

GUMVERN W FR**Decorative and protective fibre-reinforced
pigmented elastomeric liquid sheath**

Description: Coloured fibre-reinforced walkable waterproofing liquid membrane, formulated with selected synthetic resins in water dispersion and special additives.

Advantages:

- Reduces concrete carbonation phenomena.
- Long-lasting waterproofing resistant to weathering and UV rays.
- Cold laying, directly on the old bituminous membranes without the need to remove them (eliminates the risk of fire during installation).
- Perfect adherence, suitable for complex construction details and resistant to micro-cracking.
- It can be used both horizontally and vertically and adapts to any geometry of the surface to be covered.
- Low maintenance, does not require additional protection.
- Resistant to standing water (not permanent) on the surface even in the absence of a slope.
- Walkable.
- Also suitable for surfaces in industrial areas or near the sea.
- Odourless, non-flammable product.
- Non-toxic product, free from solvents.
- Thanks to its high Solar Reflectance Index (SRI) value, the Gumvern W FR white version ensures excellent thermal insulation by creating a highly reflective barrier against UV rays, reducing the external surface temperature, improving thermal well-being inside living spaces and reducing energy consumption for summer air conditioning.

Applications:

- Waterproof and coat new surfaces in concrete, membranes with mineral finish, fibre-cement, wood, metal and ceramic such as roofs and coverings, balconies, terraces, bathrooms, showers, saunas, fireplaces, cornices, retaining walls and foundations.
- Restore old waterproofing of existing bituminous surfaces, tiled terraces and balconies, as well as surfaces such as those indicated above.
- Coat concrete tanks for containing non-drinking water and other non-acidic and/or aggressive liquids.
- Create a waterproofing and bonding base for the subsequent bonding of tiles with the appropriate cement-based adhesives (category C according to EN 12004).
- Smoothing for micro-cracked plaster.

Surface preparation:

- Make sure that the surface is free from detached parts, loose debris or non-adherent parts, coatings, rust, powder, or release oils. Carefully clean the surfaces, which must be solid, even, and dry and in the case of concrete surfaces must not have been previously treated with evaporation retardant products.
- Surfaces with irregularities, plaster and castings that are too rough, holes, gravel patches, cracks, etc. need to be repaired and/or smoothed.
- Before applying, it is advisable to check the solidity and efficiency of the water run-off points of the surface to be waterproofed.
- On non-visible lightened or waterproofed screeds (under screed, underfloor, etc.) check the internal humidity and whether or not it is necessary to lay vapour vents.
- The waterproofing must be protected from rain, dew, and fog until completely dry. Humidity and low temperatures lengthen drying time.

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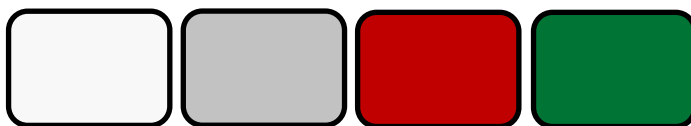
- Application:**
- Apply Gumvern W FR with a smooth trowel or with rollers (sponge or with very short bristles) using a brush in the corners.
 - The second coat must be applied perpendicular to the first.
 - For very crumbly and dusty surfaces, the application of Gumvern W diluted with 50% water is recommended as a base coat.
 - After use, wash tools with water and, if the product has dried, it is advisable to remove it with hot water or with the common synthetic thinners.

Consumption: The application must include at least two/three layers. The overall average consumption is 1.5-2.0 kg/m² and can vary according to the nature and degree of porosity of the surface and the desired thickness.

- Warnings:**
- The product is ready to use, do not dilute and do not use mechanical mixers; if necessary, mix manually.
 - Apply the product at ambient temperatures between +5 °C and +35 °C and when there are no weather conditions such as fog, rain, or frost, and in any case avoid extreme situations of cold and heat, even during drying.
 - Avoid using in the presence of damp backpressure phenomena. When applying on new cement substrates, wait for its curing.
 - We advise against applying the product on newly applied bituminous surfaces, which could still release hydrocarbons and cause adhesion problems of the film on the sheath.
 - We recommend applying the product on old polymer-bitumen membranes after applying a base coat of Primersint G2 Natural.
 - Check (according to UNI 10329) that the residual humidity content of the cement surface to be treated is $\leq 5\%$ by weight (for screeds with a density of 2000 kg/m³).
 - We recommend applying the product on surfaces not subject to standing water.
 - If the roof includes insulating packages, a shorter restore is advisable.
 - When applying on polymer-bitumen membranes or bituminous surfaces, check in advance the adhesion of Gumvern W FR before applying.
 - Walkable, but not for continuous traffic.
 - Protect from frost, do not expose the package to temperatures below +5 °C; once frozen, the product can no longer be recovered.
 - For further information, request the safety data sheet.

Packaging: 1, 5, 10, 20 and 25 kg metal or plastic pails.
200 kg metal drums.

**Available
colours:**



Technical data:

MAIN CHARACTERISTICS		
Appearance		Thixotropic paste
Colours		White, Grey, Red, Green.
Shelf life in closed original packaging		24 months
Solid content (<i>m/m at 130 °C</i>)	EN ISO 3251	White (64-71)%
		Grey (68-72)%
		Red (66-72)%
		Green (66-70)%
Brookfield viscosity (<i>at 20 °C, spindle 6; 10 rpm</i>)	EN ISO 3219	(50,000±10,000)cP
Density (<i>at 20 °C</i>)	EN ISO 2811-1	White (1.30-1.40) kg/L
		Grey (1.40-1.50) kg/L
		Red (1.30-1.40) kg/L
		Green (1.40-1.50) kg/L
Dust-free time		4 hours*
Complete drying time		At least 24 hours*
Operating temperature		-20°C - +90°C

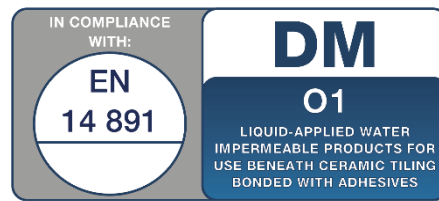
* Measurements have been recorded at a temperature of 23 °C and with 50% moisture. Declared data may vary depending on the thickness of the applied product and on the specific conditions of the construction site: temperature, humidity, ventilation, and absorbcency of surfaces.

RESISTANCE TO STATIC INDENTATION EOTA TR 007		
LOAD	LOAD CATEGORY	RESULT
250 N	P4	Product water resistance: LEVEL L4 (WITH LOAD CATEGORY P4)
RESISTANCE TO DYNAMIC INDENTATION EOTA TR 006		
TYPE OF PUNCH	PUNCH DIAMETER	RESULT
I2	20 mm	Product water resistance: LEVEL L2

Technical data:

PERFORMANCE PROPERTIES - EN 1504-2 SURFACE PROTECTION SYSTEMS FOR CONCRETE (C COATINGS – PR-PI-MC-IR)		
Permeability to CO ₂	EN 1062-6	S _D > 50 m
Water vapour permeability	EN ISO 7783	Class I (S _D < 5 m)
Liquid water permeability	EN 1062-3	w < 0.1 kg/m ² ·h ^{0.5}
Tensile bond strength	EN 1542	≥ 1 N/mm ²
Abrasion resistance (<i>Taber test</i>)	EN ISO 5470-1	< 3 g
Impact resistance	EN ISO 6272-1	class III (≥20 Nm)
Reaction to fire	EN 13501-1	E


PERFORMANCE PROPERTIES - EN 14891 – LIQUID APPLIED WATER IMPERMEABLE PRODUCTS FOR USE BENEATH CERAMIC TILING BONDED WITH ADHESIVES -		
PERFORMANCE PROPERTIES	EN 14891 REQUIREMENTS	PRODUCT PERFORMANCE
Initial Tensile Adhesion Strength	> 0.5 N/mm ²	> 0.5 N/mm ²
Tensile adhesion strength after water contact	> 0.5 N/mm ²	> 0.5 N/mm ²
Tensile adhesion strength after heat ageing	> 0.5 N/mm ²	> 0.5 N/mm ²
Tensile adhesion strength after freeze-thaw cycle	> 0.5 N/mm ²	> 0.5 N/mm ²
Tensile adhesion strength after contact with chlorinated water	> 0.5 N/mm ²	> 0.5 N/mm ²
Water impermeability	No penetration	Impermeable
Crack Bridging Ability (at -5 °C)	> 0.75 mm	> 0.75 mm
CLASSIFICATION ACCORDING TO UNI EN 14891	CLASS DM 01	Impermeable product applied in liquid dispersion with improved crack bridging ability at low temperatures (-5 °C)




GUMVERN W FR BIANCO: specifications for COOL ROOFS.

Thanks to its high SRI value, Gumvern W FR Bianco allows obtaining LEED credits for the reduction of the heat island effect and ensures an increase in the energy efficiency of the photovoltaic panels.

Technical data:

SOLAR REFLECTANCE, THERMAL EMITTANCE, SOLAR REFLECTANCE INDEX				
Solar Reflectance Index (SRI) ASTM E1980-11	Thermal emittance (E) ASTM C1371-15	Solar reflectance (R) ASTM E903-12	Surface temperature (T _s)	
100	84	81	44.6 °C	

LEED CERTIFICATION REQUIREMENTS v 4.1 BD+C										
SS HEAT ISLAND EFFECT CREDIT: ROOFS	<p>Use roofing materials that have 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 area.</p> <table> <tr> <th>Type of roof</th><th>Gradient</th><th>SRI</th></tr> <tr> <td>Low slope roofs</td><td>≤15%</td><td>82</td></tr> <tr> <td>Highly sloping roofs</td><td>>15%</td><td>39</td></tr> </table> <p>Membranes painted with Gumvern W FR Bianco have an SRI > 82.</p>		Type of roof	Gradient	SRI	Low slope roofs	≤15%	82	Highly sloping roofs	>15%
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Low slope roofs	≤15%	82								
Highly sloping roofs	>15%	39								

The advice and technical information provided represent HA ITALIA S.p.A.'s best knowledge of product properties and use. Considering the different situations of use of the products and factors beyond our control (media, working conditions, failure to comply with instructions), we cannot be held responsible for the results obtained. Before using the product, anyone who intends to make use of it is required to determine whether it is suitable for the intended use and assumes full liability for whatever may arise from its use.

HA Italia disclaims any and all liability arising from failure to observe the warnings mentioned in this data sheet and failure to comply with the requirements set out in the safety data sheet.

Data sheet no.: REV01 dated 01.01.2024