Materials Testing Institute University of Stuttgart

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Test Report

Determination of sports surface properties

Report-No.:

903 4438 01

Client:

Bona AB

Murmansgatan 130 SE 200-21 Malmö

Order-No. (Client):

Order-No. (MPA):

903 4438 000 /Scz

Test Item:

Linoleum surface treated with "Bona LinoPrime + Bona Pure"

Specification Applied:

[1] DIN EN 14904:2006-06 Surfaces for sports areas – Indoor surfaces for multi-sports use – Specification

[2] DIN V 18032-2:2001-04 Sport halls - Halls for gymnastics, games and multi-purpose use - Part 2: Floors for sporting activities,

requirements, testing

Date of Receipt of Test Item

01.12.2017

Date of Test:

04.12.2017

Date of Report:

06.12.2017

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Enclosures:

Supplements:

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1 Purpose of Investigation

You commissioned us with testing of technical properties of a surface for sports areas according to DIN EN 14904 [1] and DIN V 18032-2 [2]. Therefor we received three Linoleum surface samples (size approx. 20 cm x 70 cm) labeled as follows:

Sample 1: coated with "Bona LinoPrime + Bona Pure"

The treatment of the Linoleum sample with the primer "Bona LinoPrime" was done according to manufacturer's instructions (product specification sheet dated 20.11.2017) in one layer with 20-25 ml/m². Subsequently a layer of "Bona Pure" was applied according to manufacturer's instructions (product specification sheet dated 27.11.2017) in one layer with 100-120 g/m².

2 Tests and Analyses Performed

The tests were carried out according to the procedures mentioned in DIN EN 14904 [1] and DIN V 18032-2 [2]. The tests performed are accredited tests according to DIN EN ISO/IEC 17025, see DAkkS-certificate (D-PL-11027-04-07).

3 Results of Investigation

The following test results were obtained.

Table 1: test results of linear friction acc. to DIN EN 14904 [1]:

Test spot	Linear friction	
	along	across
1	82	83
2	85	85
3	85	86
4	86	85
5	87	84
along/across Ø	85	85
Total Ø	85	

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Table 2: test results of sliding properties acc. to DIN V 18032-2 [2]:

Testing spot no.	Sliding coefficient μ	
1	0,42	
2	0,43	
3	0,42	
4	0,41	
5	0,42	

4 Summary

According to EN 14904 [1] the following requirements are valid: mean value (80 - 110), range (+/- 4 units). This requirement was fulfilled by the tested rubber sample coated with "Bona LinoPrime + Bona Pure".

According to DIN V 18032-2:2001-04 the following requirement is valid: $\mu_{min.}$ 0,4 - $\mu_{max.}$ 0,6. This requirement was fulfilled by the tested rubber samples coated with "Bona LinoPrime + Bona Pure".

Prepared by

Testing Engineer

Approved and released by

Dr.-Ing. Michael Stegmaier

Head of Unit