



DIAMOND FLOORS

TECHNICAL SPECIFICATIONS EN 16511

Loose-laid panels-Semi-rigid multilayer modular floor (MMF) covering panels with wear resistant top layer SPC VINYL FLOORING 4 mm + 1 mm IXPE 0,55 mm

DIMENSIONS		
Thickness	5.00 mm · $t_{max} - t_{min} \leq 0.50$ mm	
Length	1219.2 mm · $l_{max} - l_{min} \leq 0.50$ mm	
Width	181.1 ± 0.10 mm · $w_{max} - w_{min} \leq 0.20$ mm	
Density	2000 (kg/m ³)	
Underlayment	IXPE	
TOLERANCE		
Squareness	EN 16511	≤ 0.20 mm
Straightness	EN 16511	≤ 0.30 mm / m
Flatness Crosswise	EN 16511	Concave: ≤ 0.15% · convex: ≤ 0.20%
Flatness Lengthwise	EN 16511	Concave: ≤ 0.50% · convex: ≤ 1.00%
Openings between Elements	EN 16511	Average: ≤ 0.15 mm · max: ≤ 0.20 mm
Height Difference between Elements	EN 16511	Average: ≤ 0.10 mm · max: ≤ 0.15 mm
TEST		
Beveled Edges		Yes -Micro Bevel
Surface treatment (UV)		YES
Click System		I4F DROP LOCK SYSTEM/Optional: UNICLIC
Measuring Heat Stability of Resilient Flooring by Color Change	ASTM F1514	No Changes
Measuring Light Stability of Resilient Flooring by Color Change	ASTM F1515	No Changes
Resistance to Chemicals of Resilient Flooring	ASTM F925	No Changes
Usage Classification	EN 16511	Class 23 / Class 33
Assessment of the surface resistance to microscratching	EN16094 Procedure A	MSR-A1
Assessment of the surface resistance to microscratching	EN16094 Procedure B	MSR-B1



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Resistance to staining	EN 438-2	Class 5 (No Change)
Abrasion Resistance Method B	EN 16511	≥ 3000 cycles
Impact Resistance	EN 16511	≥ 1800 mm
Castor Chair Test	ISO 4918	No change in appearance after 25.000cycles
Effect of Furniture Leg	EN 16511	No visible damage
Thickness Swelling	EN 16511	No swelling
Residual Indentation	EN 16511	≤ 0.01mm
Dimensional Stability	EN 16511	≤ 0.15 %
Floor Heating System	Yes suitable, see separate installation instructions.	Max. 27° C
Locking Strength	EN 16511	f _{l0,2} ≥ 1 kN/m (length); f _{s0,2} ≥ 1.5 kN/m (width)
ENVIRONMENT		
Emission of Formaldehyde	CDPH	PASS
TVOC Range	TVOC	PASS (0.5 mg/m ³ or less)
PHYSICAL BEHAVIOR		
Fire Behaviour	EN 13501-1	Bfl-s1
Slide Resistance	EN 13893	DS
Thermal Resistance	EN 12667	0.034 (m ² K)/W
Electrostatic Behaviour	EN 1815	Antistatic Floor Covering
SOUND ABSORPTION QUALITIES		
Impact Sound Reduction with 1mm IXPE Underlay	EN ISO 717-2	19 dB
Calculated Impact Insulation Class	ASTM E492-09	IIC 62
Calculated Sound Transmission Class	ASTM E90-09	STC 60

The data sheet is updated regularly to meet new technological standards. This version replaces all previous versions as well as those which are undated.
 SPC RIGID CORE Flooring of floating installation, Level of use according to EN 16511: Class 33
 FOR FLOORING TO BE USED IN LIVING AREAS AND COMMERCIAL PREMISES
 05/2024



DIAMOND FLOORS

TECHNICAL SPECIFICATIONS EN 16511

Loose-laid panels-Semi-rigid multilayer modular floor (MMF) covering panels with wear resistant top layer SPC VINYL FLOORING 5.5 mm + 1.5 mm IXPE 0,55 mm

DIMENSIONS		
Thickness	7.00 mm · $t_{max} - t_{min} \leq 0.50$ mm	
Length	1219.2 mm · $l_{max} - l_{min} \leq 0.50$ mm	
Width	228.6 ± 0.10 mm · $w_{max} - w_{min} \leq 0.20$ mm	
Density	2000 (kg/m ³)	
Underlayment	IXPE	
TOLERANCE		
Squareness	EN 16511	≤ 0.20 mm
Straightness	EN 16511	≤ 0.30 mm / m
Flatness Crosswise	EN 16511	Concave: ≤ 0.15% · convex: ≤ 0.20%
Flatness Lengthwise	EN 16511	Concave: ≤ 0.50% · convex: ≤ 1.00%
Openings between Elements	EN 16511	Average: ≤ 0.15 mm · max: ≤ 0.20 mm
Height Difference between Elements	EN 16511	Average: ≤ 0.10 mm · max: ≤ 0.15 mm
TEST		
Beveled Edges		Yes -Micro Bevel
Surface treatment (UV)		YES
Click System		I4F DROP LOCK SYSTEM/Optional: UNICLIC
Measuring Heat Stability of Resilient Flooring by Color Change	ASTM F1514	No Changes
Measuring Light Stability of Resilient Flooring by Color Change	ASTM F1515	No Changes
Resistance to Chemicals of Resilient Flooring	ASTM F925	No Changes
Usage Classification	EN 16511	Class 23 / Class 33
Assessment of the surface resistance to microscratching	EN16094 Procedure A	MSR-A1
Assessment of the surface resistance to microscratching	EN16094 Procedure B	MSR-B1



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Resistance to staining	EN 438-2	Class 5 (No Change)
Abrasion Resistance Method B	EN 16511	≥ 3000 cycles
Impact Resistance	EN 16511	≥ 1800 mm
Castor Chair Test	ISO 4918	No change in appearance after 25.000cycles
Effect of Furniture Leg	EN 16511	No visible damage
Thickness Swelling	EN 16511	No swelling
Residual Indentation	EN 16511	≤ 0.01mm
Dimensional Stability	EN 16511	≤ 0.15 %
Floor Heating System	Yes suitable, see separate installation instructions.	Max. 27° C
Locking Strength	EN 16511	fl0,2 ≥ 1 kN/m (length); fs0,2 ≥ 1.5 kN/m (width)
ENVIRONMENT		
Emission of Formaldehyde	CDPH	PASS
TVOC Range	TVOC	PASS (0.5 mg/m ³ or less)
PHYSICAL BEHAVIOR		
Fire Behaviour	EN 13501-1	Bfl-s1
Slide Resistance	EN 13893	DS
Thermal Resistance	EN 12667	0.034 (m ² K)/W
Electrostatic Behaviour	EN 1815	Antistatic Floor Covering
SOUND ABSORPTION QUALITIES		
Impact Sound Reduction with 1.5mm IXPE Underlay	EN ISO 717-2	22 dB
Calculated Impact Insulation Class	ASTM E492-09	IIC 62
Calculated Sound Transmission Class	ASTM E90-09	STC 60

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