

# Aquastop Nanoflex®

**Certified, eco-friendly, breathable, anti-alkali and chlorine-resistant, mineral membrane for the flexible waterproofing with high levels of adhesion and durability of surfaces before laying tiles using adhesives, ideal for use in GreenBuilding. Single-component with low CO<sub>2</sub> emissions and very low volatile organic compound emissions, recyclable as an inert material at the end of its life.**

Aquastop Nanoflex® develops a smooth creamy mixture paste, consistency can be adjusted by varying the amount of water in order to achieve optimal workability as per the particular site conditions. Guarantees maximum adhesion to the bonded system.



**GREENBUILDING RATING®**

**Aquastop Nanoflex®**  
 - Category: Inorganic mineral products  
 - Class: waterproofing products

<p>rating 4</p>	<p>Natural mineral content 63%</p>	<p>CO<sub>2</sub>/kg emission 108 g</p>	<p>Very low VOC emissions</p>	<p>Can be recycled as inert material</p>
	RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS			

**PRODUCT STRENGTHS**

- Floors and walls, for internal and external use
- Breathable
- Crack-Bridging Ability even at low temperatures
- Specifically intended for laying using H40® No Limits or Bioflex®
- Suitable for overlaying
- 30% better coverage than two-component systems
- The Nanotech Technology, makes it complete water repellent, chemically stable and permanent elasticity

**ECO NOTES**

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- Single-component; avoiding the use of plastic cans reduces CO<sub>2</sub> emissions and the need to dispose of special waste

**AREAS OF USE**

**Use**  
 Terraces, balconies, horizontal surfaces and swimming pools on monolithic cement-based screeds, existing floors covered with ceramic/vitrified tiles and marble stone, dimensionally stable natural stone well-anchored to the surface and clean, cement-based plasters/renders and cementitious mortars, aged concrete.

**Do not use**  
 On gypsum or anhydrite-based surfaces without the use of Primer A Eco eco-friendly, water-based surface isolation, on metal or wood substrates, on bituminous sheeting, to waterproof exposed surfaces subject to foot traffic, on low-density screeds, on insulation layers on inverted roofs made with insulating panels or low-density materials, in swimming pools and tanks used to hold exposed water, when adhesion of the coverings requires the use of Superflex or reactive adhesives.

**INSTRUCTIONS FOR USE**

**Preparation of substrates**  
 The surface must be perfectly cured and dry, solid (i.e. free of weak or easily removable parts) and free from oil, grease, paint and de-bonding agent. When working on weakened parts, when parts of the substrate are missing and also in the case of gravel beds, the substrate must be restored with suitable products. Correct uneven areas with suitable finishing products. On ceramic substrates all traces of surface treatments such as wax and oil must be removed. The most suitable cleaning methods are sandblasting, mechanical scarification or washing with detergents and jet washing. Before application damp absorbent surfaces without letting any stagnant water.

Take due care to waterproof perimeter joints, expansion and desoliderisation joints using Aquastop 120 tape, bonded with Aquastop Nanoflex®.

Use the special pieces to waterproof external angles, internal angles and connections to drains. Any structural joints must first be waterproofed.

## INSTRUCTIONS FOR USE

### Preparation

Prepare Aquastop Nanoflex® in a clean container by pouring in approximately ¾ of the water required. Gradually add Aquastop Nanoflex® to the container, mixing the paste from the bottom upwards with a low-rev (≈ 400/min) agitator. Add more water until the desired consistency is obtained. The mixture must be of smooth consistency and without any lumps. The amount of water to be added, indicated on the packaging, is an approximate guide. It is possible to obtain desired consistency of mixture according to the application demand.

