# **Planogel Rheo**

Self-levelling gel with variable rheology and viscosity. Longer working time and enhanced drying time before installing floorcoverings.

The innovative formula based on raw materials with low environmental impact and high technological content, allows the application professional to regulate the fluidity of the mix, combining and calibrating control capacity under the spreader and extreme fluidity. Planogel Rheo is ideal for applications on all types of bonded substrates and all types of coverings.

- 1. Thicknesses from 1 to 30 mm
- 2. Long self-levelling time, also suitable for large surface areas
- 3. Easy to apply also with plastering machines
- 4. Formulated with highperformance raw materials with low environmental impact
- 5. Suitable for laying ceramic tiles, porcelain tiles, natural stone, hardwood floors, resilient materials, resins
- 6. High dimensional stability and long-lasting performance



## Rating 4



- × Regional Mineral  $\geq$  60%
- × Recycled Regional Mineral  $\ge 30\%$
- $\checkmark$  CO<sub>2</sub> Emission  $\leq$  250 g/kg
- ✓ VOC Low Emission
- ✓ Recyclable

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### Areas of application

→ Intended use:

Self-levelling adjustment of irregular and uneven substrates, with extra-rapid setting and drying, compensated shrinkage. Thicknesses from 1 to 30 mm.

- Compatible adhesives:
- gel adhesives, mineral adhesives, single and two-component organic mineral adhesives
- reactive-epoxy and polyurethane, single and two-component cement-based adhesives, dispersed in water or solvent solutions

Covering materials:

- porcelain tiles, ceramic tiles, klinker and cotto of all types and formats
- natural stone, recomposed materials, marble
- hardwood floors
- textiles, rubber, PVC, LVT, linoleum, carpet
- raised floors
- Cementoresina
- Systèmes multicouche en épaisseur de la gamme Kerakoll Factory (environnements résidentiels et commerciaux)

Substrates:

- mineral screeds made with Keracem Eco Pronto, Keracem Eco Prontoplus, Rekord Eco Pronto, Massetto Premix and Keracem Eco as binder or pre-mixed product
- cement-based screeds
- calcium sulphate-based screeds
- prefabricated concrete or fresh concrete castings
- ceramic floors
- wooden floors
- OSB panels
- gypsum fibre or fibre-cement panels
- metal substrates

Internal floors in domestic, commercial and industrial applications.

Do not use in external applications, on high flexible substrates subject to thermal expansion, on wet substrates subject to moisture rising; for floating or desolidarising applications, in environments where water is always present.

### Instructions for use

#### $\rightarrow$ Preparation of substrates

The substrate must comply with current technical regulations and national standards. In general, substrates must be free of dust, oil and grease, free from any moisture rising, with no loose, flaky or imperfectly anchored parts such as residues of cement, lime, paint coatings and adhesives, which must be completely removed. The substrate must be stable, non-deformable, without cracks and have already completed the curing period of hygrometric shrinkage. In particular, substrates must be treated with a suitable primer as shown in the table below:

Substrate	Primers	<b>Dilution with water</b>
Cement-based screeds	Active Prime Fix	Undiluted or diluted
	Active Prime Grip	Pure
Calcium sul- phate-based screeds	Active Prime Fix	Pure
	Active Prime Grip	Pure
Concretes	Active Prime Fix	Undiluted or diluted
	Active Prime Grip	Pure
Ceramic floors ceramic tiles	Active Prime Fix	Pure
	Active Prime Grip	Pure
Timber substrates	Active Prime Fix	Pure
	Active Prime Grip	Pure
Gypsum fibre or fibre-cement panels	Active Prime Fix	Pure
	Active Prime Grip	Pure
Metal substrates	Active Prime Fix	Pure
	Active Prime Grip	Pure

#### Instructions for use

 $\rightarrow$  Preparation

Pour 4.75-5.5 l of clean water into a clean container; then pour in a bag of Planogel Rheo, while shaking,. Mix with a lowrev electric agitator until a smooth, lump-free and self-levelling mixture is obtained. Larger quantities of Planogel Rheo may be prepared in suitable mixers. After the first mixing, it is advisable to leave the mixture to rest for approx. 2 minutes and then mix again briefly. Planogel Rheo features a high degree of self-levelling capacity. Adding extra water does not improve its workability, and may cause shrinkage in the plastic phase of drying and result in less effective final performance with a reduction in surface hardness, compressive strength and adhesion to the substrate.

 $\rightarrow$  Application

Planogel Rheo is generally applied with a smooth spreader or float. Application with mixing pumps enables homogeneous, very thick correcting of large continuous surfaces in a very short time. It is advisable to press down hard with the trowel during application so as to regulate the absorption of water and obtain maximum adhesion to the substrate. After that, the thickness can be adjusted as required. Use of a lightened, cylindrical-section, levelling bar (in case of high thicknesses) or a specific roller to remove air bubbles (in case of low thicknesses) will be required to free the self-levelling gel from air bubbles created by high absorbency levels of the substrate and to obtain a smooth and perfectly even surface. If an additional correction layer is required, it must be applied as soon as the previous layer is ready for foot traffic ( $\approx$  3 hrs at +23 °C and 50% R.H.) and only after the application of Active Prime Fix eco-friendly adhesion promoter, following the instructions for use. After this time, it is necessary to wait  $\approx$  5-7 days, depending on the thickness created, then apply Active Prime Fix and overlay. In the case of low temperatures and high humidity it is advisable to keep the environment ventilated during application and during the hours immediately following application, in order to avoid the formation of condensation on the surface of the self-levelling gel during the setting phase. Protect from air currents at actual floor level.

