



Product Information

noraplan[®] marine **Designs: signa, sentica, stone, valua and eco**

noraplan[®] marine are single-layered rubber floor coverings available in rolls and tiles in the above-named designs. **noraplan[®] stone** has a mat, reflection-breaking surface. The designs **signa, sentica** and **eco** are available with a smooth surface. The linear surface of **noraplan[®] valua** completes the product range. The floor coverings are extremely fire-resistant and free of polymers containing chlorine.

Technical data Properties acc. to EN 1817	Test method	Requirements	Average test results from running production
Thickness	EN ISO 24346	Mean value \pm 0.15 mm of nominal value	2.0 mm
Thermal conductivity	EN 10456	$\lambda = 0,17 \text{ W/(m}\cdot\text{K)}$	Fulfilled
Dimensional stability	EN ISO 23999	$\pm 0.4 \%$	$\pm 0.3 \%$
Cigarette-burn resistance	EN 1399	Procedure A (stubbed out) \geq level 4 Procedure B (burning) \geq level 3	Fulfilled
Flexibility	EN ISO 24344, procedure A	Mandrel diameter 20 mm, no fissuring	Fulfilled
Hardness	ISO 48-4	≥ 75 Shore A	91 Shore A
Residual indentation	EN ISO 24343	Mean value ≤ 0.15 mm	0.03 mm
Abrasion resistance at 5 N load	ISO 4649, procedure A	$\leq 250 \text{ mm}^3$	189 mm ³
Colour fastness to artificial light	ISO 105-B02, procedure 3, test conditions 6.1 a)	At least level 6 on the blue scale, \geq level 3 on the grey scale	Grey scale ≥ 3 acc. to ISO 105-A02

Additional technical data

Weight	EN ISO 23997		$\sim 3.36 \text{ kg/m}^2$
Tear strength	ISO 34-1, method B, procedure A		20 kN/m
Slip resistance	DIN 51130		R 9* R 10* (reflection-breaking surf.)
Improvement in footfall sound absorption	ISO 10140-3		6 dB
Effect of chemicals	EN ISO 26987		Resistant depending on concentration and time of exposure ^(A)
Electrostatic behaviour when being walked upon	EN 1815		Antistatic, charging $< 2 \text{ kV}$
Dielectric strength	EN 60243-1, VDE 0303, part 21		43 kV
Electrical insulation properties	EN 1081 R1		$> 10^{10} \text{ Ohm}$

Fire behaviour / smoke behaviour

Fire behaviour	EN 13501-1		C _{fl} -s1, bonded
	DIN 5510-2		SF3*
Fire behaviour	ASTM E-648 / ISO 9239-1	Federal Railroad Administration	Class 1 ($\geq 0.50 \text{ W/cm}^2$)*
Smoke toxicity	ISO 5659-2	DIN 5510-2	FED $\leq 1^*$
Fire behaviour, see going vessels (surface flammability)	IMO Res. MSC.307 (88) – (F.T.P. Code 2010)		Fulfilled (glued with UZIN KR 430)
Smoke density and toxicity, see going vessels			
Oxygen index	ISO 4589		$\sim 28 \%$

Approvals

EU-Type Examination Certificate for use on board of sea going vessels in compliance with directive 2014/90/EU	Certificate No. 124117-03
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Colour variations due to different production batches as well as technical alterations to improve the product have to be accepted.

* Tested and certified by an independent testing institute.

^(A) In case of increased impact of oils, greases, acids, alkalis and other aggressive chemicals please contact us.

Standard measures: Rolls 1.22 m x 15 m // tiles 610 mm x 610 mm

Special measures: Delivery upon request.

Custom-made designs and colors of **noraplan[®] marine** with smooth or reflection-breaking surface are subject to minimum order quantities.

Unless agreed otherwise, the sort statement PQC009 is applicable in its current version.

Further product information is available in the current assortment brochure or on www.nora-transportation.com.