

Notre reference:: WVP/KH/PV160477

REPORT nr.160477

Client : FLOORIFY NV
Noordstraat 140
B-8800 Roeselare

Object : Tests on floor coverings

Date : 31st of August 2016

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Required test:

Determination of peel resistance according to EN ISO 24345:2012

Determination of micro-scratch resistance according to EN 16094:2012

Determination of thickness swelling after partial immersion in water according to EN ISO 24336:2005

Determination of locking strength for mechanically assembled panels according to EN ISO 24334:2014

Determination of indentation and residual indentation according to EN ISO 24343-1:2007

Resistance to staining according to EN 438-2:2016

Determination of the effect of simulated movement of a furniture leg according EN 424:2002

Determination of gloss value at 60 degrees according to EN ISO 2813:2014

Determination of the adhesion of the lacquer according to EN ISO 2409 : 2007



Determination of impact resistance according to EN 13329:2016

Determination of the abrasion resistance according to EN 13329:2016

Determination of mass per unit area according to EN ISO 23997:2012

1. Description of sampling:

Sampling by Floorify

Reference sample (WOOD.BE)	Description Floorify NV
<p>F60606 F60702</p>	<p>Product name: Floorify Vinyl Planks & Tiles Click Thickness : 4,3mm</p>  

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2. Results:

1) Determination of peel resistance according to EN ISO 24345:2012

Reference sample WOOD.BE	Reference report
F60702	Cfr annex: Test report order No.2716280 (executed in external lab) 4 pages

2) Determination of microscratch resistance according to EN 16094:2012

Reference sample WOOD.BE	Reference report
F60702	Cfr annex: Test report order No.2716280 (executed in external lab) 4 pages

3) Determination of thickness swelling after partial immersion in water according to EN ISO 24336:2005.

Description of the test

Samples of laminate floor-covering elements are partially immersed (50 mm) in water at 20°C during 24 h.

Test date:	1st to 3rd August 2016
Climatic condition before test:	T:23°C R.H.:50%
Climatic condition during test:	T:23°C R.H.:50%

Reference sample WOOD.BE	Average value (%)
F60702	0,0

4) Determination of locking strength for mechanically assembled panels according to EN ISO 24334:2014.

Description of the test

Mechanically assembled panels with mechanical locking systems are pulled apart until an opening of 0,20 mm occurs (F_{0,2}) and until the locking systems breaks (F_{max}).

Test date:	4 th of August 2016
Climatic condition before test:	T:23°C R.H.:50%
Climatic condition during test:	T:23°C R.H.:50%

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Short side

Reference sample WOOD.BE (A1-B1)	Thickness (mm)	Width (mm)	F _{0,2} (KN/m)	F _{max} (KN/m)	Δs (mm)
"F60702-2"	4,49	201,04	8,81	9,02	0,20
"F60702-3"	4,51	201,03	8,15	8,49	0,31
"F60702-4"	4,56	201,07	9,49	9,75	0,20
"F60702-5"	4,53	200,92	8,11	8,84	0,26
"F60702-6"	4,48	200,16	7,75	8,91	0,32
Average value			8,46	9,00	0,26

Long side

Reference sample WOOD.BE (A2-B2)	Thickness (mm)	Width (mm)	F _{0,2} (KN/m)	F _{max} (KN/m)	Δs (mm)
"F60702-1"	4,54	199,75	8,08	9,03	0,31
"F60702-2"	4,55	200,75	8,24	9,29	0,37
"F60702-4"	4,49	200,17	10,31	10,89	0,30
"F60702-5"	4,52	201,34	7,19	8,96	0,36
"F60702-7"	4,56	198,56	9,62	10,13	0,27
Average value			8,69	9,66	0,32

5) Determination of indentation and residual indentation according to EN ISO 24343-1:2007

Description of the test

A test piece is subjected to a static loading, the thickness being measured before loading and after a recovery period.

Test date:

2nd of August 2016

Reference sample WOOD.BE	Initial thick- ness (mm)	thickness after indenta- tion(mm)	final thick- ness(mm)	depth after indenta- tion(mm)	final depth(mm)
F60702-A1	4,59	4,58	4,59	0,01	0,00
F60702-B1	4,60	4,59	4,60	0,01	0,00
F60702-C1	4,60	4,59	4,60	0,01	0,00
Average	4,60	4,59	4,60	0,01	0,00

6)Resistance to staining according to EN 438-2:2016

Description of the test

Test specimens are left in contact with a series of staining agents which are likely to be encountered in everyday use.

Test date:

3rd of August 2016

Reference sample WOOD.BE	Staining agents	Rating according to EN 438-2:2016
F60702	Group1 (Acetone)	5
	Group 2 (Coffee)	5
	Group 3 (Sodium hydroxide)	4
	Group 3 (Hydro- gen peroxide)	5
	Group 3 (Shoe polish)	5

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7) Determination of the effect of simulated movement of a furniture leg according EN 424:2002

Description of the test:

The resistance of an installed floor covering to the movement of a furniture leg with rounded edges is assessed for deterioration in surface flatness, surface damage, cuts of varying depths and penetrating edges.