 $\rightarrow$  Cleaning

Residual traces of Planogel Rheo can be removed from tools using water before the product hardens.

## **Special notes**

- → Joints: allow for expansion around the perimeter, laying the Tapetex Plus or Tapetex Slim compressible tape along the whole perimeter of the room, on the walls and on any other vertical elements protruding from the supporting layer. Large and continuous surface areas need to be fractionized as soon as they can withstand foot traffic so to create areas < 100 m<sup>2</sup> with 10 m maximum individual size. All the joints located in the substrate must be respected.
- → Inconsistent screeds: use Keradur Eco to consolidate the screed. Keradur Eco must be spread evenly across the surface to be treated using a brush, roller or sprinkler, checking that it is absorbed totally by the substrate. Apply Active Prime Fix primer the following day.
- → Hardwood floors: for subsequent laying of hardwood floors, create a smooth finish with thickness  $\geq$  3 mm.
- → Resins for industrial floors: please refer to the technical data sheets of the selected multi-layer system.

- → Moisture-sensitive coverings: when laying moisture-sensitive coverings the residual moisture of Planogel Rheo must be checked on site in accordance with current regulations.
- → Underfloor heating systems (hydronic or electric): for the installation of Planogel Rheo on underfloor heating systems, the self-levelling product must be bonded to a rigid substrate (cement- or anhydrite-based screeds, dry panels, ceramic floors) properly treated with a suitable primer. Planogel Rheo cannot be applied floating or desolidarised. The minimum thickness above the system must be 5 mm, except in cases where the overlying covering requires a greater thickness. After 5 days from the installation of Planogel Rheo, proceed with the initial startup cycle of the system in accordance with the requirements of standard EN 1264-4.

## **Certificates and marks**







\* Émission dans l'air intérieur. Information sur le niveau d'émission dans l'air intérieur.
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Technical Data compliant with Kerakoll Quality Standard				
Appearance	Grey pre-mixed			
Apparent volumetric mass	$\approx 1.22 \text{ g/dm}^3$			
Mineralogical nature of inert material	silicate - crystalline carbonate			
Grading	0-600 µm			
Shelf life	$\approx$ 12 months from production in the original sealed packaging, protect from humidity			
Mixing water	≈ 4.75-5.5 l / 1 bag 25 kg			
Specific weight of the mixture	$\approx 2 \text{ g/dm}^3$	UNI 7121		
Self levelling time	≈ 20 min.			
End setting time	≈ 50-70 min.			
Temperature range for application	from +5 °C to +30 °C			
Maximum thickness	from 1 to 30 mm			
Foot traffic	≈ 3 hrs			
Waiting time before laying:				
- ceramic tiles, porcelain tiles, natural stone	≈ 4 hrs			
- hardwood floors	≈ 12 hrs			
- resilient materials	≈ 12 hrs			
- resins	≈ 12 hrs			
Coverage	$\approx 1.6 \text{ kg/m}^2 \text{ per mm of thickness}$			

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.

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Performance				
VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions				
Conformity	EC 1 plus GEV-Emicode	GEV certified 13964/11.01.02		
HIGH-TECH				
Adhesion to concrete after 28 days	$\approx 3 \text{ N/mm}^2$	EN 13892-8		
Adhesion on porcelain tiles after 28 days *	$\geq 1.5 \text{ N/mm}^2$			
Adhesion on timber after 28 days *	≥ 1.5 N/mm <sup>2</sup>			
Adhesion on metal after 28 days *	$\geq 1 \text{ N/mm}^2$			
Resistance to:				
- compressive strength after 4 hrs	$\geq 10 \text{ N/mm}^2$	EN 13892-2		
- compressive after 24 h	$\geq 20 \text{ N/mm}^2$	EN 13892-2		
- compressive after 7 days	≥ 25 N/mm <sup>2</sup>	EN 13892-2		
- compressive strength after 28 days	≥ 33 N/mm <sup>2</sup>	EN 13892-2		
- flexural after 28 days	$\geq$ 7 N/mm <sup>2</sup>	EN 13892-2		
- böhme wear after 28 days	> 22 cm <sup>3</sup> / 50 cm <sup>2</sup>	EN 13892-3		
- strain parallel to the laying surface after 28 days	> 2 N/mm <sup>2</sup>	UNI 10827		
Surface hardness after 28 days	≥ 90 N/mm <sup>2</sup>	EN 13892-6		
Surface peeling strength, Peel test	> 2 N/mm <sup>2</sup>	EN ISO 22631		
Dimensional stability	< 0.1 mm/m	EN 13892-9		
Classification/Conformity	CT-C30-F7	EN 13813		

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site. \* Substrates suitably treated with Keragrip Eco.

## Warning

- $\rightarrow$  Product for professional use
- $\rightarrow$  abide by any standards and national regulations
- → Do not use Planogel Rheo to correct substrate irregularities greater than 30 mm
- $\rightarrow$  Do not add other binders, additives or pigments to the mixture
- → Low temperatures and high relative humidity lengthen drying times and may saturate the environment with negative consequences on the surface consistency of the self-levelling gel
- → An excessive quantity of water will reduce strength and the drying time

- → Before laying hardwood floors and resilient materials, check residual moisture with a calcium carbide hygrometer
- → Protect from direct sunlight and currents of air for the first 3 hrs
- $\rightarrow$  respect the elastic joints present in the substrate
- $\rightarrow$  if necessary, ask for the safety data sheet
- → for unstable wooden types, particular substrates and for any other issues, contact the Kerakoll Worldwide Global Service +39 0536.811.516 – globalservice@kerakoll.com



The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in December 2022 (ref. GBR Data Report - 01.23); please note that additions and/or amendments to this information 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 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.