

Technical tests on wood flooring

Sample: two-layers wood flooring – oak

Test	Result	Reference values
Unvarnished		
Pentachlorophenol concentration CEN/TR 14823:2003	<0,8 mg/kg	LOD (limit of detection): 0.8 mg/kg
Wood flooring: Determination of dimensional stability- EN 1910/16	Compliant	-
Resistance to indentation (Brinell) EN 1534:2011	39,1 N/mm ² (average value)	-
Emission test - VOC (Volatile organic compounds)	Compliant to all requirements provided by the Certification Indoor Air Comfort Gold, M1 e CDPH.	Ask the manufacturer for the tests report
Varnished		
Cross-cut test UNI EN ISO 2409:2013	0	0 (none of the squares of the lattice is detached) to 5 (detached lattice >65%)
Resistance to light exposure UNI EN 15187:2007	4/5 (Test rating grey scale)	Test rating grey scale: >4 Resistance to light Blue Wool Standard N. 6: >6
Tendency of surfaces to retain dirt UNI 9300:2015	4 (Light ring only visible from one corner of observation)	1 (marked ring on the whole surface) to 5 (no visible change)
Resistance to temperature changes UNI 9429:2015	0	0 (No breaking, falling off or whitening) to 2 (visible breaking, falling off and whitening)
Hardness. Pencil test UNI 10782:1999	HB (average hardness)	9H (hard) to 9B (soft)
Surface resistance to scratching UNI EN 15186:2012, met. B	1.2, Class C (CEN/TS 16209)	Class C: 1- 1.5 N
Resistance to abrasion UNI EN 15185:2011	Class (CEN/TS 16209) -D (70 revolutions) for smooth flooring -D (60 revolutions) for brushed flooring	Class D: 30-80 evolutions
Determination of the resistance to chemical agents UNI 11622-1: 2016	Great resistance to chemical agents	See Table 1 and 2
Reaction to fire UNI EN 13501-1: 2019	C _{fi} -s1	-

Determination of the friction coefficient for flooring - B.C.R.A Slippery Method

Covering material of sliding element	Direction of test	Coefficient of friction (μ)	Reference values
Leather on dry Surface	A	0.58	$\mu > 0.40$
	B	0.69	
Hard rubber standard on wet surface	A	0.80	$\mu > 0.40$
	B	0.78	

Table 1: Determination of the resistance to chemical agents (UNI 11622-1: 2016) – slightly **brushed** flooring.

Products	Contact time					
	16 hours	6 hours	1 hour	10 min	2 min	10 sec
Distilled water	5	/	-	-	-	-
Acetic acid (aqueous solution 5%)	-	-	5	-	/	-
Detergent solution	5	-	/	-	-	-
Acetone	-	-	-	-	-	5
Ethanol (aqueous solution 50%)	-	-	5	-	/	-
Paraffin oil	-	-	5	-	-	-
Coffee	-	-	5	-	/	-
Ammonia (aqueous solution 10%)	-	-	2	5	/	-

Legend: 5: no change, 4: light change, 3: light ring, 2: marked ring, 1: very marked ring, /: not necessary, -: not provided by the standard.

Table 2: Determination of the resistance to chemical agents (UNI 11622-1: 2016) – **smooth** flooring.

Products	Contact time					
	16 hours	6 hours	1 hour	10 min	2 min	10 sec
Distilled water	5	/	-	-	-	-
Acetic acid (aqueous solution 5%)	-	-	5	-	/	-
Detergent solution	5	-	/	-	-	-
Acetone	-	-	-	-	-	5
Ethanol (aqueous solution 50%)	-	-	5	-	/	-
Paraffin oil	-	-	5	-	-	-
Coffee	-	-	5	-	/	-
Ammonia (aqueous solution 10%)	-	-	3	5	/	-

For tests of other substances, contact the manufacturer.