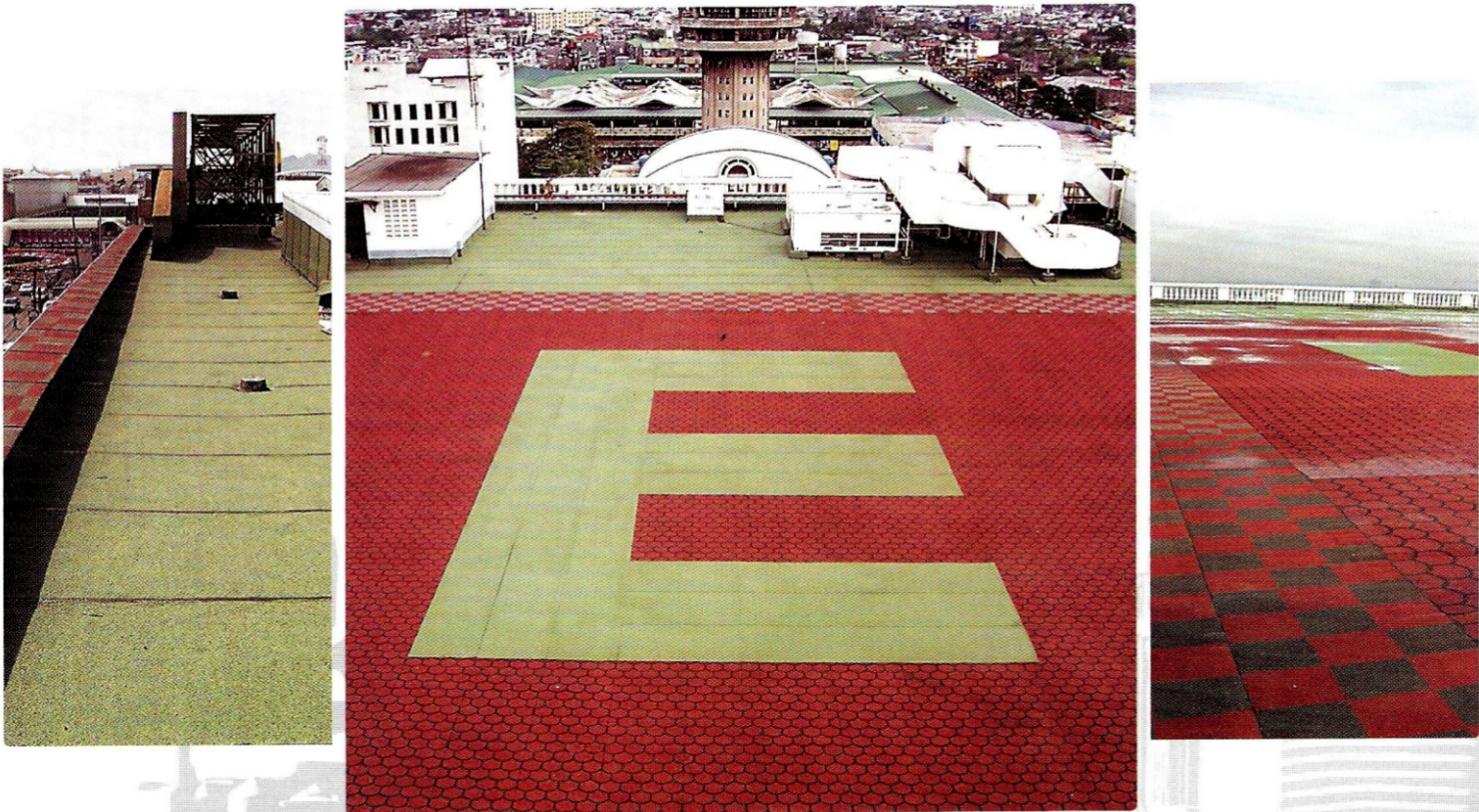




FLEXTORCH

Mineral Design



Waterproofing Membrane

Self-Protected with ceramic mineral granules in various colours and with several types of design for the decoration and development of the design Roofs

MINERAL DESIGN



Description

Mineral Design is the new generation of Index membrane which is self protected with a mineral finish. The mineral finish is no longer supplied in just one color but is now supplied in various colours in accordance with exclusive Index Designs.

The mineral design membranes are made up of distilled bitumen, selected for industrial use, with a high content of elastomeric and plastomeric polymer additives 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 bitumen even if this is the most consistent ingredients. The performance of the bitumen is therefore incremented along with the durability and the resistance to high and low temperatures while the already optimum adhesives and impermeable qualities of the bitumen remain unchanged.

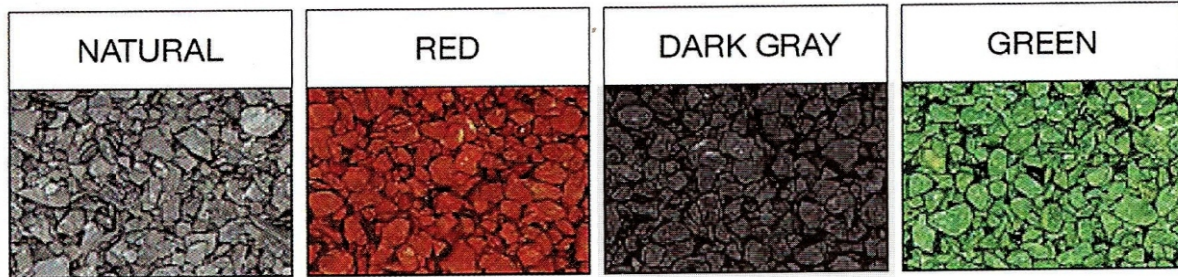
Mineral Design as well as the new decorative effects, represents as always, a valid technical instrument for long lasting waterproofing systems. It is of an advanced technical design with a new composite reinforcement which resolves the problems of dimensional stability.

