

**PRODUCT DESCRIPTION**

AQUASCUD System 420 is a waterproofing system, offering a definitive solution and without having to resort to demolition, for balconies, terraces, roof decks and all flat surfaces, even with flooring installed. It is a fast, practical and extremely elastic waterproof protective shield with CORE CURING TECHNOLOGY for effective curing even under low temperature conditions and partially damp surfaces. AQUASCUD System 420 consists of:

- AQUASCUD 420, elastic two-component waterproofing compound;
- AQUASCUD JOIN, elasticised staff bead;
- AQUASCUD JOIN BT, adhesive staff bead;
- AQUASCUD LINE, a draining gutter profile to finish and protect flooring edges;
- AQUASCUD BASIC: elasticised microporous water-repellent polypropylene membrane, which is roughened thanks to special processing, allowing perfect adhesion to the waterproof coating;

**PRODUCT APPLICATION**

- Waterproofing of terraces or flat roofs, side-walks, balconies and sloped floors, even with flooring already installed
- Substrates in general, also lightened with expanded clay

ADVANTAGES

- Fast curing allowing for short waiting times between the first and second coat and subsequent tiling, even under low temperature conditions (all in 24 hours)
- Effective curing on set surfaces, even partially wet
- Reduced risk of damage in case of sudden contact after work with rain, fog
- Excellent adhesion to all cement, masonry, ceramic and marble surfaces
- No demolition and disposal, applicable on existing floor and surfaces with micro-cracks
- Final intervention less than 3mm thick
- Allows for direct application of the flooring
- Resistant to U.V. radiation
- Excellent protection of screed against the action of un/freezing and efflorescence
- Low environmental impact thanks to reduced CO₂ emissions, very low Volatile Organic Compound emissions (VOC), components obtained from recycling processes
- The product helps earning points for LEED certification

PREPARATION AND APPLICATION Preparing the surfaces

Remove all dirt and any other material that could compromise adhesion of AQUASCUD.



Restore very irregular surfaces with FLEXOMIX 30 mortar (see the related technical data sheet).
If the surfaces are old or dusty, apply PROFIX 30 primer (see the related technical data sheet) with a roller, a brush or by spray, ensuring it does not bleed on the surface due to the surface not absorbing it.
For surfaces that are not completely dry but cured, the relative surface humidity must not exceed 12% (measurement taken with a Storch type electric hygrometer).

Preparation of installation parts and set-ups

- **EXPANSION JOINTS AND SIGNIFICANT CRACKS** Any expansion joints and significant cracks on the surface must be covered with GARVO joint cover strip (see related technical data sheet) which, with structural expansion joints, needs to be omega shaped and glued on the sides with AQUASCUD mixture
- **CORNERS AND CONNECTIONS** Set the connections up with the drains using the relative DRAIN MANIFOLD Connect all of the wall/floor corners with AQUASCUD JOIN staff bead, placing the rubber-coated part in contact with the surface using AQUASCUD sealing material. Alternatively, it is possible to use the AQUASCUD JOIN BT adhesive strip (see relevant technical data sheet) laid on a cured AQUASCUD layer. At low-height situations use AQUASCUD JOIN BT
- **GUTTER** Along the external perimeter, set up the AQUASCUD LINE draining gutter profile and relative special pieces (see relative data sheet) to finish and protect the tiled edge
- **ELASTIC REINFORCEMENT** Prepare the AQUASCUD BASIC membrane, pre-cut to the required measurements, so that it can be applied with the first coat of waterproofing mixture

Preparing the mixture

Stir the liquid component in its container, then pour it into a bucket.

Gradually add the AQUASCUD powder component while continuing to stir; mix for 2÷3 minutes with a whip-fitted drill until the mixture is smooth and free of lumps.

If necessary, it tolerates the addition of water up to maximum 4% of the liquid component, equal to about a glass per package.

Application

Apply the first thick layer of AQUASCUD 420 on the surface, a minimum thickness of 1÷1.5 mm using a special Volteco 3.5 mm NOTCHED FLOAT and/or the Volteco NOTCHED or ROLLER SQUEEGEE, making sure the product penetrates well into the substrate and covers the surface completely (average consumption: 2-2.5 kg/m² depending on the flatness of the surface).

Place the AQUASCUD BASIC membrane on the first coat of mixture in the following manner: proceed in sectors, immediately laying AQUASCUD BASIC out on the fresh AQUASCUD 420 mixture, making it adhere uniformly to the surface by pressing with the Volteco NEEDLE ROLLER.

AQUASCUD BASIC membrane becomes darker when it is rolled on. This indicates correct application and proper impregnation and adhesion.

