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 substrates before laying with adhesives, ideal for use in GreenBuilding. Single-component with low CO_2 emissions and very low volatile organic compound emissions, recyclable as an inert material at the end of its life.

Aquastop Nanoflex® develops a smooth, fluid mixture that can be adjusted by varying the amount of water in order to obtain optimal workability for the particular site conditions, guaranteeing maximum adhesion of the bonded system.

GREENBUILDING RATING®

Aquastop Nanoflex®
- Category: Inorganic Mineral Products
- Class: Nanotech waterproofing products
- Rating: Eco 3

eco3	Regional Mineral ≥ 40 %	Recycled Regional Mineral ≥ 30 %	CO_2 ≤ 250 g/kg	Low Emission IAQ VOC Indoor Air Quality	Recyclable
			✓	✓	✓
			CO2/kg emission 108 g	Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Floors and walls, for internal and external use
- Breathable
- Crack Bridging Ability
- Specifically intended for laying ceramic tiles, natural stone and glass mosaic using adhesives from the H40® range
- Suitable for overlaying
- 30% better coverage than two-component systems
- 20 kg paper bags with carrier handle
- Nanotech technology which makes it completely water repellent and gives permanent elasticity and high chemical stability

ECO NOTES

- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- Single-component; avoiding the use of plastic cans reduces CO_2 emissions and the need to dispose of special waste

AREAS OF USE

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

Do not use
On gypsum or anhydrite-based substrates 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 reactive adhesives.

INSTRUCTIONS FOR USE

Preparation of substrates
The substrate must be perfectly cured and dry, solid (i.e. free of weak or easily removable parts) and free from oil, grease, paint and parting compound. 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 the surface of absorbent substrates, without letting any build-up of water occur.
Waterproof the perimeter, expansion and desolidarisation joints in the substrates using Aquastop 120 anchored using Aquastop Nanoflex®; use special pieces for external angles, internal angles and connections to drains and installations.

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INSTRUCTIONS FOR USE

Waterproof the structural joints using Idrojoint 220 and Idrojoint 220 Flex applied with Idrojoint Eco Gum.

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 mixtures with a more or less fluid consistency, depending on the type of application.

Application

Aquastop Nanoflex® should be applied with a smooth spreader on a previously prepared substrate. 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®. Lay a continuous, even layer about 2-3 mm thick covering the substrate completely. When waterproofing with Aquastop AR1 mesh, submerge the reinforcing mesh fully in the first layer of freshly applied waterproofing product, pressing down with the spreader. The subsequent laying of the covering with H40® range eco-friendly mineral adhesive should be placed at least 24 hours after the last layer has been applied. 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 Nanosil Eco neutral organic silane sealant and level the surface with a suitable finishing product. Waterproof the corners by anchoring Aquastop 120 tape and its special pieces with adhesive from the H40® range. Where there is insufficient space to use Aquastop 120 tape, apply Nanosil Eco sealant.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	light grey ready-mixed waterproofing product	
Apparent volumetric mass	1 kg/dm³	
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/dm³	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 1st and 2nd coat	≥ 6 hrs	
Waiting time before laying the covering*	≥ 24 hrs	
Interval before normal use	≈ 7 days / ≈ 14 days (permanent water)	
Working temperature	from -20 °C to +90 °C	
Coverage	≈ 1,15 kg/m² 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-R plus GEV-Emicode	GEV certified 2353/11.01.02
HIGH-TECH		
Initial adhesion	≥ 2 N/mm²	EN 14891–A.6.2
Adhesion after contact with water	≥ 1 N/mm²	EN 14891–A.6.3
Adhesion after heat ageing	≥ 2 N/mm²	EN 14891–A.6.5
adhesion after freeze-thaw cycles	≥ 1 N/mm²	EN 14891–A.6.6
Adhesion on contact with lime water	≥ 1,5 N/mm²	EN 14891–A.6.9
Adhesion on contact with chlorinated water	≥ 0,8 N/mm²	EN 14891–A.6.7
Water-resistance	no penetration	EN 14891–A.7
Breathability (No. nanopores)	≥ 1 billion/cm²	ASTM E128
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 O1P	EN 14891

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

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KERAKOLL
The GreenBuilding Company

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 the Kerakoll Worldwide Global Service 01527 578000 - info@kerakoll.co.uk

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