



AQUA BARRIER WHITE ROOF FR

DS-6684-0326

For the Builders of a
Better World™



1. PRODUCT NAME

AQUA BARRIER WHITE ROOF FR

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

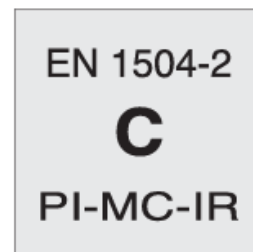
AQUA BARRIER WHITE ROOF FR is a white, fibre-reinforced liquid waterproofing membrane, formulated with selected synthetic resins in aqueous dispersion and specific additives that increase solar reflectance and the durability of the film. The membrane's composition also includes special self-extinguishing additives, which improve the fire performance of the applied system.

Advantages

- Reduces the risk of the roof covering catching fire if burning embers fall onto the roof.
- It increases thermal insulation thanks to its high UV reflectance, reducing surface temperature and improving indoor comfort.
- Reduces energy consumption associated with summer cooling.
- Improves the performance of photovoltaic systems thanks to high solar reflectance and thermal emissivity.
- Limits carbonation in concrete.
- Ensures durable waterproofing that is resistant to weathering and waterlogging.
- Cold-applied, directly onto old bituminous membranes without removal, eliminating the risk of fire during installation.
- Excellent adhesion and resistance to micro-cracking, also suitable for complex construction details.
- Good resistance to foot traffic and mechanical stress.
- Low maintenance and requires no additional protection.
- Odourless, non-flammable, non-toxic and solvent-free product.

Standard

- EN 1504-2 (C): PI-MC-IR
- UNI EN 13501-5:2016: BROOF(t2)
- UNI EN 11928-1:2023: COMPLIANT
- ISO 9001:2015: CERT-09019-2001-AQ-BOL-SINCERT



Applications

Coating and waterproofing:

- Flat roofs accessible to pedestrians, balconies, terraces, bathrooms, showers, saunas, bituminous membranes, tiled surfaces, metal roofs and walls in contact with the ground.
- Concrete tanks intended for the containment of non-potable water and other non-acidic and non-particularly aggressive liquids.
- Concrete balconies and terraces, prior to the installation of stoneware or clinker tiles, particularly where bitumen-polymer membranes cannot be used.
- Fibre cement, timber, polycarbonate and metal substrates, ensuring adhesion and protection even on non-traditional materials.

Suitable substrates

- Concrete
- Metal surfaces (pipes, gutters, cisterns, etc.)
- Fibre cement
- Plasterboard
- Wood
- Various floor coverings
- Old bituminous membranes that are sufficiently weathered

Packaging

5 kg or 20 kg per bucket

Coverage / Consumption

From 1.6 kg/m² to 2.4 kg/m² in at least 2 coats

Storage

Twenty-four (24) months in unopened original 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 fluid paste
Colour	White
Density	~ 1400 kg/m ³
Dry residue by weight	67% ± 4%
Brookfield viscosity (spindle 6; 10 rpm)	32,000 ± 6,000 cP

Performance

Classification according to UNI EN 1504-2:	Value	Standard
		PI-MC-IR
CO ₂ permeability	S _D > 50 m	UNI EN 1062-6
Water vapour 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
Reaction to fire	E	UNI EN 13501-1

Fire resistance classification according to UNI EN 13501-5:2016:	
Classification report no. N2416/21 T2i Technology Transfer and Innovation s.c.a.r.l. (LAB No. 0170L)	
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 external fire exposure, is classified as: BROOF(t2) Validity of the classification for the following fields of application: -Roof cladding – Pitch: all pitches. -On all combustible and non-combustible substrates with a density of not less than 20 kg/m ³ .

SOLAR REFLECTANCE, THERMAL EMISSIVITY, SOLAR REFLECTANCE INDEX	
Test report: Department of Engineering, Enzo Ferrari / EELab, University of Modena and Reggio Emilia	
Solar Reflectance Index (SRI) [%] ASTM E1980-11	95.0
Thermal emissivity (IE) UNI EN 15976	0.874
Solar reflectance (SR) ASTM C1549-09	0.768
Surface temperature (Ts) ASTM E1980-11	46.5°C

Performance characteristics according to UNI EN 11928-1		
	Value	Standard
Water impermeability (at 60 kPa)	No water penetration	UNI EN 1928
Water vapour 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 III PTV _{dry} : 86 PTV _{wet} : 56	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 ageing 7 days at 70±3°C (Water impermeability at 60 kPa - UNI EN 1928)	No water penetration	UNI EN 1062-11 Clause 4.1
Acceptance criteria after 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 exposure to freeze/thaw (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/m ² , 2460 hours) and spray resistance (492 hours) (Visual inspection of appearance)	Passes	UNI EN 4892-3 (cycle 3)
Acceptance criteria after exposure to UV/spray (400 MJ/m ² , 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 White Roof FR product complies with standard UNI 11928-1:2023 as a liquid-applied waterproofing product used on-site as a sealing element in a continuous (new or existing) accessible exposed roofing system.