Overlap the edges of the AQUASCUD BASIC membrane by at least 10 cm and weld them together with the AQUASCUD mixture.

Where the horizontal and vertical surfaces join, make sure the AQUASCUD BASIC membrane adheres to the horizontal edge of the previously laid AQUASCUD JOIN joint band.

Never fold AQUASCUD BASIC vertically, always join it to the AQUASCUD JOIN joint band.

The AQUASCUD BASIC membrane must be interrupted in the centre line of the GARVO strip when this covers expansion joints.

If there is an AQUASCUD LINE gutter profile along the perimeter, overlap AQUASCUD BASIC by at least 6 cm over the profile anchoring flap.

Wait at least 30 minutes (ambient temperature +20 °C; ambient humidity 60%) before applying a second layer, at least 1 mm thick, of the AQUASCUD 420 mixture (average consumption 1.75-2 kg/m²), being careful to evenly cover the AQUASCUD BASIC membrane.

For applications on balconies or on small surfaces (less than approximately 4 m²), it is possible to omit the use of the AQUASCUD BASIC membrane.

Always apply the AQUASCUD BASIC membrane on a substrate with marked cracks.

Finishing

Ceramics must be laid on AQUASCUD System 420 after at least 16 hours, with a large grout gap and C2-type adhesive (preferably with an S1 and S2 deformation class).

Line grouting works must be carried out with CG2 class cement-based grouting mortars.

AQUASCUD System 420 can be left exposed if subjected to occasional foot traffic or finished with the X-RAPID levelling compound, CRYSTAL POOL paint or AQUASCUD 500 (see respective technical data sheets).

If finishing with AQUASCUD 500, wait at least 2 hours after applying AQUASCUD BASIC.

References available at www.volteco.com**CONSUMPTION AND YIELD** 3,6÷4 kg/m² depending on the roughness of the surface.**PACKAGING AND STORAGE** AQUASCUD 420 is supplied in 20.7 kg packages (15 kg in powder + 5.7 kg in liquid). The product must be stored in a dry place without being exposed to frost and heat (at a temperature between +5°C and +30°C) or direct exposure to the sun before being applied.

ACCESSORIES	-
<i>AQUASCUD JOIN</i>	Elasticised staff bead 25 m package
<i>AQUASCUD JOIN BT</i>	Staff bead with adhesive butyl rubber 20 m package
<i>AQUASCUD BASIC</i>	Water-repellent elasticised microporous membrane 30 m ² package
<i>AQUASCUD LINE</i>	Draining profile with gutter (version H.0 and H.10) 13.5 m package
SPECIAL PIECES	-
<i>JOIN BT 90° Corner / JOIN BT 270° Corner</i>	Pre-shaped staff bead, with adhesive butyl rubber 10 pc package
<i>DRAIN/EXHAUST MANIFOLD</i>	Rubber textile element Ø 85 mm and Ø 100 mm 2 pc package
<i>SQUARE GARVO</i>	Rubber textile element 40x40 cm Single package
<i>AQUASCUD CORNER 90°</i>	Corner for AQUASCUD LINE (version H.0 and H.10) Single package
<i>AQUASCUD CORNER 270°</i>	Corner for AQUASCUD LINE (version H.10) Single package
<i>AQUASCUD FIXY</i>	Connecting joints for AQUASCUD LINE (version H.0 and H.10) Single package
APPLICATION TOOLS	-
<i>NEEDLE ROLLER – 7 kg</i>	-
<i>PLASTIVO ROLLER</i>	-
<i>ROUNDED PLASTERING TROWEL</i>	-
<i>NOTCHED TROWEL 3.5 mm</i>	-
<i>NOTCHED SQUEEGEE</i>	-
<i>SQUEEGEE (rubber-coated)</i>	-

WARNINGS - IMPORTANT NOTES Do not add cement or to the mixture or inert materials or alter the mixing ratio. Apply the product within 20 minutes of mixing (room temperature + 20°C; ambient humidity 60%). Do not use AQUASCUD 420 in thicknesses greater than 2 mm per coat. Wait at least 7 days for the substrate to cure in case of application on traditional screeds that have just been made. Do not apply the product if the temperature is higher than 30°C or lower than +5°C or if it is expected to drop below this temperature within 8 hours (in case of a dry base). The curing times will be longer in the presence of rain and/or fog and/or a low temperature. The application of AQUASCUD on surfaces exposed to direct sunlight leads to a drastic reduction of the workability time. In this case the addition of water is tolerated as specified in the paragraph "Preparing the mixture". Protect the fresh product from rain for at least 2 or 4 hours at the end of application, variable limit depending on temperature and humidity conditions. Set-up suitable anti-root protection in the case of roof gardens.



