AQUA BARRIER ROOF (WHITE)

DS-6686-0526

For the Builders of a Better World™

1. PRODUCT NAME

AQUA BARRIER ROOF (WHITE)

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

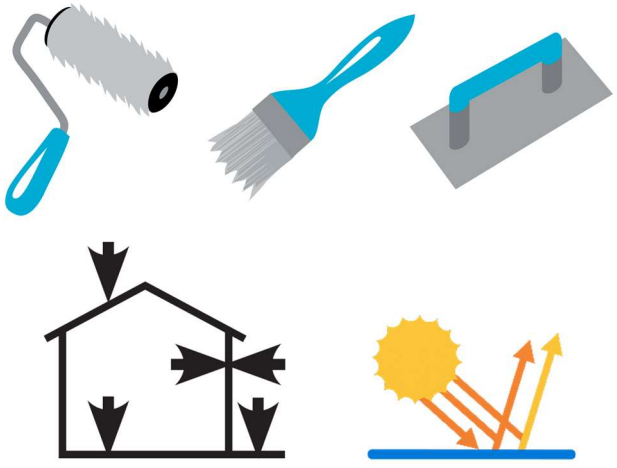
AQUA BARRIER ROOF (WHITE) is a white, fiber-reinforced liquid waterproofing membrane based on synthetic resins in aqueous dispersion. It forms a continuous, elastic, and walkable coating that is resistant to weathering and UV rays. It can be applied cold to new surfaces or over old bituminous membranes without the need for removal. It offers high adhesion even on complex geometries and various substrates, ensuring long-lasting waterproofing. Thanks to its Solar Reflectance Index (SRI) of 100, **AQUA BARRIER ROOF (WHITE)** meets the requirements for earning LEED credits related to reducing the heat island effect. Its high reflective performance also contributes to improving the energy efficiency of photovoltaic panels installed on the surface.

Advantages

- Fiber-reinforced
- Hail-resistant
- BROOF(t2) certified
- The high Solar Reflectance Index (SRI) reduces the external surface temperature, thereby improving thermal comfort in interior spaces and reducing energy loads for summer cooling.
- It reduces concrete carbonation, improving the durability of the substrate.
- Provides weather- and UV-resistant waterproofing.
- Cold application, directly onto old bituminous membranes, without removal and without fire risk.
- Excellent adhesion even on complex structural details and surfaces prone to microcracks.
- Can be used horizontally and vertically, easily adapting to surfaces of any shape.
- Requires minimal maintenance and does not require additional protection.
- Resistant to temporary water pooling, even on flat surfaces.
- Walkable after curing.
- Odorless, non-flammable, non-toxic, and solvent-free.

Standards

- EN 14891: DM O1
- UNI EN 13501-5:2016: BROOF(t2)
- EN 1504-2 (C): PR-PI-MC-IR
- UNI EN 11928-1: COMPLIANT
- ISO 9001:2015: CERT-09019-2001-AQ-BOL-SINCERT



Applications

- Waterproofing and coating of new surfaces made of concrete, mineral-finished membranes, fiber cement, wood, metal, and ceramic. Suitable for roofs and roof coverings, balconies, terraces, bathrooms, showers, saunas, chimneys, eaves, retaining walls, and foundations.
- Restoration and renewal of old waterproofing systems on existing bituminous membranes, tiled surfaces of terraces and balconies, and, more generally, the surfaces listed above.
- Internal lining of concrete tanks intended for the containment of non-potable water or non-acidic and non-aggressive liquids.
- Creation of a waterproof and adhesive-compatible substrate for the subsequent installation of tiles using cementitious adhesives classified as C2 S1 according to EN 12004.
- Use as a skim coat on plasters prone to microcracking to improve the surface continuity of the substrate.

Acceptable substrates

- Concrete
- Metal surfaces (pipes, gutters, tanks, etc.)
- Fibre cement
- Gypsum board
- Wood
- Various flooring
- Old, sufficiently weathered bituminous membranes

Packaging

5 kg or 20 kg per bucket

Coverage / Consumption

From 1.5 kg/m² to 2.0 kg/m² in at least 2–3 coats

Storage

Twenty-four (24) months in the original, unopened packaging, stored off the ground in a cool, dry place. Do not store at temperatures below +5°C.

