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Laboratory Testing Of Indoor Sports Flooring



On

'102 INDOOR FLOOR'

In accordance with EN 14904:2006

For

Flowcrete UK Ltd
The Flooring Technology Centre
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REPORT STATUS:	Final	Signature	Date
Report No:	15035/6532		
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FOREWORD

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1.0 INTRODUCTION

We refer to a sample of point elastic indoor sports flooring delivered to our laboratory for testing. The sample was identified as '102 Indoor Floor'. The sample was to be tested in accordance with BS.EN 14904:2006 as requested by Flowcrete UK Ltd.

2.0 TESTING AND METHODOLOGY

The following tests were undertaken in relation to the tolerances described in 'Indoor Sports Flooring EN 14904:2006':

- Determination of Vertical Ball Rebound – EN 12235:2013
- Determination of Shock Absorption - EN 14808:2005
- Determination of Vertical Deformation. – EN 14809:2005
- Determination of Friction – EN 13036-4:2011
- * Determination of Resistance to Indentation – EN 1516:1999
- * Determination of Resistance to Impact – EN 1517:2000
- * Determination of Resistance to Wear - EN ISO 5470-1:1999
- * Determination of Resistance to a Rolling Load – EN 1569:1999
- * Determination of Specular Gloss – EN 2813:

(*outwith our scope of ISO 17025 Accreditation)

3.0 SAMPLES

The sample was delivered and identified as '102 Indoor Floor'. The sample was laid and tested on a concrete substrate.

4.0 TEST RESULTS

All test results are given overleaf in tabular format; all testing was carried out in laboratory conditions at 23°C ± 2°C.

Temperature Range	21.1 °C – 22.5 °C
Humidity Range	25 % - 33 %



5.0 TEST RESULTS

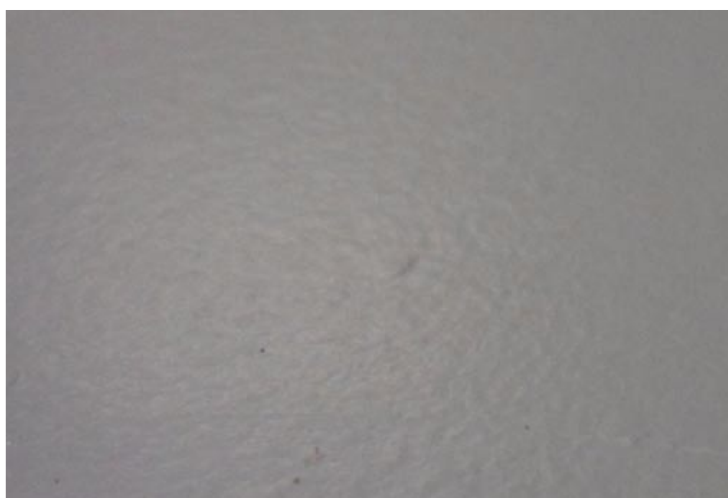
Sample and Test Details	
Product Reference Name	102 Indoor Floor
Date Tested	22/01/2014
Test Temperature	23°C
System Type	Point Elastic
Thickness	12.4 mm
Test Condition	Dry

Test Results			
Test Type	Mean Result		Specification Limits
Vertical Ball Rebound	98 %		> 90% of rebound on concrete
Shock Absorption	27 %		25 – 75 %
Vertical Deformation	0.5 mm		< 5.0 mm
Friction	102 PTV		Pendulum Test Value 80 – 110
Indentation	After 5 min	0.5 mm	≤ 0.5 mm
	After 24 h	0.0 mm	
Impact	No visible damage		No Perceivable Damage
Resistance to Wear	95 mg		Synthetic surfaces ≤ a loss of 1000mg per 1000 cycles Coatings and Lacquers ≤ a loss of 80mg per 1000 cycles
Resistance to a Rolling Load Indentation	0.15 mm		≤ 0.5mm (minimum resistance of 1500 N)
Specular Gloss	26 %		≤ 30 % for Matt ≤ 45 % for lacquered



SYSTEM PICTURE

Plan View



Side View



6.0 CONCLUSION

The point elastic system '102 Indoor Floor' complies with the requirements of BS.EN.14904:2006 for the test parameters measured.

End of report