SATRA Technology Centre Ltd
Wyndham Way, Telford Way, Kettering,
Northamptonshire, NN16 8SD United Kingdom
Tel: +44 (0) 1536 410000
email: info@satra.com
www.satra.com

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TECHNICAL REPORT

COBA Europe Ltd Europark Industrial Estate A5 Watling Street Rugby Leicestershire CV23 0AL United Kingdom	SATRA reference:	FLO2006125	
		2428	5
	Report ID/Issue number:	42932/1	
	Your reference:	50949	
	Date samples received:	03/07/2024	
	Date(s) work carried out:	03/07/2024 to 06/08/2024	
	Date of report:	15/08/2024	

Testing Requirements

Testing of one product described by the customer as "GRP Grating"
to EN 16165:2021 Annex B.

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Report Signed by:

Philip Weal

Report Signatory

TESTING OF ONE SAMPLE DESCRIBED BY THE CUSTOMER AS "GRP GRATING" TO EN 16165:2021 ANNEX B – SHOD RAMP TEST.

As requested by Coba Europe Ltd, an assessment has been conducted to determine the slip potential of the sample submitted referenced "GRP Grating" using the shod ramp method, as detailed below.

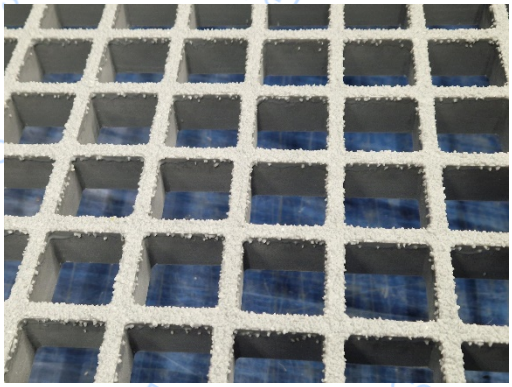
SUMMARY

When tested in accordance with the requirements as described in EN 16165:2021 Annex B, the floor sample submitted under the reference "GRP Grating" has demonstrated a ramp test value, α_{shod}, of 36°.

When the results of this testing were assessed in accordance with the National Annex NA in DIN EN 16165:2021 (2), the sample met the requirements for an **R 13 rating.**

SAMPLE SUBMITTED

Sample reference: "GRP Grating" (1)
Surface structure: Grating Panel
Appearance:



Date received: 03 July 2024
Testing completed: 06 August 2024
Testing conducted by: Phil Weal & Tom Notley

TESTS CARRIED OUT

- EN 16165:2021. Determination of slip resistance of pedestrian surfaces – Methods of evaluation. Annex B – Shod ramp test

Notes:

(1) The information supplied by the customer. Not verified by SATRA.
(2) Results assessed in accordance with the German National Annex NA (informative) included in DIN EN 16165:2021, as the information relating to R rating classification is not included in EN 16165:2021.
(3) Testing stopped due to operator safety concerns once highest slip resistance class had been achieved.

RESULTS:

Testing of sample, described by the customer as "GRP Grating", in accordance with EN 16165:2021 Annex B – Shod Ramp Test.

Test No.	Operator A (°)	Operator B (°)
1	>36.1(3)	>36.3(3)
2	>36.2(3)	>36.4(3)
3	>36.1(3)	>36.1(3)
Operator Mean ($\alpha_{0,j}$)	**>36.1**	**>36.3**
Operator Correction Factor (D_j)	**0.07**	**-0.05**
Corrected Ramp Test Value (α_{shod})	**>36°**	
R Rating (DIN EN 16165:2021) (2)	**R 13**	

DIN EN 16165:2021 National Annex NA, NA.2 Classification of the results by shod ramp test (2).

The assignment of the test result (α_{shod}) of the method according to EN 16165:2021 Annex B, can be carried out in accordance with Table NB.2.

Table NB.2 – Assignment of the test result α_{shod}, to the classes of slip resistance

Test result α_{shod}	Slip resistance class
$6° \leq \alpha_{shod} < 10°$	R 9
$10° \leq \alpha_{shod} < 19°$	R 10
$19° \leq \alpha_{shod} < 27°$	R 11
$27° \leq \alpha_{shod} < 35°$	R 12
$35° \leq \alpha_{shod}$	R 13

Annex 1.0

Operator Verification results for EN 16165:2021 Annex B.

Operator A

Verification Board		Operator A Verification				
		Test Run			Average	Difference
		1	2	3		
St-I	**(8.0 ± 3.0)**	10.0	10.3	10.1	10.1	2.1
St-II	**(19.9 ± 3.0)**	22.6	22.4	22.4	22.5	2.6
St-IIIA	**(25.7 ± 3.0)**	25.8	25.9	25.7	25.8	0.1

Operator B

Verification Board		Operator B Verification				
		Test Run			Average	Difference
		1	2	3		
St-I	**(8.0 ± 3.0)**	10.7	10.5	10.1	10.4	2.4
St-II	**(19.9 ± 3.0)**	22.1	21.5	22.2	21.9	2.0
St-IIIA	**(25.7 ± 3.0)**	25.1	25.9	25.9	25.6	-0.1

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When reporting results against a conformance statement (Pass/Fail or the allocation of a class or level) then uncertainty of measurement is taken into account based on a non-binary acceptance which itself is based on the guard band being equal to the expanded uncertainty.

Where the result corrected for uncertainty falls within the tolerance of the conformance statement then the risk of the conformance statement being a false accept or false reject is up to 2.5% and SATRA will in this instance quote a Pass/Fail, class, or level.

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