4. TECHNICAL DATA

Physical Properties

Content	Thixotropic paste
Color	White
Density	~ 1350 kg/m^3
Dry residue by weight	67% ± 3%
Brookfield viscosity (No. 6 cup; 10 rpm)	50,000 ± 10,000 cP

Performance

Classification according to UNI EN 14891:		DM O1
	Requirement	**Standard**
Initial adhesion	≥ 0,5 N/mm^2	EN 14891
Adhesion after immersion in water	≥ 0,5 N/mm^2	EN 14891
Adhesion after thermal aging	≥ 0,5 N/mm^2	EN 14891
Adhesion after freeze-thaw cycles	≥ 0,5 N/mm$^{2^2}$	EN 14891
Adhesion after immersion in lime water	≥ 0,5 N/mm^2	EN 14891
Resistance to positive pressure of 1.5 bar for 7 days	No penetration	EN 14891
Crack Bridging Ability (at -5°C)	> 0.75 mm	EN 14891
Temperature resistance	From -20°C to +90°C	

Fire resistance classification according to UNI EN 13501-5:2016:	
Classification method	UNI EN 13501-5:2016 Fire classification of construction products and elements - Part 5: Classification based on the results of exposure tests of roofs to an external fire
Test method	UNI CEN/TS 1187:2012 - Test 2 Test methods for roofs exposed to external fire
Classification	The roof covering, in relation to its characteristics regarding ignition from an external fire, is classified as: **BROOF(t2)** Validity of the classification for the following fields of application: -Roofing membranes – Slope: all slopes. -On all combustible and non-combustible substrates with a density of not less than 20 kg/m^3.

Load	**Load category**	**Result**
250 N	P4	Water resistance of the product: LEVEL L4 (WITH LOAD P4)

Punch	**Stamp diameter**	**Result**
I3	10 mm	Product water resistance: LEVEL L3

Classification according to UNI EN 1504-2:		PR-PI-MC-IR
	Value	**Standard**
CO_2 permeability	S_D > 50 m	UNI EN 1062-6
Water vapor transmission rate	Class I (S_D <5 m)	UNI EN 7783
Liquid water permeability/absorption	W <0,1 kg*m^2*h$^{-0.5}$	UNI EN 1062-3
Direct tensile adhesion	≥ 1 N/mm^2	UNI EN 1542
Abrasion resistance	< 3 g	UNI EN 5470-1
Impact resistance	Class III (≥20 Nm)	UNI EN 6272-1
Reaction to fire	E	UNI EN 13501-1

Performance characteristics according to UNI EN 11928-1		
	Value	**Standard**
Water impermeability (at 60 kPa)	No water penetration	UNI EN 1928

Water vapor transmission properties	Class I (S_d<5 m)	UNI EN 7783
Direct tensile adhesion (C40 concrete substrate)	≥ 1 N/mm^2	UNI EN 1542
Impact resistance	Class III (≥ 20 N/m)	UNI EN 6272-1
Static punching	≥ 50 N	UNI EN 12730 B
Dynamic crack bridging (23°C)	Class B4.1	UNI EN 1062-7 B
Dynamic crack bridging at low temperatures (-10°C)	Class B2	UNI EN 1062-7 B
Slip resistance	Class II PTV $_{drv}$: 93 PTV $_{wet}$: 36	UNI EN 13036-4
Permeability to liquid water (capillary absorption)	Class W_3 Low w<0.1 kg/m^2 h$^{0.5}$	UNI EN 1062-3
Resistance to heat aging for 7 days at 70±3°C (Water impermeability at 60 kPa - UNI EN 1928)	No water penetration	UNI EN 1062-11 Section 4.1
Acceptance criteria following heat exposure (7 days at 70±3°C)	No swelling No cracking No flaking	UNI EN 4682-2 UNI EN 4682-4 UNI EN 4682-5
Resistance to 20 freeze-thaw cycles without de-icing salts (Tensile adhesion to substrate – UNI EN 1542)	≥ 1 N/mm^2	UNI EN 13687-3
Acceptance criteria after freeze-thaw exposure (20 freeze/thaw cycles)	No swelling No cracking No spalling	UNI EN 4682-2 UNI EN 4682-4 UNI EN 4682-5
UV resistance (400 MJ/m², 2460 hours) and spray resistance (492 hours) (Visual inspection of appearance)	Passes	UNI EN 4892-3 (Cycle 3)
Acceptance criteria after UV/spray exposure (400 MJ/m², for 2460 hours and spray for 492 hours)	No swelling No cracking No flaking	UNI EN 4682-2 UNI EN 4682-4 UNI EN 4682-5
Reaction to fire	Euroclass E	UNI EN 13501-1

The Aqua Barrier Roof product complies with the UNI 11928-1:2023 standard as a liquid-applied waterproofing product installed on-site and used as a sealing element in a continuous (new or existing) exposed, walkable roofing system.

Solar reflectance, thermal emissivity, Solar Reflectance Index		
Index	**Value**	**Standard**
Solar Reflectance Index (SRI)	100	ASTM E1980-11
Thermal Emissivity (E)	84	ASTM C1371-15
Solar reflectance (R)	81	ASTM E903-12
Surface temperature (Ts)	44.6 °C	Product water resistance: LEVEL L3

LEED v 4.1 BD+C CERTIFICATION PROTOCOL REQUIREMENTS		
SS HEAT ISLAND EFFECT CREDIT: ROOFING		
Use roofing materials with a Solar Reflectance Index (SRI) greater than or equal to the value shown in the table below for at least 75% of the roof area.		
Roof Type	Slope	SRI
Low-slope roofing	< 15%	82
High-slope roofing	> 15%	39

Installation characteristics

Consistency of the mixture:	Ready-to-use semi-thick paste
Specific gravity of the mixture	~ 1450 kg/m^3
Minimum application temperature	+5°C
Dust-free drying time	4 h
Waiting time before applying the next coat or recoating	24 hours
Full curing	7–10 days
Maximum total quantity	2,5 kg/m^2
Application temperatures	From +5°C to +35°C
Operating temperatures	From -20°C to +90°C

(data measured at +23°C, 50% relative humidity)

The technical data provided are measured under standard laboratory conditions and are subject to change without notice. Actual product performance depends on on-site application conditions, the installation method used, and the type of coating.

