MPa
Flexibility	≥5 mm S2 very flexible
Application Thickness	3–8 mm
Application Surface Temperature	+5°C / +35°C
Service Temperature	-40°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.

Wood-Based Surfaces (OSB and Particleboard)

Moisture content must not exceed 10%. Panels should be:

- At least 25 mm thick for floors, and 19 mm for walls
- Secured with screws every 30 cm
- Installed with 8 mm expansion joints at edges
- Gaps between panels should be sealed using **ChromoTile P1** or **ChromoTile P2** for dry interior installations.

Mixing Instructions

Pour the specified amount of clean water into a mixing container. Gradually add the contents of ChromoTile Ultra S2 while mixing at 400–600 rpm for 3–4 minutes until a lump-free, smooth mixture is achieved. Let the mixture rest for 3 minutes, then remix for 1 minute before use.

Mixing Ratio

Gray: 25 kg bag + approx. 0.25 ± 8.00 L of water

White: 25 kg bag + approx. 0.25 ± 8.50 L of water

Application Method

1. Spread a 1 mm layer of ChromoTile Ultra S2 on the substrate using the flat side of a trowel.
2. Then comb with the notched side in a single direction over areas that can be tiled within 30 minutes (open time).
3. For tiles or granites with varying thicknesses, apply an additional 1 mm layer to the back of each piece.
4. Press tiles firmly into the adhesive, ensuring full contact.
5. Leave appropriate spacing for grout joints, based on tile size.
6. Grouting can begin after 24 hours using **ChromoTile G100** fillers.

Adhesive Open Time Test

Check adhesive tackiness with a fingertip. If it sticks, continue tiling. If not, remove and reapply fresh adhesive.

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 use. Once ChromoTile Ultra S2 has cured, it 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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