MAIN LABORATORY SASSUOLO

LAB N° 1170 L

Testing, Experimentation and Quality Control Laboratory

Main Laboratory Sassuolo S.r.l. - Via F.lli Setti, 7 - 42019 Scandiano - Reggio Emilia (Italy) Cod.Fisc. e P.IVA 03164360368
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TEST REPORT n. 3317/2022/I

DIN EN 16165:2021-12
DETERMINATION OF SLIP RESISTANCE OF PEDESTRIAN SURFACES
METHODS OF EVALUATION
ANNEXE A - BAREFOOT RAMP TEST

Date of report:	07/13/2022
Customer:	**GRUPPO CERAMICHE GRESMALT S.p.A.** Via Statale 467, 45 42013 Casalgrande (RE)
Requested on:	06/30/2022
Our ref.number:	33240
Execution place of tests:	Scandiano (RE)
Description of the sample:	"Ceramic tiles 604x604 mm marked: Nordic 604 Ivory tono J49A"
Sampling:	carried out by the customer
Receipt date of samples:	07/04/2022
Execution date of tests:	start: 07/08/2022 end: 07/08/2022
Test specification:	DIN EN 16165:2021-12 - Annexe A Determination of slip resistance of pedestrian surfaces - Methods of evaluation - Barefoot ramp test
Warnings:	*This test report may not be reproduced in part without our written approval.* *The results reported only refer to the samples tested, as received, and are only valid under the conditions in which the work was carried out.* *The information enclosed in inverted commas was provided by the customer and the laboratory accepts no liability for it.*

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DIN EN 16165:2021-12

DETERMINATION OF SLIP RESISTANCE OF PEDESTRIAN SURFACES

METHODS OF EVALUATION

ANNEXE A - BAREFOOT RAMP TEST

Scope: this part of the standard specifies the test method for determining the slip resistance of pedestrian surfaces using the barefoot ramp test.

Principle: Two bare-foot test persons are used to determine the angle of slip, while the pedestrian surface material being tested is continuously coated with water containing a wetting agent. The test persons, each in turn, facing down the ramp and with an upright posture, move forwards and backwards over the test surface, as they increase their angle of inclination, until the safe limit of walking is reached and a slip occurs. The mean angle of slip obtained is used to express the degree of slip resistance. Subjective influences on the angle of slip are limited by means of a correction procedure.

Test surface: sample prepared as described in A.2.4 of the standard

Surface characteristics: flat

Angle of slip: $\alpha_{barefoot}$ = 21°

Classification **National Annexe NA.1**

$\alpha<12°$	$12°\leq\alpha<18°$	$18°\leq\alpha<24°$	$\alpha\geq24°$
NC	A	B	C
		X	

U = Unclassifiable

When classifying the result the laboratory applies the simple binary rule of acceptance of the result without guard band (Section 4.2.1 of ILAC-G8:09/2019).
When the test result falls in the range centred on the class limit value and having as half amplitude the value of the extended uncertainty U the laboratory reports the value of the measurement uncertainty. In this case the risk (probability) of giving an incorrect classification is < 50%, in other cases the probability is < 2.5%.

MAIN LABORATORY SASSUOLO SRL
Centro di Ricerca, Sperimentazione e Controllo Qualità

The Director
Giulia Gaido

End of test report

MAIN LABORATORY SASSUOLO

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TEST REPORT n. 3405/2022/I

DIN EN 16165:2021-12
DETERMINATION OF SLIP RESISTANCE OF PEDESTRIAN SURFACES
METHODS OF EVALUATION
ANNEXE B - SHOD RAMP TEST

Date of report:	07/15/2022
Customer:	**GRUPPO CERAMICHE GRESMALT S.p.A.** Via Statale 467, 45 42013 Casalgrande (RE)
Requested on:	06/30/2022
Our ref.number:	33240
Execution place of tests:	Scandiano (RE)
Description of the sample:	"Ceramic tiles 604x604 mm marked: Nordic 604 Ivory tono J49A"
Sampling:	carried out by the customer
Receipt date of samples:	07/04/2022
Execution date of tests:	start: 07/09/2022 end: 07/09/2022
Test specification:	DIN EN 16165:2021-12 - Annexe B Determination of slip resistance of pedestrian surfaces - Methods of evaluation - Shod ramp test
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TEST REPORT n. 3405/2022/I

DIN EN 16165:2021-12

DETERMINATION OF SLIP RESISTANCE OF PEDESTRIAN SURFACES

METHODS OF EVALUATION

ANNEXE B - SHOD RAMP TEST

Scope: this part of the standard specifies the test method for determining the slip resistance of pedestrian surfaces using the shod ramp test.

Principle: two test persons wearing shoes are used to determine the angle of slip, after the pedestrian surface material being tested has been evenly coated with oil. The test persons, each in turn, facing down the ramp and with an upright posture, move forwards and backwards over the test surface, as they increase their angle of inclination, until the safe limit of walking is reached and a slip occurs. The mean angle of slip obtained is used to express the degree of slip resistance. Subjective influences on the angle of slip are limited by means of a correction procedure.

Test surface: sample prepared as described in B.2.2 of the standard

Surface characteristics: flat

Angle of slip: α_{shod} = 15°

Classification **National Annexe NA.2**

α<6°	6°≤α<10°	10°≤α<19°	19°≤α<27°	27°≤α<35°	α≥35°
U	R9	R10	R11	R12	R13
		X			

U = Unclassifiable

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The Director
Giulia Gaido

End of test report

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ANNEXE B - SHOD RAMP TEST

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DIN EN 16165:2021-12

DETERMINATION OF SLIP RESISTANCE OF PEDESTRIAN SURFACES

METHODS OF EVALUATION

ANNEXE B - SHOD RAMP TEST

Scope: this part of the standard specifies the test method for determining the slip resistance of pedestrian surfaces using the shod ramp test.

Principle: two test persons wearing shoes are used to determine the angle of slip, after the pedestrian surface material being tested has been evenly coated with oil. The test persons, each in turn, facing down the ramp and with an upright posture, move forwards and backwards over the test surface, as they increase their angle of inclination, until the safe limit of walking is reached and a slip occurs. The mean angle of slip obtained is used to express the degree of slip resistance. Subjective influences on the angle of slip are limited by means of a correction procedure.

Test surface: sample prepared as described in B.2.2 of the standard

Surface characteristics: flat

Angle of slip: α_{shod} = 15°

Classification **National Annexe NA.2**

α<6°	6°≤α<10°	10°≤α<19°	19°≤α<27°	27°≤α<35°	α≥35°
U	R9	R10	R11	R12	R13
		X			

U = Unclassifiable

When classifying the result the laboratory applies the simple binary rule of acceptance of the result without guard band (Section 4.2.1 of ILAC-G8:09/2019).
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End of test report