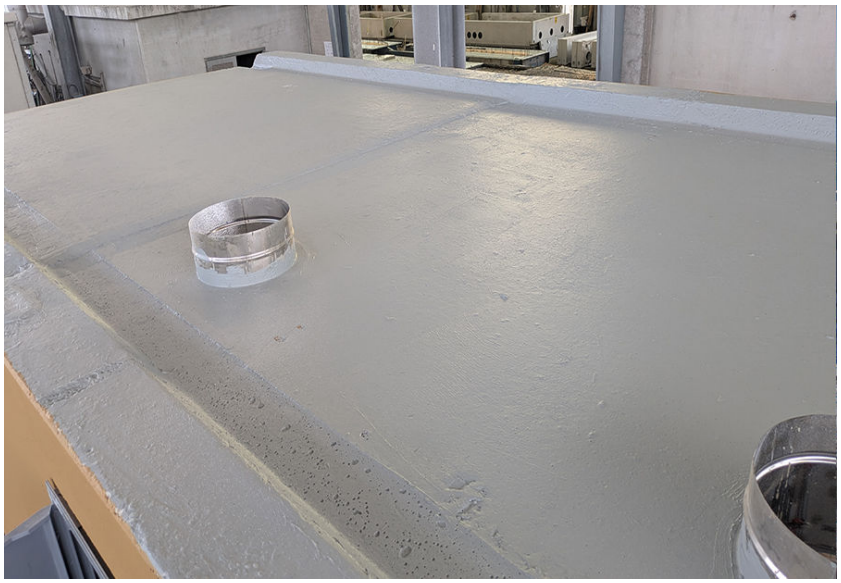
AQUASCUD 501



FLEXIBLE LIQUID SYSTEMS

PRODUCT DESCRIPTION

AQUASCUD 501 is a fibred elastic waterproofing liquid membrane, formulated on the basis of selected synthetic resins in water dispersion and special additives.
AQUASCUD 501 is characterised by high impact resistance and a pleasant aesthetic-decorative effect, developed to ensure reliable performance over time and a quality surface finish.

PRODUCT APPLICATION

AQUASCUD 501 is suitable for coating walkways, technical walkways, maintenance walkways and similar pedestrian transit areas, as well as flat, sloping, curved or complex geometrically shaped roofs, whether new or existing, made with:

- Polymer-modified liquid membranes
- Stabilised bituminous coatings, no longer subject to surface migration of oils and plasticisers
- Galvanised sheets, GRP and fibre cement
- Waterproofing of screeds and cement floors
- Tiles and roof tiles
- Stoneware or klinker tiles
- Gutters and drainage channels in concrete, iron, aluminium, copper and polycarbonate

ADVANTAGES

• Excellent walkability, resistant to both constant and dynamic loads even in areas subject to frequent traffic
• Available in three colours (grey, red and green), it blends harmoniously into the building context, combining functionality, design and waterproof protection, with a refined aesthetic impact
• High resistance to UV radiation and weathering which ensures greater durability of the coating over time
• Excellent adhesion to substrates and ability to follow surface deformations thanks to high elasticity, without the need for additional protection
• Ready-to-use, cold application, with quick and easy installation
• Non-toxic and solvent-free product, safe for operators and the environment

PREPARATION AND APPLICATION

The preparation and installation data refer to normal environmental conditions (temperature +23°C; relative humidity 50%).

Preparing the surfaces

Clean the surfaces thoroughly, removing all traces of dust, dirt, salt deposits, efflorescence and loose parts by brushing or pressure washing.

In the case of old ceramic, marble or similar floors, check complete adhesion to the substrate.

Check the solidity of the substrate and the efficiency of the water outflow points.

On very uneven surfaces, restore the substrate with FLEXOMIX 30 mortar (see relevant data sheet).

In the case of old or dusty surfaces, apply PROFIX 30 primer beforehand (see relevant data sheet).

For substrates that are not completely dry but adequately cured, the surface relative humidity must not exceed 5% (measured using a Storch type electric hygrometer).

If the substrate is partially soaked in water, with relative surface humidity between 5% and 10% (measured using a Storch type electric hygrometer), apply BI MORTAR ULTRA SEAL (see relevant technical data sheet).