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 a minimum of 75% of the roof surface.		
Roof type	Slope	SRI
Low-slope roofing	< 15%	82
Steep-slope roofing	> 15%	39

Processing characteristics

Consistency of the mixture:	Thixotropic fluid paste
Specific gravity of the mixture	~ 1400 kg/m ³
Minimum application temperature	+5°C
Dust-free drying time	4 h
Full cure time	24 h
Maximum total quantity	2.4 kg/m ²
Application temperature	From +5°C to +35°C
Operating temperatures	From -20°C to +90°C

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

The technical data provided has been measured under standard laboratory conditions and is subject to change without notice. The actual performance of the product depends on site 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 from dust, grease, oil, paint and wax. Clean the surfaces thoroughly; they must be sound, uniform and dry. In the case of concrete surfaces, they must not have been previously treated with anti-evaporation products.

Before application, check 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 levelled beforehand to ensure a uniform base for application. On lightweight screeds or on concealed waterproofing (sub-bases, under-screeds, sub-floors), it is necessary to check the internal moisture content and assess the possible use of vapour barriers.

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

Product preparation

AQUA BARRIER WHITE ROOF FR is ready to use; do not dilute. Mix thoroughly before application

Application

Apply AQUA BARRIER WHITE ROOF FR using a sponge roller or short-bristle roller, brush, wide-bristle brush or spray, in two cross-coats, allowing a waiting time of 24 hours between coats, depending on ambient temperature and humidity conditions. The first coat should be applied diluted with up to 10% 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 where there is rising damp.
- Avoid application on surfaces subject to permanent water pooling.
- Do not apply to new bituminous surfaces, which may still release hydrocarbons, causing poor adhesion.
- In the case of roofs with insulation layers, it is recommended to carry out repairs with reduced waiting times.
- On bitumen-polymer membranes or bituminous membranes, check the product's adhesion beforehand before final application.

Warnings

- The product is ready to use: do not use mechanical mixers; if necessary, mix by hand.
- Apply at ambient temperatures between +5°C and +35°C, avoiding fog, rain or frost, and any situation of extreme heat or cold during film drying.
- Check, in accordance with UNI 10329, that the residual moisture of the cementitious substrate is ≤ 5% by weight (for screeds with a density of 2000 kg/m³).
- When applying to new cementitious substrates, allow the material to cure completely.
- Do not expose the product to frost: below +5°C, quality may be compromised and, once frozen, it cannot be recovered.
- Keep out of reach of children.

- For professional use.
- For further information, please refer to the product safety data sheet.

6. AVAILABILITY AND COSTS

Availability

LATICRETE® products are available worldwide. To find your nearest dealer, please contact LATICRETE EUROPE S.r.l.

Telephone: +39 059 535540

Email: info@laticreteeuropa.com

Website: <https://eu.laticrete.com/>

Prices

Please contact your nearest LATICRETE EUROPE S.r.l. stockist for full pricing information.

7. WARRANTY

The supplier guarantees 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 long-lasting, maintenance-free installations; however, their durability and performance depend entirely on the type of cleaning products used.

9. TECHNICAL SERVICES

Technical Support

For further information, please contact Technical Support

Telephone: +39 059 535540

Email: info@laticreteeuropa.com

Technical and safety documentation

To obtain technical and safety documentation, please visit our website: <https://eu.laticrete.com/>

Warnings

The information and guidelines contained in this Technical Data Sheet, although based on knowledge acquired over years of application, are to be considered indicative. As LATICRETE® cannot directly control the installation conditions and application methods of the products, it accepts no liability arising from their installation. Anyone intending to use LATICRETE® products must carry out appropriate on-site tests to establish their suitability for the intended use.

Our products are covered by a warranty within the limits set out in our general terms and conditions of sale and within the limits of our products' compliance with the 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

Further product information is available on our website at <https://eu.laticrete.com/>.