AQUASCUD BASIC can remain free of AQUASCUD protection mixture up to a maximum of 7 days. Wait at least 16 hours after the second coat before applying any type of protective or finishing layer. Wait at least 2 hours after applying AQUASCUD BASIC if finishing with AQUASCUD 500. If more than 28 days have passed since the second coating, an additional layer must be applied to ensure the subsequent coating adheres well.

PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values		
Appearance	Grey powder - white latex		
Working temperature	-5°C +60°C		
Liquid/powder mixing ratio	0,38/1		
Workability time at +20°C	20'		
Specific weight	> 1.7 kg/l		
Specification	Test method	Performance requirements	Declared performance
Crack Bridging Ability (+23°C)	UNI EN 14891 Met. A.8.2	> 0.75 mm	> 1,5 mm
Crack Bridging Ability (-5°C)	UNI EN 14891 Met. A.8.3	> 0.75 mm	> 1,5 mm
Crack Bridging Ability (+23°C)(with Aquascud Basic)	UNI EN 14891 Met. A.8.2	> 0.75 mm	> 2 mm
Crack Bridging Ability (-5°C)(with Aquascud Basic)	UNI EN 14891 Met. A.8.3	> 0.75 mm	> 2 mm
Initial adhesion	UNI EN 14891 Met. A.6.2	> 0.5 N/mm ²	> 0.5 N/mm ²
Adhesion after immersion in water	UNI EN 14891 Met. A.6.3	> 0.5 N/mm ²	> 0.5 N/mm ²
Adhesion after heat application	UNI EN 14891 Met. A.6.5	> 0.5 N/mm ²	> 0.5 N/mm ²
Adhesion after un/freezing cycles	UNI EN 14891 Met. A.6.6	> 0.5 N/mm ²	> 0.5 N/mm ²
Adhesion after immersion in alkaline water	UNI EN 14891 Met. A.6.9	> 0.5 N/mm ²	> 0.5 N/mm ²
Water impermeability	UNI EN 14891 Met. A.7	150 KPa	150 KPa
Parameters subject to company Quality Control	Values AQUASCUD BASIC	Values AQUASCUD JOIN	
Water impermeability	-	No passage up to 100 kPa	
Elongation at breaking point	> 40%	> 20%	
Resistance at breaking point	> 0.6 kN/m	> 267 N/5 cm	

SAFETY

This is a non-toxic product.
It is recommended to use a mask and gloves while working.
Accidental contact with eyes, rinse thoroughly with water and seek medical advice.

	VOLTECO S.p.a Via delle Industrie, 47 - 31050 Ponzano Veneto (I)
	<p>18 0024-CPR-2018/10/09 EN 14891:2012 AQUASCUD 420</p> <p>Two-component liquid waterproofing product modified with polymer (CM 01) for outdoor applications under ceramic tiles(applied with class C2 adhesive in compliance with EN 12004)</p> <p>Initial tensile adhesion strenght: $\geq 0,5 \text{ N/mm}^2$</p> <p>Tensile adhesion strength after water contact: $\geq 0,5 \text{ N/mm}^2$</p> <p>Tensile adhesion strength after heat ageing: $\geq 0,5 \text{ N/mm}^2$</p> <p>Tensile adhesion strength after freeze-thaw cycles: $\geq 0,5 \text{ N/mm}^2$</p> <p>Tensile adhesion strength after contact with lime water: $\geq 0,5 \text{ N/mm}^2$</p> <p>Water impermeability: No penetration and $\leq 20 \text{ g}$ weight gain</p> <p>Crack bridging ability under standard conditions (23°C): $\geq 0,75 \text{ mm}$</p> <p>Crack bridging ability at low temperatures (-5°C): $\geq 0,75 \text{ mm}$</p> <p>Hazardous substances: See SDS</p>

COPYRIGHT

© Copyright Volteco S.p.A. - All rights reserved.



AQUASCUD SYSTEM 420

Information, images and text found in this document are exclusive property of Volteco S.p.A.
They may change anytime without prior notice.
Updated versions of this and other documentation (specification, brochure, other) are on www.volteco.com.
In case of translation text may contain technical and linguistic inaccuracies.

LEGAL NOTES

Note for buyer/installer:

This document prepared by Volteco S.p.A. is provided as an aid and guideline for the buyer/installer.
This does not take into consideration the details of each single operational context, for which Volteco S.p.A. will not be held liable.
This does not change and does not extend the obligations of Volteco S.p.A.
It may vary and the installer is therefore required to update his/her information prior to each application by referring to www.volteco.com.
The before-after sales technical/trade information of the sales network have the same validity as this document.