

Sponsor: Interlocking Solutions Ltd
Old Brickworks,
Suit S1
Bates Industrial Estate
Church Road
Harold Wood
Romford
RM3 0HU
Attention of: Mr Walker

Technical Services Report

Subject: Assessment of the slip resistance of a rubber floor tile in accordance with DIN 51130
Firm: Interlocking Solutions Ltd
Contact: Mr Walker
Your ref: Black interlocking rubber studded floor tile
Our ref: FLO 0163986-0821
Date: 29th May 2008

Conditions of Issue:

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Tests marked † are not UKAS accredited

Report signed by: S L Morris
Floorcoverings Technologist
Floorcoverings Evaluation Centre
On behalf of SATRA Technology Centre Ltd

(Page 1 of 4)

SLIP RESISTANCE TESTING OF AN INTERLOCKING FLOOR TILE ACCORDING TO DIN 51130

As requested by Interlocking Solutions Ltd, an assessment has been conducted to determine the slip potential of the rubber interlocking floor tile submitted using the ramp method, as detailed below.

SAMPLE SUBMITTED

Sample reference:	Not Supplied
Description:	Studded rubber interlocking floor tile
Colour:	Black
Thickness:	1.5mm
Size:	500mm x 500mm
Sample condition:	New
Application:	Contract use
Date received:	20 th May 2008
Date Conditioned:	20 th May 2008
Testing commenced:	28 th May 2008
Testing completed:	29 th May 2008
Testing conducted by:	Michael Cawley, Dave Smith

TESTS CARRIED OUT

- DIN 51130:1992 Testing of floor coverings - Determination of slip resistance – Work rooms and areas of work with an increased risk of slipping – Walking method – ramp test ⁽¹⁾

Note:

1) The test method DIN 51130 has been modified. The standard shoe described in DIN 51130 clause 4 is no longer available and no replacement has yet been finalised. To ensure the slip testing is completed according to the method and on the advice sort from the German Standard, we have replaced the standard shoe with the UVEX Athletic Boots (9453/9). Verification testing has been carried out using the three standard floor coverings E, P and R to ensure the replacement shoes meet the requirements described in the method DIN 51130.

RESULTS

No.	Operator 1 Inclined Platform Shod (°)	Operator 2 Inclined platform shod (°)
1	7.2	5.8
2	7.6	6.8
3	6.8	6.4
Mean	6.8	
Category	R9	

COMMENTS

This test measures slip through the use of a human subject, who walks backwards and forwards over contaminated flooring at ever increasing angles of inclination. The resulting angle at which slip occurs classifies the flooring via a rating using a designation such as R9 up to R14.

The test surface is coated with a specific viscosity grade oil and is tilted from the horizontal at a rate of one degree per second. Two people perform the test separately with the subject wearing safety footwear and each determine the angle three times; the overall average of the six results is used to categorise the surface with the R rating as detailed below.

R rating category

R Value	Category Static Friction is:	Angle of Inclination
R9	Low	6° to 10°
R10	Normal	>10° to 19°
R11	Above Average	>19° to 27°
R12	High	>27° to 35°
R13	Very High	>35°

Note to end use applications:

- R9 Floors in work rooms and work areas without a high risk of slipping. General and private areas.
- R10 to R13 Floors in workrooms and work areas where there is an increased risk of slipping due to grease, oil, water, foods, left-overs, dust, flour, plant clippings, etc.

The sample submitted achieved an R9 rating with an average slipping angle of 6.8°.

CONCLUSION

With regards to the requirements laid out in DIN 51130 the floor samples submitted referenced “Black studded rubber interlocking floor tile” demonstrates low static friction, Category R9, when assessed using the DIN 51130 ramp method.

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Firm: Interlocking Solutions Ltd
CQ: FLO 0163986-0821
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(Page 4 of 4)

Signed:

