

# AQUASHIELD



## Nano-based: Ultimate

\*Member of the TECNADIS PRS family\*

Nanotechnology-based water repellent of very high performance for <u>vertical</u> surfaces made by porous materials





## **AQUASHIELD Ultimate**

Transparent water repellent mainly designed for the protection of vertical and tilted surfaces of porous materials against the action of water.

#### **CHARACTERISTICS**

SUPER-HYDROPHOBICITY: Avoids the water absorption in the substrate, (contact angle > 150º).

INERT AND DOES NOT FORM ANY FILM: Does not react chemically, leaving the substrate unchanged, allowing the complete breathability of the substrate.

**PERMEABILITY:** (< 10%) mínimum variation of the capacity to transfer water vapour.

**COLOUR**: Does not change at all neither colour nor appearance of the substrate.

HIGH DURABILITY: Guaranteed durability higher than 10 years against all kinds of external environmental conditions.

**OPTIMAL UV RESISTANCE:** Unaffected by solar radiation since it does not lose its properties or modify their appearance.

EASY APPLICATION METHOD: Fast, with conventional systems and without needing of additional curing. Very fast drying.

**TOTALLY REAPPLICABLE:** no need to remove previous treatments.

**Brick** 

#### **IDEAL SOLUTION FOR TREATING ANY KIND OF SURFACE!**



Natural stone









Concrete

Ceramic

SUITABLE for: Marble, slate, granite, limestone, sandstone, wood, concrete, brick, plaster, alabaster, etc.

### **AQUASHIELD Ultimate COMPARED TO ITS MAIN COMPETITORS**

Results obtained in laboratory tests in comparison with main competitors

PRODUCT	Dilution	Performance	m²/L
(Company)		(L/m²) <sup>1,2</sup>	(aprox.) <sup>1,2</sup>
AQUASHIELD U.	-	<b>0,19</b>	<b>5,25</b>
(Tecnan)		<i>0,125-0,40</i>	8-2,5
Sikaguard 700S	-	<b>0,75</b>	<b>1,3</b>
(Sika)		0,75-1,25	1,3-0,8
Z-6689* (Dow Corning)	1:19	<b>0,2</b> 0,2-0,4	<b>5,00</b> 5-2,5
Hydrorep	-	<b>0,15</b>	<b>6,7</b>
(Fila)		0,1-0,2	10-5

<sup>&</sup>lt;sup>1</sup> In bold, performance according to laboratory tests

\*Dilution used according to manufacturer indications

- <u>WATER REPELLENCY</u>: AQUASHIELD Ultimate has a <u>higher contact angle</u> compared with any of its competitors, which results in a higher water repellency (**better hydrophobic effect**-very spherical drops). In addition, its best advantage is that the <u>material surface does not get wet</u>. On the other hand, it is also shown how filmogenic products change the colour of the material.



It can be clearly seen how the material's surface gets wet with products such as Z-6689 and Hydrorep, while with <u>AQUASHIELD Ultimate</u> is not wet at all.

<sup>&</sup>lt;sup>2</sup> In italics, performance according to data sheet

- <u>COLOUR</u>: AQUASHIELD Ultimate DOES NOT modify the aspect, structure and colour of the original material at all. Nevertheless clear changes on the aesthetic conditions of the material are shown with several of its competitors such as Sikaguard 700S, and Z-6689.





- **PERMEABILITY:** In contrast with traditional water repellents based on siloxanes, *AQUASHIELD Ultimate* does not form any film, allowing totally the breathability of the substrate.
- TOTAL UV RESISTANCE: The nano-structure of the product does not have any weakness to UV, a fact which is not true for the competitors products based on siloxanes and which form film, since its organic structure is much easily breakable by this type of radiation

  Aguashield Ultimate
- <u>COST</u>: AQUASHIELD Ultimate presents higher performance comparing to the best product from the competence at a highly competitive cost, very close to the cheapest competitors. For example, in comparison to the <u>high performance competitors</u> such as Sikaguard 700S, its cost is 2-3 times lower in €/m<sup>2</sup>.



Summary of the results obtained in laboratory testing in comparison to competitors' products.

PRODUCT (Company)	CONTACT ANGLE	EFFECT ON COLOUR	PERMEABILITY (water vapour)	€/m² (aprox.)
AQUASHIELD U. (Tecnan)	159,4°	Colour does not change	ተተተ	
Sikaguard 700S (Sika)	159,1°	Colour changes	ተተተ	
Z-6689 (Dow Corning)	149,8°	Colour changes	个个	I
Hydrorep (Fila)	133,1°	Colour does not change	ተተተ	

Additionally, AQUASHIELD Ultimate presents total resistance to UV, does not form any film on the substrate, is totally re-applicable and has a long lifetime (more than 10 years)

## Some examples of applications of AQUASHIELD Ultimate



Sagrada Familia (Barcelona) © Pep Daudé / Sagrada Família Basilica



Tabacalera Building (San Sebastián)



Oviedo Cathedral (Asturias)



Residential complex - Erroz Tower (Pamplona)



Almudena Cathedral (Madrid)



Escolapios College (Zaragoza)

## **TECNADIS SOLUTIONS - OTHER READY TO USE NANOPRODUCTS**

### **TECNADIS PRS PERFORMANCE**

Hydrophobic and oleophobic product for floors or pavements and facades.



## **VETROSMART**

Hydrophobic product to facilitate the cleaning of glasses.



### THE REVOLUTION OF WATER REPELLENTS

Why resign oneself with lower quality products?

Choose the product with better performance at the most competitive price:

## **AQUASHIELD Ultimate**

## **AQUASHIELD Ultimate**

Water repellent product of **VERY HIGH PERFORMANCE** for facades of porous materials.



Formats: 1L, 5L, 25L

Place your order by:

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E-mail: tecnan@tecnan-nanomat.es

Formats: 1L, 5L, 25L

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