

CX-1

Floor and Wall Tile Adhesive

PRODUCT DESCRIPTION:

CX-1 is a polymer-based tile adhesive specifically formulated for fixing ceramic tiles and small format natural stone, clay tiles, terracotta and quarry tiles of regular size. It is suitable for both vertical and horizontal surfaces, over the cementitious substrate for indoor application, in dry as well as wet areas. Easy to use with just water mixing, CX-1 is perfect for dry areas and occasional moisture environments like bathrooms and kitchens. Choose CX-1 for exceptional bond strength, flexibility, fast curing, and user-friendly application.



KEY FEATURES AND BENEFITS:

- Single-component, easy to use:** Simply add water for a ready-mixed solution.
- Interior applications:** Ideal for use on interior floors and walls.
- Economical:** Cost-effective solution for tile installation.
- High-performance:** Meets international classifications EN / ISO C1T and IS 15477:2019 – Type 1T.
- Versatile:** Bonds to various substrates including concrete, concrete masonry and cement-based surfaces.

SUBSTRATES

Concrete
Concrete Masonry
Cement Mortar Beds
Cement Plaster
Brick Masonry
Existing Natural Stone* (cleaned and roughened)

*Note: Surfaces must be cleaned and roughened before installation of tiles or stones

APPLICATION

CX-1 is designed for dry areas of interior floors and walls. It can be used for installing all types of ceramic tiles and small format natural stones on concrete and various cement-based substrates. The maximum bed thickness is 12mm

◆ CERTIFICATIONS :

IS 15477:2019 Type: 1T
EN 12004 / ISO 13007: C1T

◆ PERFORMANCE PROPERTIES : (CX-1 Adhesive mixed with Water):

This adhesive mortar conforms to IS 15477: 2019 - Type 1T Adhesive.

◆ PACKAGING : 20 kg bag (Available in Grey and White (With the name of CX-2))

PROPERTY	VALUE
Density	1.79 kg/litre Approx
Pot Life	120 Minutes Approx
Open Time	20 minutes Approx
Adjustability	20 minutes Approx
Setting Time	Approx. 1 Day
Full Strength	Approx. 14 Days
Tensile Strength	>0.60 N/mm ²
Shear Strength	>1.00 N/mm ²

COVERAGE:

Approximately 55-60 square feet per 20 kg pack, using a 1/4" x 1/4" (6mm x 6mm) square notched trowel for a 3mm bed. Approx. 1.2 kg/m² per mm of thickness. Coverage will vary depending on several factors including trowel notch size, tile type and size and substrate smoothness.

IS DATA

Property: Test Method	Requirement	Typical Values
Tensile Adhesion		
Dry Condition – Annex A (Clause 5.1)	Minimum 0.50 N/mm ²	0.60-0.70 N/mm ²
Shear Adhesion		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.10-1.20 N/mm ²
Slip Resistance		
Slip Resistance – Annex E (Clause 5.5)	≤0.50 mm	0.25-0.35 mm

INSTALLATION INSTRUCTIONS:

- All surfaces must be between 40°F (4°C) and 104°F (40°C), structurally sound, clean, and free of dirt, oil, grease, loose paint, laitance, concrete sealers or curing compounds.
- Ensure the surface is plumb and level within ¼ inch (6mm) over 10 feet (3 meters).
- Smooth rough or uneven concrete surfaces with a screed or plaster material to achieve a wood float finish (or better).
- Dampen dry, dusty concrete slabs or masonry and remove excess water before installation. New concrete slabs must be damp cured and at least 28 days old before application.
- Incorporate expansion joints through the tile work to match any construction or expansion joints in the substrate. Do not cover expansion joints with mortar.
- Gresbond PUA-100 is recommended for tile or stone installations on plywood and wood substrates.

MIXING:

- Pour clean, potable water into a clean mixing bowl.
- Add CX-1 powder to the water (approximately 5 - 5.5 liters of water per 20 kg of powder).
- Mix by hand or with a slow-speed mixer until a smooth, trowelable consistency is achieved.
- Allow the adhesive to slake for 5 minutes.
- Adjust consistency if necessary.
- Remix before applying with the proper sized notched trowel.
- For large format tile or stone installations on exterior surfaces, contact Gresbond technical services.

APPLICATION:

- Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to ensure good contact.
- Use the proper sized notched trowel to ensure full bedding of the tile.
- Comb additional adhesive onto the substrate with the notched side of the trowel. Use the appropriate trowel size to ensure full coverage of the tile back. Spread only as much adhesive as can be covered with tile within 10 minutes.
- Back-butter large format tiles (greater than 12" x 12" or 300mm x 300mm) to provide full bedding and support.
- Place tiles into the wet, sticky adhesive and tap them in using a beating block and rubber mallet to embed the tile and adjust the level.
- Periodically remove a tile to check for complete adhesive coverage by inspecting the amount of adhesive transferred onto the back of the tile.
- Use spacers to create grout joints between tiles/stones. The joint width should follow the architect's or engineer's recommendations. Remove spacers once the adhesive has set firmly.
- If the adhesive skins over (loses tack), remove it and replace it with fresh adhesive.
- Apply adhesive to the substrate with the flat side of the trowel.
- Tiles must be fixed within 10-15 minutes of adhesive being applied, depending on the porosity of the surface and atmospheric conditions.
- Leave no voids behind tiles.
- Use suitable support along with adhesive for fixing tiles on vertical surfaces.
- Leave adequate joints between individual wall and floor tiles using spacers. The joint width shall be as per the recommendation of architect/engineer.
- Clean off surplus adhesive from the tile face and between joints.
- Clean tools and tile work with water while adhesive is fresh

GROUTING:

Begin grouting after a minimum curing time of 24 hours at 70°F (21°C). Use Gresbond's KE-100 series epoxy grout or unsanded grout mixed with KGA-100 Grout Admix.

For maximum stain resistance on interior spacer joints, use KE-100 Stain- resistant Grout

PRECAUTIONS & NOTE:

- Always add powder to water.
- Do not add excess water than recommended.
- Never add sand & cement at site.
- Do not use on wet screed. Surface must be fully cured.
- Do not use the adhesive to correct surface irregularities greater than 12 mm.
- Protect from direct rainfall/ foot traffic for at least 24 hours.
- Leave gap between the tile & fill gaps with Gresbond tile grout.
- Designer/ applicator must evaluate the use of an additional mechanical fastening system for extra security for more than 3m height (such as steel hooks fastened to the substrate).

LIMITATION :

- Do not apply directly to gypsum plaster or boards, fibre cement boards or other drywall partitions, plywood, chipboard, particleboard, decorative laminates or resilient flooring, metal, plastic, deformable surfaces or subject to vibrations. Use Gresbond PUA-100 as per application.
- Adhesives for ceramic tile, bricks and stone are not designed as replacements for waterproof coating. Use waterproofing coating before tiling for wet area.
- Do not use for fixing artificial/ nano/ engineered stone/ composites/ metal tile. Use Gresbond PUA-100 for the same.

Disclaimer:

This technical data sheet is provided for informational purposes only. The information contained herein is based on our technical knowledge and experience. However, due to variations in field conditions, we recommend conducting preliminary tests to ensure product suitability for a specific application.

Customer Care

Kajaria Ceramics Limited

J1/B1 (Extn.), Mohan Co-op Industrial Estate (Opp. Badarpur Thermal Power Station), Mathura Road, New Delhi - 110 044

Phone: +91-11-2694 6409 Fax: +91-11-2694 6407, 2694 9544 | Email: info@kajariagresbond.com