5. APPLICATION

Substrate Preparation

All surfaces must be flat, structurally sound, and compact; they must not have any loose parts and must be free of dust, grease, oil, paint, and wax. Thoroughly clean the surfaces, which must be solid, uniform, and dry; in the case of concrete surfaces, they must not have been previously treated with anti-evaporation products.

Before application, verify the integrity and effectiveness of the water drainage points on the surface to be waterproofed.

Any irregularities in the substrate—such as excessively rough surfaces, cavities, gravel pockets, holes, or cracks—must be repaired and/or smoothed beforehand to ensure a uniform base for application.

On lightweight screeds or on concealed waterproofing (substrates, under-screeds, subfloors), it is necessary to check the internal moisture content and evaluate the possible use of vapor extractors.

The waterproofing must be protected from rain, dew, and fog until completely dry; high humidity or low temperatures can significantly prolong drying times.

Product Preparation

AQUA BARRIER ROOF is ready to use; do not dilute. If necessary, mix only by hand.

Application

Apply AQUA BARRIER ROOF using a sponge roller, short-bristle roller, or smooth trowel, using a brush in the corners, in two cross-coats, allowing a 24-hour waiting period between coats, depending on ambient temperature and humidity conditions.

On dusty or very dry surfaces, it is recommended to apply a first primer coat using AQUA BARRIER ROOF diluted with 50% water.

It is advisable to wash tools with water immediately after use; once hardened, the product should be removed with hot water or thinner.

Limitations

- Do not use the product in the presence of rising

damp.
- Avoid application on new, not fully stabilized bituminous surfaces, which may release hydrocarbons and compromise adhesion.
- Do not apply outside the recommended temperature range or under unfavorable environmental conditions that prevent proper drying.

Warnings
- The product is ready to use: do not dilute or agitate with mechanical mixers; mix manually only if necessary.
- Apply at ambient temperatures between +5°C and +35°C, avoiding fog, rain, frost, and extreme weather conditions during application and drying.
- On newly constructed cementitious substrates, allow for complete curing to avoid issues related to residual moisture.
- Before application on existing bitumen-polymer membranes, apply a primer coat with **AQUA BARRIER LASTIK PRIMER**
- Verify, in accordance with UNI 10329, that the residual moisture of the cementitious substrates is ≤ 5% by weight (value referring to screeds with a density of 2000 kg/m³).
- Prefer application on surfaces not subject to permanent water stagnation.
- If the roof includes insulation layers, more frequent maintenance is recommended.
- Before installation on bituminous membranes or roofing, check the adhesion of **AQUA BARRIER ROOF** in advance through preliminary tests.
- The surface is walkable but not suitable for continuous traffic.
- Protect packages from freezing: temperatures below +5°C will irreparably damage the product.
- Keep out of reach of children.
- **For professional use only.**

For further information, consult the product safety data sheet.

6. AVAILABILITY AND COSTS

Availability
LATICRETE® products are available worldwide. To find the dealer nearest you, contact LATICRETE EUROPE S.r.l.
Phone: +39 059 535540
Email: info@laticreteeurope.com
Website: https://eu.laticrete.com/

Prices
Contact your nearest LATICRETE EUROPE S.r.l. product dealer for complete pricing information.

7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions of use. The warranty is valid for one (1) year. Contact Technical Support for further information.

8. MAINTENANCE

LATICRETE® products are high-quality products designed to provide durable, maintenance-free installations; however, their durability and performance depend heavily on the type of cleaning products used.

9. TECHNICAL SERVICES

Technical Support
For information, contact Technical Support
Phone: +39 059 535540
Email: info@laticreteeurope.com

Technical and Safety Literature
To obtain technical and safety literature, visit our website: https://eu.laticrete.com/

Warnings
The information and guidelines provided in this Technical Data Sheet, although based on knowledge gained through years of application, are to be considered indicative. Since LATICRETE® cannot directly control the installation conditions and application methods of the products, it assumes no liability arising from their use. Anyone intending to use LATICRETE® products must conduct appropriate on-site tests to determine their suitability for the intended use.
Our products are covered by a warranty within the limits established by our general terms and conditions of sale and within the limits of our products' compliance with applicable technical specifications and certifications, as expressly indicated in the product data sheets or applicable technical documentation and expressly provided by us with the products themselves.

10. DOCUMENTATION

Additional product information is available on our website at https://eu.laticrete.com/.