In the case of application over existing bituminous membranes, the substrate must be stable, undamaged, dry and free of moisture, with no loose or deteriorated parts.

If the membrane is deteriorated or raised, it must be repaired beforehand by suitable repair work.

It will be necessary to control the slope of the surface to avoid stagnation any dips or hollows must be corrected by appropriate levelling or smoothing to ensure regular rainwater run-off.

In the presence of dirt, dust, oils or surface deposits, surfaces should be cleaned with high pressure and allowed to dry completely before proceeding to the next steps.

Once the above conditions have been satisfied on cured bitumen membrane or if a stronger adhesion is desired, proceed with the application of PROFIX 50 primer (see relevant data sheet).

Preparation of installation details and arrangements (if any)

• JOINTS Any deformation joints (expansion and contraction/splitting) and construction joints on the surface must be covered by means of GARVO joint cover strips (see relevant technical data sheet); in case of structural joints, use BI FLEX System (see relevant technical data sheet)

• CORNERS AND CONNECTIONS In case of insulation joints, fill all wall/floor corners by means of AQUASCUD JOIN (see relevant technical data sheet) staff bead, placing the rubber-coated part in contact with the surface using AQUASCUD 501 sealing material. Alternatively, it is possible to use the AQUASCUD JOIN BT adhesive strip (see relevant technical data sheet) laid on a cured AQUASCUD 501 layer. At low-height situations use AQUASCUD JOIN BT or, alternatively, BI MASTIC adhesive mastic (see relevant technical data sheet)

• DRAINS Prepare the connections to the drains by using the relative DRAIN MANIFOLD

• GUTTER Along the external perimeter, set up the AQUASCUD LINE H.0 draining gutter profile and relative special pieces (see relative data sheet)

Preparation and method of application

Before use, mix AQUASCUD 501 by hand to obtain a homogeneous, lump-free mixture, avoiding the use of mechanical mixers.

Then proceed with the application of the first coat by trowel, short-hair roller or brush, distributing it evenly with a minimum thickness of 0.7- 0.8 mm, ensuring continuous and regular coverage over the entire surface.

When the first coat is fully cured, approximately after 12 hours, proceed with the application of the second coat, with a minimum thickness of 0.7 - 0.8 mm, laid crosswise to the previous one, in order to obtain an even distribution of the fibres contained in AQUASCUD 501.

Depending on environmental conditions and the condition of the substrate at the time of application, the first coat may be diluted with water up to a maximum of 10% to improve workability and adhesion to the substrate.

The second coat, on the other hand, must be applied without dilution.

Before application, check that the first coat is perfectly dry; Dust, dirt or deposits accumulated during curing time, if present, must be carefully removed before applying the second coat.

Upon completion of application, protect from rain, dew and mist until the coating is fully cured.

Humidity and low temperatures can prolong drying times.

Strengthening with reinforcement mesh

If necessary, local or continuous reinforcements can be provided on the surface in order to give greater consistency and uniformity to the coating.

In this case, apply a first, more abundant coat of AQUASCUD REFLEX (approx. 1 mm) and insert the XNET mesh (see relevant technical data sheet) into the first, still fresh coat, pressing it down with a metal trowel until it is completely embedded.

