

# FIDIA POLYESTER MINERAL FIDIA POLYESTER FIDIA/V

ELASTOPLASTOMERIC POLYMER-BITUMEN  
WATERPROOFING MEMBRANES

GRANTS *LEED* CREDITS

CATEGORY	CHARACTERISTICS		ENVIRONMENTAL						METHOD OF USE					
 EP		 Reazione al fuoco	 ECO GREEN	 ASBESTOS FREE	 TAR FREE	 CHLORINE FREE	 RECYCLABLE	 NON DANGEROUS WASTE	 EXHAUSTED OIL FREE	 TORCH APPLICATION	 HOT AIR APPLICATION	 NAILING	 COLD ADHESIVE BONDING	 APPLICATION WITH MOLTEN BLOWN BITUMEN
ELASTOPLASTOMERIC	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	TORCH APPLICATION	HOT AIR APPLICATION	NAILING	COLD ADHESIVE BONDING	APPLICATION WITH MOLTEN BLOWN BITUMEN

\* For waterproofing membranes with TEXFLAMINA underface finish only

## DESCRIPTION

The **FIDIA** 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 though 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.

**FIDIA POLYESTER** and **MINERAL FIDIA POLYESTER** 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.

**FIDIA/V** is reinforced with rot-proof fibreglass mat which is strengthened longitudinally and has high dimensional stability properties.

The **FIDIA POLYESTER** and **FIDIA/V** membranes, produced in various thicknesses, 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, produced in various weights, 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 pre-tension 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.

## APPLICATION FIELDS

The long lasting strength, elasticity and stability at high and low temperatures make **FIDIA POLYESTER** and **MINERAL FIDIA POLYESTER** membranes ideal for use as a single or multi-layer waterproofing systems for new building work or for refurbishment:

- On all sloping surfaces: on flat, vertical and curved surfaces.
- On different types of substrates: site-cast or prefabricated concrete substrates, on metal or timber roofing, on the most common thermal insulation used in the building trade.
- For the most varied uses: terraces, flat and sloping roofs, dielectric and acid-proof coatings and walls in contact with the ground.

The high dimensional stability of **FIDIA/V** makes the membranes suitable for combining with elastomeric, elastoplastomeric and plastomeric membranes reinforced with "non woven" polyester fabric. to form double layer waterproofing systems. **FIDIA/V** can also be used in a single layer as a vapour barrier.

CE

INTENDED USE OF "CE" MARKING SPECIFIED ACCORDING TO THE AISPEC-MBP GUIDELINES

### EN 13707 - REINFORCED BITUMEN

#### SHEETS FOR ROOF WATERPROOFING

• Under layer or intermediate layer in multi-layer systems without permanent heavy surface protection

- FIDIA POLYESTER  
- FIDIA/V

• Upper layer in multi-layer systems without permanent heavy surface protection

- FIDIA POLYESTER - 4-5 mm  
- MINERAL FIDIA POLYESTER 4.0 - 4.5 kg/m<sup>2</sup>

