

H40 Gel

Multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain tiles, ceramic tiles and natural stones.



GEL
TECHNOLOGY



Rating 5 White
Rating 4 Grey

W G

- ✓ ☒ Regional Mineral $\geq 60\%$
- ✓ ☒ Recycled Regional Mineral $\geq 30\%$
- ✓ ☒ CO₂ Emission ≤ 250 g/kg
- ✓ ☒ VOC Low Emission
- ✓ ☒ Recyclable

1. High adhesion and flexibility
2. Excellent wettability
3. Variable rheology
4. Ideal for large formats
5. Ideal for underfloor heating systems

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Areas of application

→ Use

Substrates:

- existing tiles
- waterproofing products
- heated floors
- cement-based screeds
- concrete
- plasterboard
- fibro-cement slabs
- gypsum and anhydrite ⁽¹⁾
- cellular concrete
- brick
- lime and cement-based plasters/renders
- thermal insulation panelling systems
- insulating panels
- timber ⁽¹⁾
- metal ⁽¹⁾
- PVC ⁽¹⁾

*(1) After application of Active Prime Fix or Active Prime Grip.
Internal use only.*

Materials:

- porcelain tiles
- laminated stoneware and/or stoneware featuring backing materials
- low thickness slabs
- ceramic tiles
- large format tiles (up to 160x320 cm)
- marble - natural stone
- cement-based recomposed
- glass mosaics
- glass tiles
- thermal and acoustic insulation
- terracotta - klinker

Uses:

- adhesive and finishing
- floors and walls
- for internal use - external
- overlaying
- terraces and balconies
- facades
- swimming pools and fountains
- saunas and spa
- domestic
- commercial
- industrial
- street furniture

Instructions for use

→ The instructions for use are referred, where prescribed, to Italian Standard UNI 11493 "Laying of ceramic tiles on floors and walls. Instructions for planning, laying and maintenance".

→ Preparation of substrates

Preparation of the substrate (UNI 11493 - point 7.3)

All substrates must be level, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising. It is best to dampen highly absorbent cement-based substrates before the application or apply one coat of Active Prime Fix or Active Prime Grip.

→ Preparation

Mixing water (EN 12004-2):

- Grey ≈ 24.5% – 26.5% by weight
- White ≈ 30% – 32% by weight

Mixing water on-site

Fluid mix on floors:

- Grey ≈ 6.75 l / 1 x 25 kg bag
- White ≈ 7.75 l / 1 x 25 kg bag

Thixotropic mix on walls:

- Grey ≈ 5.75 l / 1 x 25 kg bag
- White ≈ 6.75 l / 1 x 25 kg bag

The amount of water indicated is approximate. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made.

→ Application (UNI 11493 - points 7.9/11)

To guarantee structural adhesion it is necessary to apply a layer of adhesive sufficient to cover the entire back of the material.

Large, rectangular sizes with sides > 60 cm and low thickness sheets may require adhesive to be applied directly to the back of the material. Check samples to make sure the adhesive has been transferred to the back of the material. Respect structural, fractionizing, and perimeter joints present in the substrates. Abide by local existing provisions when creating elastic expansion joints.

Standard UNI 11493 – joints must divide the surface into areas of the following sizes:

- ≈ 10 m² in external use
- ≈ 25 m² in internal use

→ Cleaning

Clean the tools and any residues of the product from the surfaces using water while the adhesive is still fresh. Once hardened, the adhesive can only be removed by mechanical means.

Special notes

→ Materials and special substrates

- Marble-natural stones and recomposed materials: materials subject to deformation or staining due to water absorption need a rapid setting (H40 Revolution) or reactive (H40 Extreme) adhesive. Marble and natural stones may generally have characteristics that vary even with reference to materials of the same chemical and physical nature. For this reason it is essential to consult the Technical Customer Service Kerakoll to request specific indications or to carry out a test on a sample of the material. In the absence of specific indications from the manufacturer, natural stone slabs with reinforcement layers, in the form of resin coating, polymer mesh, matting, etc. or treatments (for example damp courses, etc.) applied on the laying surface must be tested in advance to ensure they are compatible with the adhesive. Check for the presence of any really consistent traces of rock dust created during cutting, and remove them if found.
- Waterproofing products: adherent and floating polymer sheets, liquid bitumen and tar-based sheets or membranes require application of a laying screed on top. On reactive waterproofing products (such as RM according to EN 14891), the use of a reactive adhesive is required.

