

# H40® No Limits®

Highly flexible, multi-purpose, structural adhesive to fix fully vitrified tiles and natural stone of all types and size.



**GREENBUILDING RATING®**

**H40® No Limits®**  
 - Category: Inorganic mineral products  
 - Mineral adhesives with SAS technology

Very low VOC emissions  
 Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

**PRODUCT STRENGTHS**

- For internal and external use
- Long open time
- Shape memory - per india free flowing
- No sag
- Water resistant
- Full coverage
- Sustains heat ageing
- No shrinkage
- High deformation
- Structural adhesion
- Distributes tensile strength
- Increases resistance
- Transfers the forces
- Absorbs dynamic loads

**ECO NOTES**

- Single-component; avoiding the use of plastic cans reduces CO<sub>2</sub> emissions and the need to dispose of special waste
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- With very low volatile organic compound emissions

**AREAS OF USE**

**Use**

**Uses No Limits:**

- Adhesive and finishing
- Floors and walls
- Internal use – external use
- Overlaying
- Terraces and balconies
- Façades
- Swimming pools and fountains
- Saunas and spa
- Domestic applications
- Industrial applications
- Commercial applications
- Street furniture

**Materials No Limits:**

- Vitrified tiles
- Laminated stoneware
- Low thickness slabs
- Ceramic tiles
- Large size
- Terracotta
- Marble and natural stone
- Recomposed materials
- Various mosaics
- Internal insulating and soundproofing panels

**Surface No Limits:**

- Existing tiles
- Waterproofing products
- Heating systems
- Cement-based screeds and mortars
- Cement and gypsum-based plasters/ renders
- Concrete surfaces
- Cellular concrete
- Plasterboard
- Brick
- Lime and cement-based plasters/ renders
- Thermal insulation panelling systems
- Fibro-cement slabs

\* 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).

## INSTRUCTIONS FOR USE

### Preparation of the surface

All surfaces must be dimensionally stable according to IS 1443-1972, level, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising.

It is good practice to dampen highly absorbent concrete surfaces or apply a coat of Primer A Eco.

### Preparation

Creamy paste consistency for low thickness fixing and full wettability:

- Grey ≈ 9 litres of clean water per bag
- White ≈ 10.5 litres of clean water per bag

Non-sag consistency on walls and for high thickness fixing:

- Grey ≈ 7 litres of clean water per bag
- White ≈ 8.5 litres of clean water per bag

### Application

To guarantee maximum adhesion it is necessary to apply a sufficient layer of adhesive, on the back surface of the tile. Large, rectangular sizes with sides > 60 cm may require adhesive to be applied directly to the back of the tile surface.

Check samples to make sure the adhesive has been transferred to the back of the material.

Create elastic expansion joints:

- ≈ 10 m<sup>2</sup> in external applications,
- ≈ 25 m<sup>2</sup> in internal applications,
- every 8 metres in long, narrow applications.

Respect all structural, fractionizing, and perimeter joints present in the surfaces.

## SPECIAL NOTES

### Pre-treatment of special surfaces

Gypsum and anhydrite (internal use only): Primer A Eco.

As treating special fixing surfaces is difficult to classify in a standard manner, it is always advisable to contact Kerakoll India Helpline and/or request a site inspection by Kerakoll India sales team. In any case it is essential to carefully read the technical data sheet on how to use the indicated primers properly.

### Materials and special surfaces

**Marble, Natural Stones and Recomposed Materials** that are subject to deformation or staining due to water absorption require a reactive adhesive. Marble, natural stones and recomposed materials in general may have characteristics that vary even with reference to materials of the same chemical and physical nature. For this reason it is essential you consult Kerakoll Helpline 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 fixing 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 fixing screed on top.

### Special applications

**Facades:** the surface should guarantee a cohesive tensile strength of  $\geq 1.0$  N/mm<sup>2</sup>.

For coverings with > 60 cm side, if necessary add to the mixing water a percentage of Top Latex Eco to assess the function of the thermo-dynamic strain provided by the structure.

Always apply a layer of adhesive directly on the back of the tile/stone.

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Shelf life	≈ 12 months in the original packaging Protect from humidity	
Pack	25 kg	
Adhesive thickness	from 2 to 15 mm	
Temperature of the air, substrates and materials	from +5 °C to +35 °C	
Pot life at +23 °C		
- Grey	≈ 4 hrs	
- White	≈ 4 hrs	
Pot life at +35 °C:		
- Grey	≈ 3 hrs	
- White	≈ 3 hrs	
Open time at +23 °C (BIII tile):		
- Grey	≥ 60 min.	EN 14411
- White	≥ 60 min.	EN 14411
Open time at +35 °C (BIII tile):		
- Grey	≥ 20 min.	EN 14411
- White	≥ 20 min.	EN 14411
Correction time (BIII tile):		
+23 °C	≥ 15 min.	EN 14411
Foot traffic/grouting of joints at +23 °C (BIIa tile):		
- Grey	≈ 20 hrs	EN 14411
- White	≈ 20 hrs	EN 14411
Foot traffic/grouting of joints at +35 °C (BIIa tile):		
- Grey	≈ 12 hrs	EN 14411
- White	≈ 12 hrs	EN 14411
Grouting in walls at +23 °C (BIIa tile)		
- Grey	≈ 18 hrs	EN 14411
- White	≈ 18 hrs	EN 14411
Grouting in walls at +35 °C (BIIa tile):		
- Grey	≈ 8 hrs	EN 14411
- White	≈ 8 hrs	EN 14411
Ready for use at +23 °C / +35 °C (BIIa tile):		
- light foot traffic	≈ 3 – 2 days	EN 14411
- heavy traffic	≈ 4 – 3 days	EN 14411
- swimming pools (+23 °C)	≈ 14 days	EN 14411
Coverage per mm thickness:		
- Grey	≈ 1.3 kg/m <sup>2</sup>	
- White	≈ 1.2 kg/m <sup>2</sup>	

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 absorbcency 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 4618/11.01.02
<b>HIGH-TECH</b>		
Tensile adhesion (concrete/vitrified tiles) after 28 days	≥ 3 N/mm <sup>2</sup>	EN 1348
Shear adhesion (vitrified tiles/vitrified tiles) after 28 days	≥ 3 N/mm <sup>2</sup>	ANSI A-118.4
Shear adhesion after water immersion	≥ 1 N/mm <sup>2</sup>	ANSI A-118.4
Shear adhesion after heating to +100 °C	≥ 2 N/mm <sup>2</sup>	ANSI A-118.4
Transversal deformation	≥ 2.5 mm	EN 12002
<b>Durability test:</b>		
- adhesion after heat ageing	≥ 3 N/mm <sup>2</sup>	EN 1348
- adhesion after water immersion	≥ 1 N/mm <sup>2</sup>	EN 1348
- adhesion after freeze-thaw cycles	≥ 1 N/mm <sup>2</sup>	EN 1348
- adhesion after straining cycles	≥ 1 N/mm <sup>2</sup>	SAS Technology
Working temperature	from -30 °C to +90 °C	

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 surface irregularities greater than 15 mm
- protect from direct rainfall for at least 24 hrs
- the temperature, ventilation and absorption of the surface and covering materials to be fixed may cause variations in the adhesive workability and setting times
- use the right size of toothed 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 the Kerakoll India Helpline (Toll Free) 1800-200-6550 - info@kerakollindia.com

The Rating classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in August 2020 (ref. GBR Data Report - 09.20); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://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 yards 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.