

SWIMMING POOL
WATERPROOFING
SOLUTION

ARMONIA 3D







THE PLUS

- + visual appeal
- + easy setting
- + sensorial experience

SOPREMA, world leader in waterproofing solutions, introduces its new reinforced PVC membranes Armonia 3D. The line Armonia 3D has been conceived aiming at replicating the feeling and the aesthetic aspect of mosaics and natural materials. Its embossed patterns, with a great visual appeal, are combined with the traditional benefits of reinforced PVC liner: quick and easy setting, and a great protection and waterproofing capacity.

FOUR-LAYER MEMBRANE

Reinforced PVC synthetic membrane composed of 4 layers of different complementary formulations, introducing a polyester reinforcement between the second and third layer.

This grid guarantees excellent tensile strength properties and very high dimensional stability.

« BIO-SHIELD » TREATMENT

It helps to protect the membrane against micro-organism growth and prevents molecular changes.

WARRANTY

The products of the line **Armonia 3D** are guaranteed for 10 years.



Sensitive Grev



Sensitive Black



Sensitive Bali



Mosaic White



Spirit Ceram



Sensitive Dune



Sensitive Sand



Sensitive White



Mosaic Pearl Grey



Spirit Ceram Grey

TECHNICAL DATA SHEET

PRODUCT

Synthetic membrane for the internal covering of swimming pools.

CURRENT STANDARD

Synthetic membrane in plasticized PVC made by spreading, reinforced with polyester mesh, with nominal thickness of 1.5 mm (Mosaic and Spirit Ceram) and 1.8 mm (Sensitive). **The superficial finishing of Sensitive membranes has slip prevention according to the European standard EN 15836 and DIN 51097.** Produced according the European standard EN 15836-2 (2010).

STORAGE

Rolls should be stored horizontally in their original packages, in a dry and temperate area (10-30°C).

		MOSAIC	SPIRIT CERAM	SENSITIVE	Test method
		150	150	180	
Thickness	(mm)	1,50	1,50	1,80	UNI EN 1849-2
Width	(m)	1,65	1,65	1,65	UNI EN 1848-2
Length		≥ nominal value	≥ nominal value	≥ nominal value	UNI EN 1848-2
Flatness	(mm)	≤ 10	≤ 10	≤ 10	UNI EN 1848-2
Straightness	(mm)	≤ 30	≤ 30	≤ 30	UNI EN 1848-2
Air mass	(kg/m²)	1,80	1,80	2,10	UNI EN 1849-2
Water absorption (168 hours at 23 ± 2°C)	(%)	≤ 1,0	≤ 1,0	≤ 1,0	EN ISO 62 met. 1
CaCO ₃ content	(%)	≤ 3,0	≤ 3,0	≤ 3,0	EN 15836 - 2 Ann. A
Resistance to traction	(N/5 cm)	≥ 1100	≥ 1100	≥ 1100	UNI EN 12311-2 met. A
Mesh elongation to rupture	(%)	≥ 15 and ≤ 30	≥ 15 and ≤ 30	≥ 15 and ≤ 30	UNI EN 12311-2 met. A
Tear resistance	(N)	≥ 180	≥ 180	≥ 180	UNI EN 12310-2
Dimension stability	(%)	≤ 0,5	≤ 0,5	≤ 0,5	UNI EN 1107-2
Cold bending	(°C)	≤ -25	≤ -25	≤ -25	UNI EN 495-5
Resistance to welding peeling	(N/5cm)	≥ 80	≥ 80	≥ 80	UNI EN 12316-2
Resistance to artificial aging: - exposure of 648 MJ/ m2 to UV between 300 and - contrast level according to greys scale	400 nm	≥ 3000 hours ≥ degree 3	≥ 3000 hours ≥ degree 3	≥ 3000 hours ≥ degree 3	EN ISO 4892-2 met. A - cycle n°1 EN 20105 - A02
Resistance to micro organisms: - mass loss	(%)	≤ 5,0	≤ 1,0	≤ 5,0	EN ISO 846 met. D
Resistance to streptoverticilium reticulum bacteria		Absence of stains	Absence of stains	Absence of stains	EN ISO 846 met. C Ceppo: ATCC 25607
Resistance to chlorine - colour changing according to greys scale		≥ degree 3	≥ degree 3	≥ degree 3	EN 15836 - 2 Ann. C
Resistance to staining agents - colour changing according to greys scale		≥ degree 2	≥ degree 4	≥ degree 2	EN 15836 - 2 Ann. D
Resistance to staining agents after abrasion: - colour changing according to greys scale		-	≥ degree 4	≥ degree 4	EN 15836-par. 6.3.1 EN 15836 - 2 Ann. D





SOPREMA at your service

SOPREMA SRL

Do you have a question about a specific project, the products or application possibilities? All information can be found on: www.soprema.com

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