→ Special applications

- Facades (UNI 11493 - point 7.13.7): the substrate should guarantee a cohesive tensile strength of $\geq 1.0 \text{ N/mm}^2$. The need to call for suitable mechanical safety anchoring must be evaluated by the designer for coverings with $> 30 \text{ cm}$ side. Always apply a layer of adhesive on the substrate and on the back of the material (double-spread technique).

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Abstract

High-performance laying of ceramic and porcelain tiles, mosaic, marble and natural stone with structural highly flexible multi-purpose Gel Adhesive, compliant with standard EN 12004 – class C2 TE S1, GreenBuilding Rating 4/5, GT-2 classified, such as H40 Gel by Kerakoll Spa. Substrates must be compact, with no loose, flaky material, clean and fully cured, having already completed the curing period for hygrometric shrinkage. For laying, a ____ mm toothed spreader must be used for an average coverage of \approx ____ kg/m^2 . Existing joints must be respected, create elastic fractionizing joints every ____ m^2 of continuous surface. Ceramic tiles must be laid with joint-gap spacers with a width of ____ mm.

Technical Data compliant with Kerakoll Quality Standard		
Appearance	White or grey pre-mixed powder	
Pack	25 – 5 kg bags	
Shelf life	≈ 12 months from production in the original sealed packaging, protect from humidity	
Thickness	from 2 to 15 mm	
Temperature range for application	from +5 °C to +35 °C	UNI 11493 - 8.3
Pot life at +23 °C:		
- grey	≈ 6 h	
- white	≈ 6 h	
Open time at +23 °C (BIII tile):		
- grey	≥ 60 min.	EN 12004-2
- white	≥ 60 min.	EN 12004-2
Open time at +35 °C (BIII tile):		
- grey	≥ 20 min.	
- white	≥ 20 min.	
Correction time (BIII tile):		
+23 °C	≥ 20 min.	
+35 °C	≥ 15 min.	
Foot traffic/grouting of joints at +23 °C (BIa tile):		
- grey	≈ 24 h	
- white	≈ 24 h	
Foot traffic/grouting of joints at +5 °C (BIa tile):		
- grey	≈ 50 h	
- white	≈ 50 h	
Grouting in walls at +23 °C (BIa tile):		
- grey	≈ 20 h	
- white	≈ 15 h	
Ready for use at +23 °C / +5 °C (BIa tile):		
- light foot traffic	≈ 2 – 3 days	
- heavy traffic	≈ 3 – 7 days	
- swimming pools (+23 °C)	≈ 14 days	
Coverage	≈ 1.25 kg/m ² per mm of thickness	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e. temperature, ventilation and absorbency level of the substrate and of the materials laid.

Performance		
VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions		
Conformity	EC 1 plus GEV-Emicode	GEV certified 14613/11.01.02
HIGH-TECH		
Shear adhesion (porcelain tiles/porcelain tiles) after 28 days	≥ 2,5 N/mm²	ANSI A-118.4
Tensile adhesion (concrete/porcelain tile) after 28 days	≥ 2,5 N/mm²	EN 12004-2
Durability test:		
- adhesion after heat ageing	≥ 2,5 N/mm²	EN 12004-2
- adhesion after water immersion	≥ 1 N/mm²	EN 12004-2
- adhesion after freeze-thaw cycles	≥ 1 N/mm²	EN 12004-2
- adhesion after straining cycles	≥ 1 N/mm²	SAS Technology
Vertical slip	≤ 0,5 mm	EN 12004-2
Transversal deformation	≥ 2,5 mm	EN 12004-2
Flexibility test according to GT method:		
- torsional moment (eccentric shear on 5x5 cm sample)	≥ 2,5 KN	
- bending moment (eccentric traction on 5x5 cm sample)	≥ 0,4 KN	
classification	GT-2	GT method
Working temperature	from -40 °C to +90 °C	
Conformity	C2 TE S1	EN 12004

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

Warning

- Product for professional use

→ abide by any standards and national regulations

→ do not use the adhesive to correct substrate irregularities greater than 15 mm

→ protect from direct rainfall for at least 24 hrs

→ the temperature, ventilation and absorption of the substrate and covering materials, may vary the adhesive workability and setting times
- use the right size of notched trowel for the format of the tile or slab

→ guarantee a full-bed in all external laying operations

→ if necessary, ask for the safety data sheet

→ for any other issues, contact Kerakoll Technical Customer Service:
+ 39 0536.811.516
www.kerakoll.com/contatti

Kerakoll Quality System

ISO 9001 CERTIFIED 1710/0327

Kerakoll Quality System

ISO 40001 CERTIFIED 18586-1

The Rating classifications refer to the GreenBuilding Rating Manual 2012. This information was last updated in January 2025 (ref. GBR Data Report – 01.25); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building site and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.