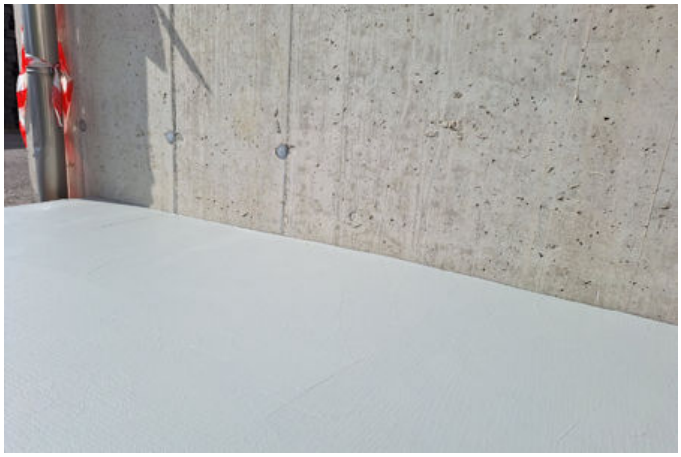
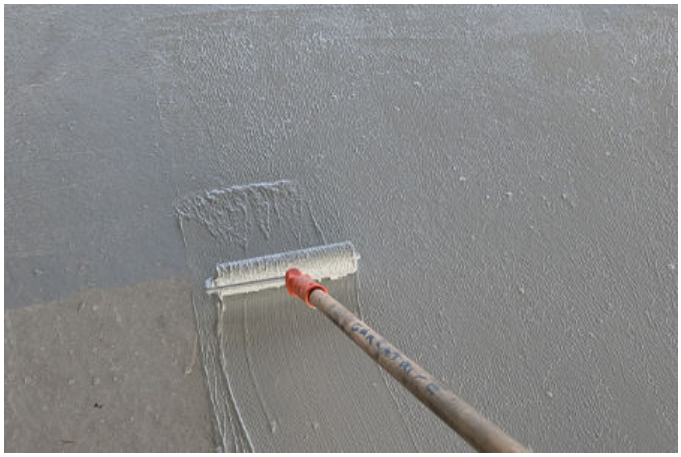
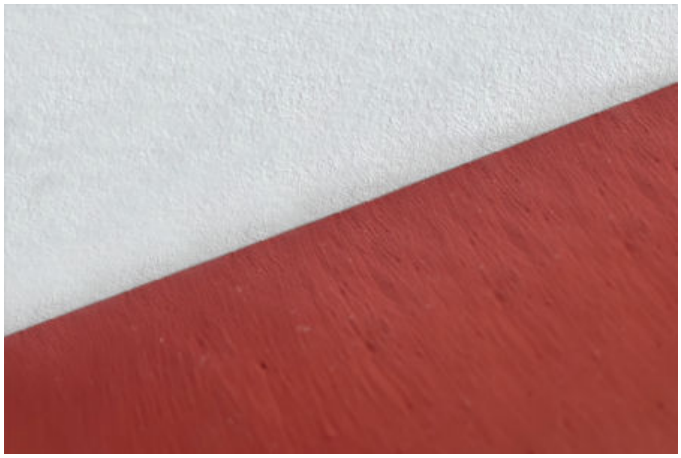
Any overlapping of the rolls of XNET should be 10 cm.

In order to obtain complete coverage of the surfaces involved, it is recommended to pre-cut the XNET portions to facilitate installation operations, interrupting them at the intersection of different installation planes, in correspondence with any BI FLEX tapes and GARVO joint cover strips.

Maintenance

If maintenance is necessary, clean the surfaces thoroughly, removing all traces of dirt, deposits, efflorescence and loose parts by brushing or pressure washing.

Subsequently, apply the product following the laying methods indicated in the chapter 'Preparation and application methods', in order to preserve the aesthetic and functional quality of the coating over time.


References available at www.volteco.com

CONSUMPTION AND YIELD

1.5-2 kg/m^2 depending on the type and porosity of the substrate and the thickness to be obtained.

PACKAGING AND STORAGE

AQUASCUD 501 is packed in 20 kg pails.

Available in colours: grey, red and green.

Storage time 24 months.

The product must be stored in a dry place without being exposed to frost and heat (at a temperature between +5°C and +35°C).

WARNINGS - IMPORTANT NOTES

The product is ready to use, mix manually before application, do not use mechanical mixers.

Do not store the product in direct sunlight before application.

Do not expose packages to temperatures below +5 °C in the event of frost, the product loses its characteristics and

can no longer be used.

Check (ref. UNI 10329) that the concrete substrate to be treated has a residual moisture content ≤ 5% by weight (ref. screed density ≈ 2000 kg/m^3) for lightweight or special screeds, assess the moisture content according to the type and criteria of the standard to ensure a dry substrate before application.

Ensure the presence of adequate slopes and rainwater collection-disposal systems.

If pressure washing the substrate, wait until it is completely dry before application.

Apply the product at an ambient temperature between +5 °C and +35 °C and when no foggy, rainy or frosty conditions are expected, avoiding extreme cold and heat also while the film is drying.