The MINERAL DESIGN TRIARMATO (triple reinforcement) SPUNBOND POLYESTER membrane was designed to decorate roofs so it may not warp, crack or wrinkle. The absolute dimensional stability both before and after application is extremely important and for this reason the MINERAL DESIGN TRIARMATO membrane has a composite reinforcement of three layers, where the fiberglass is compressed between two layers of continuous strand, "non-woven" polyester fabric and so cannot damage the bituminous mass.

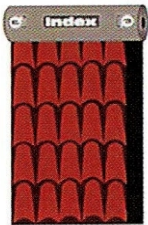
Stability is guaranteed by the fiberglass mat which limits the movement of the membrane at high and low temperatures. The bituminous mass is protected and reinforced by a "non-woven polyester" fabric. The dimensional stability of MINERAL DESIGN TRIARMATO is practically the same as that of membranes reinforced with fiberglass mat, while the optimal elastic characteristics of the "non-woven" polyester fabric remain unchanged, therefore the membrane does not crack, shrink or warp.

Furthermore, MINERAL DESIGN TRIARMATO is also much more resistant to nail tearing than normal membranes, so it is suitable for mechanical fixing. MINERAL DESIGN POLYESTER is reinforced with a "non-woven" polyester fabric stabilized with fiberglass mat which guarantees stability in hot conditions, while in cold conditions it behaves like a sheet reinforced with pure polyester. The top face of MINERAL DESIGN is self-protected with hot bonded and pressed ceramic mineral granules, with the exception of an overlapping side strip, protected by a strip of Flamina film which is torch welded to weld the joints. The film which melts, with a high retraction, coats the underside of the membrane guaranteeing a fast and reliable installation.

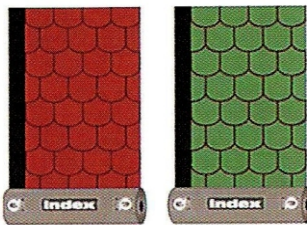
Mineral Design Decoration Table



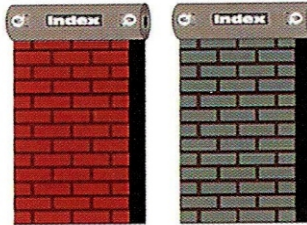
Tiles



Oval Slates



Bricks



Checkerboard



Shingles



Rhombus



Winding Fantasy

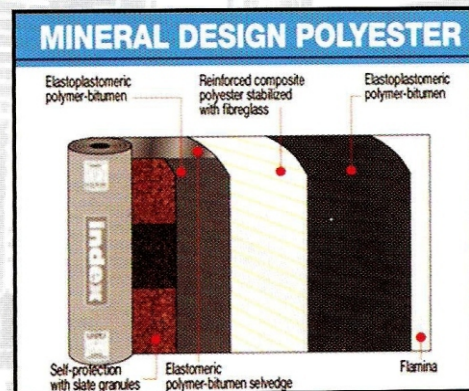
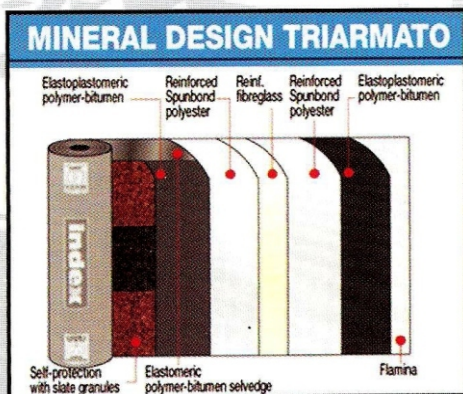


Military Camouflage



MINERAL DESIGN represents the evolution of mineral self-protected membranes. Now designers have a new instrument at their disposal and the special designs of the membranes open up new and, until now, unforeseen possibilities for the decoration of roofs.

MINERAL DESIGN, now the pitched roof of a school, a church or a block of flats may be covered in a colourful way, with a choice of many colours. MINERAL DESIGN'S light weight makes it possible to obtain the decorative aspect of shingles, curved tiles and flooring even on light roofing.



Technical Characteristics

PROPERTY	T	MINERAL DESIGN TRIARMATO	MINERAL DESIGN POYESTER
Weight (EN 1849-1)	± 15%	4.5 kg/m ²	4.5 kg/m ²
Roll size (EN 1848-1)	>	1X10 m	1X10 m
Reinforcement		"Non-woven" composite polyester stabilized with fiberglass	Three layer composite: fiberglass layer between 2 layers of "non-woven" Spunbond Polyester
Watertightness (EN 1928 - B method)	>	60 kPa	60 kPa
Maximum tensile force (EN 1928 - B method)	-20%	760/650 N/50 mm	650/500 N/50 mm
Elongation (EN 12311-1)	- 15% V.A.	50/50%	45/50%
Resistance to tearing (nail shank) (EN 12310-1)	-30%	250/250 N	150/150 N
Dimension Stability (1107-1)	<	-0.3/+0.1%	-0.25/+0.1%
Flexibility to low temp. (EN 1109)	<	-15°C	-15°C
Flow resistance at elevated temperature (EN 1110) • after ageing	>	120°C	120°C
UV Ageing (EN 1297)		NPD	NPD
Reaction to fire class (EN 13501-1)		Euroclass F	Euroclass F
External Fire Performance (EN 13501-5)		Froof	Froof