

TEST REPORT

Laboratory tests on indoor surfaces for multi-sports use according to the requirements of NF EN 14904 (06/2006)

PVC FLOOR 9.0T

JIANGSU SEESUN NEW MATERIAL TECHNOLOGY CO., LTD



Accreditation N° 1-2113 Scope of accreditation available on www.cofrac.fr

Only certains services from this report are covered by the accreditation. They are identified by the symbol *

LABORATORY TEST REPORT N° R171729-A1

LE MANS, LE 07/11/2017

This report is composed of 5 pages and 1 appendix.

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The results are valid only for the tested surface. Complete results available on request.

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1 CLIENT DETAILS

Company: Jiangsu Seesun New Material Technology Co.,Ltd Room904, Int'l Industry Design Mansion No.801 Hongqiao Road,Wux Jiangsu CHINA

2 **TEST PROGRAM**

LABOSPORT France has been commissioned by **Jiangsu Seesun New Material Technology Co.,Ltd** to carry out laboratory tests on the multi-sports indoor sport floor **PVC Floor 9.0T**.

Tests methods and technical requirements criteria considered in this report refer to the standard:

- NF EN 14904: Surfaces for sports areas - Indoor surfaces for multi-sports use - Specification (06/2006).

Dimensions of the tested samples conform to the testing standards.

Samples were tested in accordance with the client's instructions (installation conditions, laying type).

Tests are realized in laboratory where temperature and air humidity are controlled:

Temperature (°C)	23°C ± 2.0°C
Air humidity (%)	50 % ± 10%



3 SAMPLES (client declaration)

Product name	PVC Floor 9.0T	
Product type	Point-elastic sports floor	
Internal reference	021797 & 022709	
Receipt date	06/06/2017 & 12/10/2017	
Picture		
Description	9.0mm PVC Floor Type of installation: Glued Base: Concrete	
	Description and data sheet of the product has not been provided by the client	

Product identification

	Manufacturer declaration	Labosport results	Units
Total thickness	NC	8.9	mm
Mass per unit area	NC	5.4	kg/m²
Density	NC	611	kg/m ³
Hardness	NC	70	shore A
Colour	Different colors	Beige (Wood color)	-

NC : not communicated



4 TEST RESULTS

Properties	Methods	Units	Results	Requirements	Pass/Fail
Friction	EN 13036-4	-	* 84	80 - 110	Pass
			-3 / +3	± 4 from the average	
Shock absorption	EN 14808	%	* 26	25 - 75	- Pass
			-1 / +1	± 5 from the average	
Vertical deformation	EN 14809	mm	* 0.8	≤ 5.0	Pass
Vertical ball rebound	EN 12235	%	* 98	≥ 90	- Pass
			-1 / 0	± 3 from the average	
Resistance to rolling load		mm	0.50	≤ 0.50	Pass
	EN 1569	-	No damage	No damage	Pass
Resistance to wear	EN ISO 5470-1	g	0.18	≤ 1.00	Pass
Specular gloss	EN ISO 2813	%	22	Matt surface : ≤ 30	Pass
Resistance to indentation	EN 1516	mm	0.26	≤ 0.50	Pass
Resistance to impact	EN 1517	-	No damage	No damage	Pass



5 CONCLUSION

Results of the tests mentioned below, covered by the COFRAC accreditation, comply with the requirements of the NF EN 14904 standard:

- Shock absorption (Type: **P1**)
- Vertical deformation (Type : **P1**)
- Friction
- Vertical ball rebound

Results of the tests mentioned below, not covered by the COFRAC accreditation, comply with the requirements of NF EN 14904 standard:

- Resistance to rolling load
- Resistance to wear
- Specular gloss
- Resistance to indentation
- Resistance to impact

The results uncertainty has not been taken into account to declare or not the product conformity to the requirements.

Le Mans, le 07/11/2017

Po Enic CHAUVIN

Benoit Bossuet Synthetic Surfaces Technical Manager



Steeve Bazeille Laboratory D^{pt} Manager



ANNEX 1 : ACCREDITATIONS FOR LABORATORY TESTS

Scope

The COFRAC accreditation delivered to LABOSPORT certifies that this laboratory is competent to undertake laboratory tests according to the following standards:

Standard	Title
NF EN 12235	Surfaces for sports areas - Determination of vertical ball behaviour
NF EN 13036-4	Road and airfield surface characteristics - Test methods - Part 4: Method for measurement of slip/skid resistance of a surface: The pendulum test
NF EN 14808	Surfaces for sports areas - Determination of shock absorption
NF EN 14809	Surfaces for sports areas - Determination of vertical deformation

Description of COFRAC tests

Standard	Tests Equipment*	Principles
NF EN 12235	Acquisition system A05-00-00	A basketball ball is dropped vertically on the tested sample. The vertical ball rebound height is measured and the % relative to the drop height is calculated.
NF EN 13036-4	Device A02-00-00	The system is composed of a standard rubber "patin 57" slider assembled with a spring and fixed to the pendulum extremity. Dropping the pendulum arm from the horizontal position, the energy loss caused by the slider friction onto the surface is measured on a calibrated scale giving the oscillation arm amplitude decrease.
NF EN 14808	Acquisition system A04-00-00	A mass is allowed to fall onto a spring that rests, via a load cell and test foot on the test specimen, and the maximum force applied is recorded. The percentage reduction in this force relative to the maximum force measured on a concrete surface is reported as the 'Force Reduction'.
NF EN 14809	Acquisition system A04-00-00	A mass is allowed to fall onto a spring that rests, via a load cell and test foot, on the test specimen and the maximum and standard deformation of the surface is determined.

* = The delivery of a test report carrying "COFRAC-TEST" logo guarantees the connection of the equipment used during the test to the International Unit System (S.I).