### Application

Aquastop Nanoflex® should be applied with a brush or a plain trowel on a previously prepared surface. Apply the first coat about 1 – 2 mm thick, pressing down to ensure maximum adhesion to the substrate. Once hardened and after removing any surface condensation, apply the second coat of Aquastop Nanoflex®. Apply a continuous, even layer about 2 – 3 mm thick covering the surface completely. When waterproofing with Aquastop AR1 mesh, submerge the reinforcing mesh fully in the first layer of freshly applied Aquastop Nanoflex®, pressing down with the trowel. The subsequent fixing of the covering should be placed at least 24 hours after the last layer has been applied, using H40® Eco range eco-friendly mineral adhesive. when working in low temperatures and with high humidity, the waiting time before laying will be longer. If rain falls on the product before it is fully hardened, check it is ready before applying the next coat/covering.

### Cleaning

Residual traces of Aquastop Nanoflex® can be removed from tools with plain water before the product hardens.

## SPECIAL NOTES

**Pools, tanks, basements and foundations in cured reinforced concrete:** break the spacer holes mechanically and clean them suitably, then apply Aquastop Nanosil neutral organic silane sealant and level the surface with a suitable finishing product. Waterproof all the corner joints, internal and external angles and connection joints to drains, by Aquastop 120 tape and special pieces.

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	light grey ready-mixed waterproofing product	
Apparent volumetric mass	1 kg/dm <sup>3</sup>	
Mineralogical nature of inert material	silicate - crystalline carbonate	
Shelf life	≈ 12 months in the original packaging in dry environment	
Pack	20 kg bags with handle	
Mixing water	≈ 5 – 6 ℓ / 1 20 kg bag	
Viscosity	≈ 60,000 mPas · sec	
Specific weight of the mixture	≈ 1.5 kg/dm <sup>3</sup>	UNI 7121
Pot life	≥ 1 hr	
Temperature range for application	from +5 °C to +35 °C	
Substrate residual humidity	≤ 4%	
Minimum total thickness	≥ 2 mm	
Maximum thickness per layer	≤ 1.5 mm	
Waiting time between 1 <sup>st</sup> and 2 <sup>nd</sup> coat	≥ 6 hrs	
Waiting time before laying the covering*	≥ 24 hrs	
Interval before normal use	≈ 7 days / ≈ 14 days (swimming pools)	
Application temperature range	from -20 °C to +90 °C	
Coverage	≈ 1.15 kg/m <sup>2</sup> per mm of thickness	

*Values taken at +23 °C, 50% R.H. and no ventilation.*

*(\*) Thickness and weather conditions may extend these times considerably.*

## PERFORMANCE

### VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS

Conformity	EC 1 plus GEV-Emicode	GEV certified 2353/11.01.02
<b>HIGH-TECH</b>		
Initial adhesion	≥ 2 N/mm <sup>2</sup>	EN 14891–A.6.2
Adhesion after contact with water	≥ 1 N/mm <sup>2</sup>	EN 14891–A.6.3
Adhesion after heat ageing	≥ 2 N/mm <sup>2</sup>	EN 14891–A.6.5
Adhesion after freeze-thaw cycles	≥ 1 N/mm <sup>2</sup>	EN 14891–A.6.6
Adhesion on contact with lime water	≥ 1.5 N/mm <sup>2</sup>	EN 14891–A.6.9
Adhesion on contact with chlorinated water	≥ 0.8 N/mm <sup>2</sup>	EN 14891–A.6.7
Water-resistance	no penetration	EN 14891–A.7
Breathability:		
- number of nanopores	≥ 1 billion/cm <sup>2</sup>	ASTM E128
- water vapour permeability coefficient (μ)	≈ 820	UNI EN ISO 7783–1
Crack Bridging in standard conditions	≥ 0.75 mm	EN 14891–A.8.2
Crack Bridging at low temperatures (-5 °C)	≥ 0.75 mm	EN 14891–A.8.3
Conformity	CM 01P	EN 14891

*Values taken at +23 °C, 50% R.H. and no ventilation.*

## WARNING

- **Product for professional use**
- abide by any standards and national regulations
- technological specifications and application information can be found in the AquaExpert Instructions
- if necessary, ask for the safety data sheet
- for any other issues, contact Kerakoll Customer Care +91-22-2839 5593 / 1800 102 4957 - info@kerakollindia.com

The Rating classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in January (ref. GBR Data Report - 02.20); 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.