

GRESBOND EA-100 | High-Performance Polyurethane Adhesive for Tiles and Stones

Product Description

GRESBOND EA-100 is a two-component, ready-to-mix polyurethane thin-set adhesive designed for fixing various tile and stone sizes. It excels at adhering all types of tiles and stones to different substrate, including metal and glass surfaces.

Applications

Designed especially for interior and exterior floor and wall installations of all types of ceramic tile, vitreous, semi-vitreous tile, glass mosaic tiles, precast terrazzo, engineered stone, metal tiles and natural stones over concrete and on a variety of substrates including metal substrates and drywall boards.

Features / Benefits

- Two components, just mix and use.
- High strength, chemical resistant
- Economical & Easy to use
- Bonds to various substrates including metals
- Complies to ISO with a R2T classification.
- Meets and exceeds IS 15477 : 2019 requirements as Type 5 T S2
- Water, freezing, thermal shock resistant
- Flexible and heat resistant.

Product Classification

- GRESBOND EA-100 is classified as R2T according to ISO 13007 and IS 15477:2019 type 5 adhesive, indicating it's an improved reaction resin adhesive with slip resistance.

Application Substrates

- Concrete Masonry & Brick Masonry
- Cement Mortar Beds & Plaster
- Metal floors and walls
- Tile and Stone
- Wood & Plywood**
- Cement Terrazzo
- Engineered stones & Marbles
- Epoxy or PU resin based substrates
- Rubber & PVC substrates
- Concrete – VDF and MIVON

**Consult the Plywood manufacturer's data sheet for the specific recommendations and load bearing capacity of specific board intended for use.

Certifications

IS 15477:2019 - Type 5TS2

ISO 13007: R2T

TECHNICAL DATA

Performance Properties:

EA-100

Applicable Standards:

ISO 13007; IS 15477: 2019

	IS 15477:2019 Data	
Test / Reference	Requirement	Typical Values
Vertical Slip – Clause 5.5	≤0.5mm	0.2- 0.25mm
Tensile Adhesion – Dry condition – Clause 5.1	≥2.0 N/mm ²	2.4- 2.8 N/mm ²
Shear Adhesion Strength- Dry condition: Clause 5.2	≥6.0 N/mm ²	6.5- 7.5 N/mm ²
Shear Adhesion Strength: Heat Ageing condition: Clause 5.2	≥3.0 N/mm ²	3.2- 3.4 N/mm ²

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

Packaging:

1 Kg, 5 Kg & 10 Kg

Application Areas

- Suitable for interior and exterior walls and floors

Surface Preparation

- Ensure the substrate is structurally sound, clean, and free of contaminants like dirt, oil, grease, paint, sealers, curing compounds etc.
- Remove dirt, dust, and laitance using a high-pressure water jet or other suitable methods.
- Maintain a substrate temperature between 15°C and 40°C (higher temperatures accelerate curing; saturate with water to cool down).
- Saturate cementitious substrates thoroughly and remove excess water before applying the tile adhesive. The surface should be brought to a touch-dry condition.
- For drywall and other substrates, dry cleaning is recommended. For metallic substrates, remove loose rust and paint, and apply a suitable treatment before using GRESBOND EA-100.
- Use a wire brush if necessary to remove any bond-inhibiting compounds.

In case of oil stains:

- Use surfactants for cleaning, followed by proper cleaning with water to prevent tile debonding.
- Leave expansion joints at least 10 mm thick for every 12 feet in the substrate, following industry standards. Do not cover expansion joints with adhesive; fill them with an appropriate flexible sealant.

Mixing

- Wear appropriate personal protective equipment (PPE) before handling the product.
- Gradually add 2.5 kg of GRESBOND EA-100 component A to 2.5 kg of GRESBOND EA-100 component B. Mix until you achieve a lump-free, smooth, workable paste using a suitable stirrer/low-speed drill (100 rpm) or another appropriate tool.
- Avoid high-speed mixing.
- Mix only the amount of adhesive that can be consumed within 60 minutes.
- Allow the mixture to stand for 2 minutes after mixing
- Wash tools immediately with water after use to prevent adhesive hardening.

