

Incaline

Technical specifications (1)



Property	Tested according to standard	Result	BRL 19006/EN 1504-2 requirement
Colour	N/A	Default colour beige	
Odour	N/A	None	
Flexural strength	ASTM D790- NBN EN 196-1	Average 25 MPa	
Compressive strength	NBN EN 196-1	Average 44 MPa	
Tensile strength	NEN EN ISO 6892	3 mm test pieces 6 N/mm ² average 6 mm test pieces 8 N/mm ² average 12 mm test pieces 14 N/mm ² average	
Young's-modulus	N/A	> 10 years of use 900 N/mm ²	
Wear resistance	EN ISO 5470-1	After 1000 rotations 59 mg	≤120 mg
Impact resistance	NEN 5335	No damage to the concrete substrate	
Shock resistance	EN ISO 6272-1	Class III No cracks or delamination after loading	No cracks or delamination after loading Class I: ≥ 4 Nm Class II: ≥ 10 Nm Class III: ≥ 20 Nm
Scratch resistance	EN ISO 1518-1	Penetration depth at 50N ≤ 1,0 mm	≤ 1,0 mm
Shore hardness	ISO 868	72 D	
Adhesion strength	EN 1542	Exceeds the cohesive strength of the substrate. Failure occurs in the mineral substrate ≥ 1,5 N/mm ²	No air bubbles and flaking. Mean value: 1,0 N/mm ² Smallest individual value: 0,7 N/mm ²
Adhesion to damp concrete	EN 13578 – EN 1542	No blistering, cracking and flaking. Mean value: 2,1 N/mm ²	After loading, no blistering, no cracking, no flaking. Pull-off strength ≥ 1,5 N/mm ² , the failure shall occur > 50% as concrete rupture
Resistance to thermal shock	EN 13687-5	No bubbles and no flaking Mean value: 3,9 N/mm ² Smallest value: 3,4 N/mm ²	No bubbles and no flaking Mean value: 1,0 N/mm ² Smallest value: 0,7 N/mm ²
Adhesion after thermal compatibility	EN 13687-1	No bubbles and no flaking Mean value: 3,8 N/mm ² Smallest value: 2,1 N/mm ²	No bubbles and no flaking Mean value: 1,0 N/mm ² Smallest value: 0,7 N/mm ²
Artificial weathering	EN 1062-11	No blistering, cracking and flaking. Mean value: 2,0 N/mm ²	After weathering, no blistering, cracking and flaking.
Dielectric properties	At 3 mm layer thickness At 6 mm layer thickness At 6 mm layer thickness	With 25 x 25 cm electrode up to 20 kV With 10 x 10 cm electrode up to 35 kV With 25 x 25 cm electrode up to 25 kV	
Permeability to water	NBN B 15-222	No water absorption at 7 bar and 3 mm layer thickness	
Water absorption	NEN EN ISO 2812-2	1,8 % (23°C/100 days)	≤ - 20%

Incaline

Technical specifications (2)

Property	Tested according to standard	Result	BRL 19006/EN 1504-2 requirement
Water resistance Reference Adhesion strength vapour phase Adhesion strength liquid phase Difference	NEN EN ISO 2812-2	2,1 N/mm ² 2,5 N/mm ² 3,8 N/mm ² +18,8 %/+ 81,9%	≤ - 20%
Capillary absorption and permeability to water	EN 1062-3	0,001 kg/(m ² x h ^{0,5})	w < 0,1 kg/(m ² xh ^{0,5})
Permeability to water vapor	EN ISO 7783	Class III S _D > 200 m	Class I: S _D < 5 m Class II: 5 m ≤ S _D ≤ 50 m Class III: S _D > 50 m
Resistance to moisture ingress from behind the coating	PTV 562 § 4.3.2.30 (BENOR)	Mean value: 4,2 N/mm ²	Adhesion strength ≥ 2,0 N/mm ² or failure in the substrate.
Permeability to CO ₂	EN 1062-6	S _D > 2500 m	S _D > 50 m
Resistance to severe chemical attack	EN 13529	Group 1: Class I Group 3: Class I Group 10: Class I	Reduction of the hardness by max. 50% Class I: ≥ 3d without pressure
Chemical resistance Medium Appearance Initial thickness After loading Thickness difference Adhesion strenght reference Adhesion strength after loading Difference	NEN EN ISO 2812-2	H ₂ SO ₄ (pH 3) NaOH (pH 13) No blistering, slight change in colour 3,9 mm 3,4 mm 3,6 mm 3,6 mm -7,7% -5,9% 2,1 N/mm ²	1,8 N/mm ² 4,6 N/mm ² -16,3% + 118,5% ≤ - 20%
VOC concentration	Analysis using headspace-GC-MS	0,004%	
Heavy metals	Analysis using IC-ICP-HRMS	none	
Chromium-6	Analysis using IC-ICP-OES	none	
Processing time	15-20 minutes after mixing components at 20°C		
Operating temperature	N/A	-20°C to +80°C for water. May vary for chemicals, available on request	
Curing time	7 days to full chemical resistance. Loading normally after 24 hours, depending on temperature and humidity. Certain chemical stressors can necessitate a longer curing time. At lower temperatures, environmental conditions may be adapted artificially.		

Incalifin NV

lepersestraat 59
B-8500 Kortrijk, Belgium

T +32 (0)56 77 59 81

E info@incalifin.com