Test date: 29th of August 2016
 Climatic condition before test: T:23°C R.H.:50%
 Climatic condition during test: T:23°C R.H.:50%
 Brass feet: Type 0

Reference sample WOOD.BE	Damages	Visual detection
F60702	Deterioration in the flatness of the surface	no
	Destruction of the surface	no
	Detection of cuts	no
	Detection of penetrating edges	no
	Joint opening \geq 1 mm	no

8) Determination of gloss value at 60 degrees according to EN ISO 2813:2014

Description of the test:

With a reflectometric apparatus, gloss values are determined on coated surfaces, correlating with the visual gloss perception. In this context (glossmeter), the ratio of the gloss of the coating with specified reference refractive index is obtained.

Test date: 3rd of August 2016
 Climatic condition before test: T:23°C R.H.:50%
 Climatic condition during test: T:23°C R.H.:50%
 Glossmeter used: ZGM 1120 ZEHNTNER

Calibration of the glossmeter before measuring:

-High gloss standard: 94,7 GU
 -Zero point check : 0 GU

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Reference sample WOOD.BE	Remarks	Gloss value (geometry 60°) (GU)
F60702-A	Transversal to the grain	4
F60702-B		3,3
F60702-C		4,3
F60702-D		3,6
F60702-E		3,8
Average value		3,8
Δmax value		1

Reference sample WOOD.BE	Remarks	Gloss value (geometry 60°) (GU)
F60702-A'	longitudinal to the grain	3,1
F60702-B'		3,6
F60702-C'		3,9
F60702-D'		3,8
F60702-E'		3,9
Average value		3,66
Δmax value		0,8

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9) Determination of the adhesion of the lacquer according to EN 2409:2007

Description of the test:

Test method for assessing the resistance of varnished coatings to separation from the substrate when a right-angle lattice pattern is cut into the coating, penetrating through to the substrate.

Test date: 8th of August 2016
 Climatic condition before test: T:23°C R.H.:50%
 Climatic condition during test: T:23°C R.H.:50%
 Cutting tool used: ERICHSEN model: 295/II

Reference sample WOOD.BE	Classification according to ISO 2409
F60702	0

10) Determination of impact resistance according to EN 13329:2016

Description of the test with small-diameter ball

A specimen from the floor covering is subjected to the impact of a 5 mm steel ball mounted at one end of a spring-loaded bolt. The maximum spring force for which no visible damage occurs is used as a measure of resistance to impact

Test date: 4th of August 2016
 Climatic condition before test: T:23°C R.H.:50%
 Climatic condition during test: T:23°C R.H.:50%

Reference sample WOOD.BE	Maximum spring force (N)
F60702	70
F60702	70
F60702	73
F60702	73
F60702	75
Average value	72

Description of the test with large-diameter ball

A specimen from the laminate is subjected to the impact of a steel ball which is allowed to fall from a known height. Impact resistance is expressed as the maximum drop height which can be achieved without incurring visible surface cracking or producing an imprint greater than a specified maximum diameter.

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Test date: 4th of August 2016

Climatic condition before test: T:23°C R.H.:50%

Climatic condition during test: T:23°C R.H.:50%

Reference sample WOOD.BE	Maximum drop height (mm)
F60702	1800
F60702	1800
F60702	1800
F60702	1800
F60702	1800
Average value	1800

Reference sample WOOD.BE	Classification according to EN 13329:2016
F60702	IC3

11) Determination of the abrasion resistance according to EN 13329:2016

Description of the test:

Measuring abrasion resistance and consequently determining the abrasion class of laminate floor covering elements. Abrasion is achieved by rotating a test specimen in contact with a pair of loaded cylindrical wheels covered with specified abrasive paper. The number of revolutions of the test specimen required to cause a defined degree of abrasion is measured.

Test date: 4th of July 2016

Climatic condition before test: T:23°C R.H.:50%

Climatic condition during test: T:23°C R.H.:50%

Reference sample WOOD.BE	average IP - value	Abrasion class according to EN 13329:2016
F60606	3400	AC3

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12) Determination of mass per unit area according to EN ISO 23997:2012**Description of the test:**

A number of specimens of defined size are taken from a resilient floor-covering sample. The specimens are weighed and, from this, the mass per unit area of the floor covering is calculated.

Test date: 29th of July 2016
Climatic condition before test: T:23°C R.H.:50%
Climatic condition during test: T:23°C R.H.:50%

Reference sample WOOD.BE	Average value (g/m ²)	Nominal value (g/m ²)
F60702	7978	7930

Brussels, 31st of August 2016

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RD 'Floor coverings'