

**MODENA CENTRO PROVE s.r.l.**

Sede legale e Laboratori: 41123 Modena (Italy) - Via Sallustio, 78  
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C.C.I.A.A. Modena n. 228587 - Tribunale di Modena n° 2231 - C.F. e P. IVA n. 01592020364

MECCANICA

ECOLOGIA

CERAMICA

ALIMENTARE

Modena, 19/03/18

To **CERAMIKA NOWA GALA S.A.**  
UL. CERAMICZNA 1  
26-200 KONSKIE PL

Attn. **Ewelina Stepień**

MATERIAL and/or SAMPLE to be tested	Denomination of the Sample	Client Reference – Your delivery	date
porcelain tiles	WALNUT STRUCTURE	your delivery	21/02/2018

Here attached, you will receive the Test Report of Serial No. **20181402/n**, which shows the results of tests required.

**MODENA CENTRO PROVE**

MODENA CENTRO PROVE  
  
Director  
Sant'Unione dr. Giuseppe



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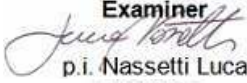



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## TEST REPORT: 20181402/1

Modena, 19/03/18

<b>CUSTOMER</b>	<b>CERAMIKA NOWA GALA S.A. - - UL. CERAMICZNA 1 - 26-200 - KONSKIE - PL</b>
<b>MATERIAL and/o SAMPLE to be tested</b>	porcelain tiles;
<b>Denomination</b>	WALNUT STRUCTURE;
<b>Date of sample reception</b>	21/02/2018;
<b>Kind of test executed</b>	Determination of the Anti-Slip characteristics
<b>Referring standards</b>	DIN 51130:2014
<b>Shifting from standards</b>	No one
<b>Equipment</b>	Pullmeter with ramp cod. MCP C150
<b>Calibration</b>	RT 01 of 30/08/2017
<b>Subcontracted phases</b>	No one
<b>Sampling made by</b>	Customer

*The test results showing in this Report are only referred to the sample taken by our staff or supplied by the Customer. He commits himself to reproduce integrally this document. Partial reproduction is forbidden.  
The times of retain of the samples was indicated in the offer related to the test report.*

<p><b>Examiner</b>  p.i. Nasseti Luca <b>Examiner</b>  p.i. Bortolai Alberto</p>	<p><b>MODENA CENTRO PROVE</b>  Ceramic Dept. Responsible P.I. De Pasquale Roberto</p>	<p><b>MODENA CENTRO PROVE</b>  Director Sant'Unione dr. Giuseppe</p>
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## DETERMINATION OF THE ANTI-SLIP CHARACTERISTICS

Beginning date : 01/03/18

Analysis ending date : 02/03/18

**SAMPLE** : Ceramic tiles, marked «**WALNUT STRUCTURE** »

The test regards the working areas with a high slipping risk: the procedure foresees that a person taking part in the test walks on an inclined plane which is floored with the tested tiles and greased an oil whose viscosity is SAE 10W-30. During the execution of the test it is determined if the tested material may be properly laid down in specific work environments.

There is an average inclination which determines the insecurity of the person walking on the inclined plane and causes the classification of the tested tiles in one of five groups used to determine the sliding resistance.

### RESULTS

- Mean inclination angle  $\alpha_{ges}$  : 23.7°
- Classification : R 11

### CLASSIFICATION

Mean value $\alpha_{ges}$	Class
$6^\circ \leq \alpha_{ges} \leq 10^\circ$	R 9
$10^\circ < \alpha_{ges} \leq 19^\circ$	R 10
$19^\circ < \alpha_{ges} \leq 27^\circ$	R 11
$27^\circ < \alpha_{ges} \leq 35^\circ$	R 12
$\alpha_{ges} > 35^\circ$	R 13

**Note** : The group classification give the parameter for determine the sliding resistance: the group R 9 is less anti-slip, the group R 13 as the maximum effectiveness anti-slip.

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Examiner  
  
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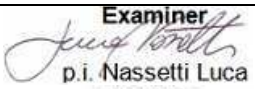



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## TEST REPORT: 20181402/2

Modena, 19/03/18

<b>CUSTOMER</b>	<b>CERAMIKA NOWA GALA S.A. - - UL. CERAMICZNA 1 - 26-200 - KONSKIE - PL</b>
<b>MATERIAL and/o SAMPLE to be tested</b>	porcelain tiles;
<b>Denomination</b>	WALNUT STRUCTURE;
<b>Date of sample reception</b>	21/02/2018;
<b>Kind of test executed</b>	Determination of Slipperiness
<b>Referring standards</b>	DIN 51097:1992
<b>Shifting from standards</b>	None
<b>Equipment</b>	Pullmeter with ramp cod. MCP C150
<b>Calibration</b>	RT 01 of 30/08/2017
<b>Subcontracted phases</b>	None
<b>Sampling made by</b>	Customer

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**DETERMINATION OF SLIPPERINESS**

Beginning date : 01/03/18

Analysis ending date : 02/03/18

**SAMPLE** : Ceramic tiles, marked « **WALNUT STRUCTURE** »

A person walks backwards and forwards barefoot across the tiles to be tested, the inclination of which is increased by about 1° per second; the angle of inclination at which the person is no longer in conditions of safety is defined as the slip angle. The surface is wet continuously with a solution ( 1 g/l of wetting agent + water ).

**RESULTS**

- Sample dimensions (length, width) : 1x 0.5 (m)
- Width of joints : 5(mm)
- Groutig substance : mortar
- D of profiles : none
  
- SLIP ANGLE : 24.9°
- CLASSIFICATION : C(A+B+C)

**CLASSIFICATION**

Total Average Values	Group Classification
< 12	0
≥ 12°	A
≥ 18°	B
≥ 24°	C

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