• Under heavy protection in multi-layer systems

- FIDIA POLYESTER

### EN 13969 - BITUMEN DAMP PROOF SHEET INCLUDING BITUMEN BASEMENT TANKING SHEETS

• Membranes for foundations

- FIDIA POLYESTER

### EN 13970 - BITUMEN WATER VAPOUR CONTROL LAYERS

- FIDIA/V

### EN 13859-1 - UNDERLAY FOR DISCONTINUOUS ROOFING

- MINERAL FIDIA POLYESTER

# TECHNICAL CHARACTERISTICS

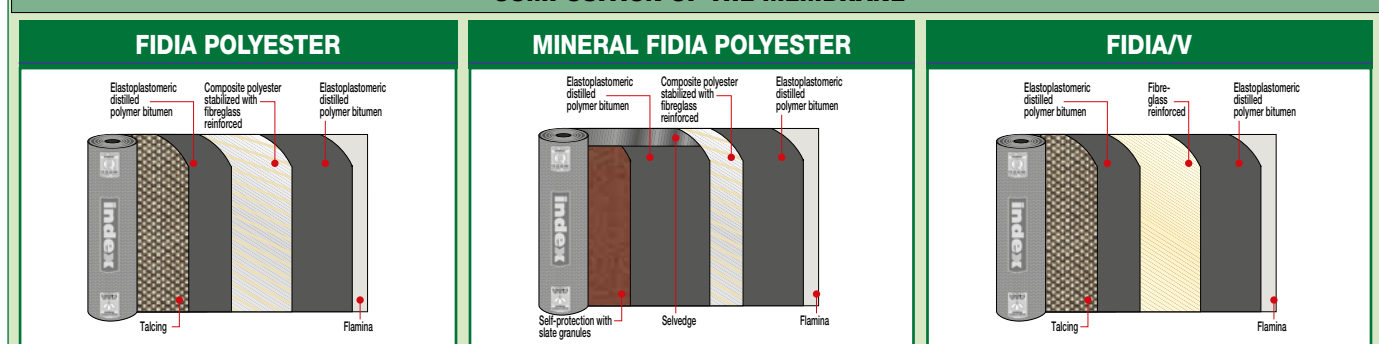
	Standard	T	FIDIA POLYESTER			MINERAL FIDIA POLYESTER			FIDIA/V		
Reinforcement			"Non-woven" composite polyester stab. with fibreglass			"Non-woven" composite polyester stab. with fibreglass			Fibreglass		
Thickness	EN 1849-1	±0,2	3 mm	4 mm	5 mm	-	-	-	2 mm	3 mm	4 mm
Mass per unit area MINERAL	EN 1849-1	±15%	-	-	-	3.5 kg/m <sup>2</sup>	4.0 kg/m <sup>2</sup>	4.5 kg/m <sup>2</sup>	-	-	-
Roll size	EN 1848-1	-1%	1x10 m	1x10 m	1x10 m	1x10 m	1x10 m	1x20 m	1x10 m	1x10 m	1x10 m
Watertightness • after ageing	EN 1928 - B EN 1926-1928	≥	60 kPa	60 kPa	60 kPa	60 kPa	60 kPa	60 kPa	60 kPa	60 kPa	-
Shear resistance L/T	EN 12317-1	-20%	350/300	350/300 N/50mm	-	-	-	-	200/100 N/50mm	-	-
Maximum tensile force L/T • after ageing	EN 12311-1	-20%	450/400	450/400 N/50 mm	450/400 NP	450/400 NP	450/400 N/50 mm NP	450/400 N/50 mm NP	300/200 N/50 mm	-	-
Elongation • after ageing	EN 12311-1	-15% V.A.	40/40%	40/40%	40/40%	40/40%	40/40%	40/40%	2/2%	-	-
Resistance to impact	EN 12691 - A		1 000 mm	1 000 mm	-	-	-	-	NPD	-	-
Resistance to static loading	EN 12730 - A		10 kg	10 kg	-	-	-	-	-	-	-
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	150/150 N	150/150 N	-	-	150/150 N	-	70/70 N	-	-
Dimensional stability L/T	EN 1107-1	≤	-	-0.25/+0.10%	-	-	-0.25/+0.10%	-	-	-	-
Flexibility to low temperature	EN 1109	≤	-10°C	-10°C	-10°C	-10°C	-10°C	-10°C	-10°C	-	-
Flow resist. at high temp. • after ageing	EN 1110 EN 1296-1110	≥	110°C	110°C	-	-	110°C	110°C	110°C	-	-
Water vapour transmission • after ageing	EN 1931 EN 1296-1931	-20%	-	-	-	-	-	-	μ = 100 000 NP	-	-
Res. to water penetration • after ageing	EN 1928 EN 1296-1928	-	-	-	-	W1	W1	W1	-	-	-
UV ageing	EN 1297		NPD	Test passed	-	-	-	-	-	-	-
Reaction to fire Euroclass	EN 13501-1		E	E	E	E	E	E	E	-	-
External fire performance	EN 13501-5		F roof	F roof	F roof	F roof	F roof	F roof	F roof	-	-

### Thermal specifications

Thermal conductivity			0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK
Heat capacity			3.90 KJ/K	5.20 KJ/K	6.50 KJ/K	4.20 KJ/K	4.80 KJ/K	5.40 KJ/K	2.60 KJ/K	3.90 KJ/K	5.20 KJ/K

Compliant with EN 13707 in terms of the resistance factor to steam penetration for reinforced polymer-bitumen membranes, the value of μ = 20 000 may be considered, unless declared otherwise.

## COMPOSITION OF THE MEMBRANE



## PRODUCT FINISHING

**EMBOSSING FLAMINA.** The embossing on the lower surfaces of the membranes finished with Flamina film makes it possible to lay the product precisely and quickly, forming a smooth surface when melted with the torch. It indicates the correct melting temperature and lets the film retract faster. The embossing also enables optimal vapour diffusion; in spot bonded and loose laid installation, in the points where it remains intact, preventing blisters and swelling.

**TALC SURFACING.** The talcing of the top face is carried out with a technique which evenly spreads the very thin talc over the top surface with a special pattern, preventing accumulation or zones without talc. This new system allow a quick unroll and gives the surface a pleasant aspect, which enable to torch it faster if compared to the other coarser mineral finishes.

**SELF-PROTECTION WITH SLATE GRANULES.** On the visible face of the membrane, a protective coating made up of slate granules of various colours is hot bonded. This mineral shield protects the membrane from ageing caused by UV rays.

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

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The colour of delated membranes may vary according to the storage time. The problem is resolved within 2-3 months of application and the original colour is restored. The colour of the membranes may vary according to the storage time. The problem is resolved within 2-3 months of application and the original colour is restored. The colour of the membranes may vary according to the storage time. The problem is resolved within 2-3 months of application and the original colour is restored.

The numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering