



Argo P

REINFORCED PLASTOMERIC POLYMER-BITUMEN WATERPROOFING
MEMBRANE MADE OF DISTILLED BITUMEN AND PLASTOMERS



The ARGO membranes are made up of distilled bitumen, selected for industrial use, with elastomeric and plastomeric polymers added to obtain a phase inversion compound whose continuous phase is formed by polymers in which the bitumen is dispersed, where the characteristics are determined by the polymeric matrix and not by the bitumen even if this is the most consistent ingredient.

The performance of the bitumen is therefore increased along with the durability and the resistance to high and low temperatures while the already optimum adhesive and impermeable qualities of the bitumen remain unchanged. The membranes are reinforced with high weight, isotropic, thermally fixed, rot-proof, "non-woven" single strand Spunbond polyester fabric. The reinforcement is very strong, has a notable ultimate elongation and an optimal resistance to puncture and tearing. ARGO is produced in various weights and reinforced with fibreglass mat and in stabilized "non woven" polyester fabric.

ARGO/P and MINERAL ARGO/P are reinforced with a rot-proof "non woven" polyester fabric composite, stabilized with fibreglass mat which is very strong and elastic with optimal dimensional stability in hot conditions which reduces the problems of the banana effect and the retraction of head lap joints as it is 2 to 3 times more stable than normal reinforcements in "non woven" polyester fabric.

ARGO V and MINERAL ARGO V are reinforced with rot-proof fibreglass mat which is strengthened longitudinally and has high dimensional stability properties. The ARGO P and ARGO V membranes, have the upper face of the membrane coated with a uniformly distributed, fine serigraphed talc, a patented treatment which makes it possible to quickly unroll the rolls and install the membranes with the reliable and fast welding of the joints.

The mineral versions have the upper face self-protected with hot bonded and pressed slate granules, with the exception of an overlapping side strip, protected by a strip of Flamina film which is torched to weld the joints. The underside of the membranes is coated with Flamina, a plastic film that melts when torched and which is embossed both to obtain the pretension and therefore the optimal retraction of the film and also to offer the torch a greater surface area for faster and more reliable installation. When the membrane is dry laid or spot bonded, the embossing diffuses the vapour.

Fields of use

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ARGO V and MINERAL ARGO V are reinforced with rot-proof fibreglass mat which is strengthened longitudinally and has high dimensional stability properties. The ARGO P and ARGO V membranes, have the upper face of the membrane coated with a uniformly distributed, fine serigraphed talc, a patented treatment which makes it possible to quickly unroll the rolls and install the membranes with the reliable and fast welding of the joints.

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Physical properties

Properties	Values	Values
Reinforcement Polyester	fibreglass composite	Fibreglass mat
Flow resistance at 100°C (EN 1110)	Stable	Stable
-Flexibility at low temperature (EN 1109) (*)	0°C	0°C
-Tensile properties under max. load/breakage Long./Trans. (EN 12311-1) (2)	400/300 N/5 cm	300/200 N/5 cm
-Ultimate elongation Long./Trans. (EN 12311-1) (2)	40/40%	2/2%
-Tensile strength of the joints (EN 12317-1)	2500 N/5 cm or breakage outside the joint	2500 N/5 cm or breakage outside the joint
-Resistance to tearing Long./Transv. (EN 12310-1)	120/120 N	Values
-Puncture resistance (UNI 8202) on concrete on polystyrene	Static/Dynamic PS _a /PD _a PS _s /PD _s	Values
-Dimensional stability in hot conditions Long./Transv. (EN 1107-1)		0.25/+0.10%
Impermeability to water (EN 1928)	≥ 60 kPa	≥ 60 kPa

(1) On the mineral membranes the test is carried out on the underside

(2) Nominal value tolerance conform to UEAtc directive for polymer-bitumen membrane, January 1984

Conform to prEN 13707 standards (August 1999) § 5.3.2. as vapour barrier resistance factor for reinforced polymer-bitumen membranes can be taken as value > 20,000.

Precautions and Method of use

The membrane is just one element, which joined with other such elements, form an unbroken layer which alone or with other unbroken layers, forms a waterproof surface. The membrane is part of an often complex stratigraphy, made up of different types of layers with different functions, which are often discontinuous and interact with each other. The high quality of the membrane alone is not enough to guarantee the successful implementation or the durability of waterproofing work in time, which are in fact the result of an inseparable combination of planning and the thorough knowledge of the stratigraphic behaviour which makes it possible to choose exactly the right materials for the job with a correct and attentive laying of the same, along with a meticulous attention to detail. Therefore, we advise the reader to study the laying methods, the behaviour of the materials and the connections between layers in depth, by carefully reading the following Index S.p.A. handbooks: "Technical specifications", "Application manual", "Composition and analysis of roofing protection systems", "Waterproofing", where the various laying systems are described such as, bonding and hot air welding, mechanical fixing, cold bonding with adhesives and hot air welding. These handbooks also contain valuable information regarding the correct storage methods for the materials. The handbooks are also used for the various levels of training courses which Index organises at its Technical Training and Refresher Course Centre, where it is possible to carry out a more in depth study of application techniques and planning.

Technical support

Customers can contact the sales department of the company at sale@ferroproduct.co.th to inquire about product usage methods. Furthermore they can also request information or organize the following activities :

1. Request for the latest updated data sheet.
2. Request for the sale conditions document and the product price list.
3. Schedule a technical staff visit to demonstrate the products at the customer's job site by filling out the "Demonstration request form" prior to the product purchase.
4. Schedule a technical staff visit to provide product usage training to the customer's workers at the job site by filling out the "Worker training request form".
5. Schedule training for the customer's foreman at the company's training center (Ferro training center) by filling out the (Foreman training request form).

Dimension Package

Weight kg/m ²	Roll Size	N. of rolls per pallet
3	1X10	36
4	1X10	30
5	1X10	24

Product warranty: The company is pleased to replace any product that is clearly proven to be defective due to manufacturing processes with a new products of equal value to the portion that is defective. Refunds are not available. Customers must be notify us of replacement within 7 days from the order date. Additionally customers can't claim damages resulting from direct or indirect using of the materials, as well as delays in delivery by the company. Furthermore replacements can't be made for errors in using that arise from customers negligence without consulting the sales staff or technical documentation provided by the company. The company reserves the right to amend manufacturing formulas or new packaging designs without prior notice. Therefore customers must be request the data sheet and sale conditions from the company before actual using and before each purchase. By doing so the company assumes that customers have understood and agreed to the company's sale conditions before using. (Company products are only allowed for using by individuals who have completed training provided by the company). *For further data please refer to the sale conditions from the company's sale department at sale@ferroproduct.co.th.



ISO 9001 & ISO 14001

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