Application in high humidity, strong sunlight, intense wind or temperatures outside the operating limits may alter curing times and adversely affect the development of aesthetic and performance characteristics.

Application on bituminous membranes should only be done on cured, stabilised, clean and suitably sloping substrates.

Direct application on bituminous membranes may result in alterations to the original colour due to bitumen migration phenomena.

Protect wet product from rain.

In the event of bubbles forming due to moisture in the substrate or insufficient drying time, cut the bubble, remove the material and restore the area with a new coat on a perfectly clean substrate.

Several coats of the product can be applied, always referring to the instructions in the chapter 'Preparation and method of application' and respecting the recommended quantity per application.

Clean tools with water; if the product is already dried, we recommend removing it using hot water or the most common synthetic thinners.

PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values
Appearance	Thixotropic paste
Colour	grey, red, green
Dry dust free	4 hours
Through dry	24 hours
Working temperature	-20°C +90°C
Application temperature	from +5°C to +35°C
Specific weight	1,40 kg/l
Dry residue	68±4 %
Viscosity Brookfield	50.000±10.000 %

Initial requirements UNI 11928-1:2023

Feature	Test method	Performance requirements	Declared performance
Reaction to fire	UNI EN 13501-1	Declared Euroclass	Euroclass E
Watertightness (water passage with 60 KPa)	UNI EN 1928	No passage	No passage
Water vapour transmission properties	UNI EN ISO 7783	Class	Class I
Direct tensile adhesion, concrete type MC (0.40)	UNI EN 1542	≥ 0.5 N/mm^2	≥ 1,0 N/mm^2
Impact resistance	UNI EN 6272-1	Class	Class III
Static punching	UNI EN 12730	Valore massimo > 50 N	≥ 50 N

Feature	Test method	Performance requirements	Declared performance
Dynamic crack bridging (23°C)	UNI EN 1062-7	Class B2	Class B4.1
Dynamic crack bridging at low temperatures (-10°C)	UNI EN 1062-7	Class B1	Class B2
Slipping resistance	UNI EN 13036-4	Class	Class II
Capillary absorption	UNI EN 1062-1	W ≤ 0.1 Kg/m²*h$^{-0,5}$	W ≤ 0.1 Kg/m²*h$^{-0,5}$

Durability UNI 11928-1:2023

Feature	Test method	Performance requirements	Declared performance
Heat ageing resistance 7 days at 70±3°C (Watertightness)	point 4.1 of EN 1062-11:2003	No passage	No passage
Acceptance criteria after exposure	UNI EN ISO 4628-2 UNI EN ISO 4628-4 UNI EN ISO 4628-5	No swelling No cracking No spalling	No swelling No cracking No spalling
Frost/thaw Without thawing salts 20 cycles (Adhesion to substrate)	UNI EN 13687-3	≥ 0.5 N/mm²	≥ 1,0 N/mm²
Acceptance criteria after exposure	UNI EN ISO 4628-2 UNI EN ISO 4628-4 UNI EN ISO 4628-5	No swelling No cracking No spalling	No swelling No cracking No spalling
UV (400 MJ/m², 2460 hours) and Spray (492 hours)	UNI EN ISO 4892-3		
Acceptance criteria after exposure	UNI EN ISO 4628-2 UNI EN ISO 4628-4 UNI EN ISO 4628-5	No swelling No cracking No spalling	No swelling No cracking No spalling
Hazardous substances			See safety data sheets

*Values recorded at a temperature of 23°C and a humidity of 50%. The data expressed may vary depending on the thickness of the product applied and specific site conditions: temperature, humidity, ventilation, substrate absorbency.

Feature	Test method	Category	Certified performance (**)
Resistance to static indentation	EOTA TR 007	Load: P4	Level L4 (with load category P4)
Resistance to dynamic indentation	EOTA TR 006	Punch: I4	Level L4

WATCH VIDEOS AND INSIGHTS

Safety Data Sheets	Declaration of performance	Specifications	Technical drawings and BIM	EPD Declaration	YouTube Video

SAFETY

Refer to the related Safety Data Sheet.

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LEGAL NOTES

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