Do not:

- Attempt to extend the pot life by adding extra material like resin, solvent, etc., as this can negatively impact product performance.

Application

- Apply the adhesive onto the substrate, covering up to 1 m² at a time (or no more than what can be tiled within 30 minutes). Unfavorable weather conditions (strong sun, dry wind, high temperature) or highly absorbent substrates can significantly reduce open time, even to just a few minutes. Regularly check the adhesive to ensure ridges haven't hardened. If hardened, remove the adhesive and apply fresh material.
- Use the straight edge of the notched trowel to spread GRESBOND EA-100 over the surface. Then, comb the applied adhesive using the notched side of the trowel to achieve the desired thickness.
- Double buttering is recommended for heavier stones.
- If buttering the tile itself, ensure proper coverage of the tile surface to prevent voids.
- Maintain expansion joints at least 10 mm thick for every 12 feet in the substrate, following industry standards. Do not cover expansion joints with adhesive; fill them with an appropriate flexible sealant.
- Joint width should be as per the recommendation of the architect or site engineer.

Conduct a small-scale application evaluation on pure white or highly porous stones before large-scale usage.

Installing the Tile

- Clean the stone/tile with water or a dry cloth before installation. Wipe with a clean, dry cloth to ensure there's no water film inhibiting the bond.
- Bed the tiles firmly into the adhesive with a slight sliding and/or twisting action to ensure good and uniform contact.
- Occasionally lift a tile after fixing to verify proper contact is achieved.
- In wet areas, external areas, and all floors, the final adhesive bed should be free of voids.
- Adjust tiles within 90 minutes of installation, if necessary.
- Carefully remove any excess adhesive from the tiles and joints with a damp sponge or cloth before it sets. Leave for at least 24 hours before grouting.
- More time may be required before grouting when tiling onto impervious or sealed surfaces or using a higher bed thickness.

Notes to Specifier and Installer

- Do not use on wet screed or plaster. The surface must be fully cured.
- To create a high aesthetic appeal, fill joints with GRESBOND KE-100 grout.

Grouting

- If using grout between tiles and stones, wait 24 hours after applying GRESBOND EA-100 before grouting.
- To match the grout color to the tile/stone, use GRESBOND epoxy shade cards, available in 20 popular shades.

Ready to Use

- Surfaces are ready for use 2 days after grouting is complete, depending on the type of grout used.

Color

- Part A - Off-white thixotropic paste
- Part B - Light yellow paste

Technical Parameters

- Physical Color: Off White
- Coverage: Approx - 4.65 kg/m² per 3 mm of thickness (Ensure all surfaces are clean, smooth, level, free of defects, and without undulations for maximum coverage)
- Technical Standards and Performance: ISO 13007 & EN 12004
- Shelf Life: 1 years from the month and year of manufacturing for unopened buckets stored in dry conditions

Working Properties at 70° F (21° C)

Property	Value
Resin	Paste form
Hardener	Paste form
Chemistry	PU blend with epoxy reaction resin adhesive
Substrate	Cementitious, RCC, Plywood, Tile on tile, Drywall, Metal, PVC, Rubber, Epoxy waterproof, PU waterproofed surface
Tiles	Ceramic, Vitrified, Glass mosaic, Impregnated stone, Engineered stone, Natural stone, Glass tile, Mirror & PU coated glass
Pot life	More than 45 minutes
Open time	More than 45 minutes
Adjustability time	More than 45 minutes
Shelf life	12 months
Mixing Ratio	1:1 by weight (Component A + Component B)
Product Classification	R2T

Storage

- Store in a cool and dry place.

Disclaimer

- The user should determine the usability of the product for its intended use. Our products are manufactured under Kajaria quality standards and subjected to strict quality control procedures. However, since the company has no control over site conditions and installation procedures, the company will not be responsible under any circumstances for any loss, damage, or liability from incorrect usage.

Customer Care

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