

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

Sede legale e Laboratori: 41123 Modena (Italy) - Via Sallustio, 78
Tel. 059 822417 r.a. - Fax 0598635115 - e-mail : info@modenacentroprove.it - www.modenacentroprove.com
C.C.I.A.A. Modena n. 228587 - Tribunale di Modena n° 2231 - C.F. e P. IVA n. 01592020364

MECCANICA

ECOLOGIA

CERAMICA

AUTOMOTIVE

Modena, 08/10/21

To **GRUPPO BETA SPA**
S.S.569 NR.234 FRAZ. SOLIGNANO
NUOVO
41014 CASTELVETRO DI MODENA MO

Attn. **Dott. Montanini**

MATERIAL and/or SAMPLE to be tested	Denomination of the Sample	Client Reference – Your delivery	date
Porcelain tiles	CONCERT	Our withdrawal of samples	22/09/2021

Here attached, you will receive the Test Report of Serial No. **20216932**/n, which shows the results of tests required.

MODENA CENTRO PROVE

MODENA CENTRO PROVE

Director
Sant'Unione dr. Giuseppe

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

Sede legale e Laboratori: 41123 Modena (Italy) - Via Sallustio, 78
Tel. 059822417 r.a. - Fax 059380281 - e-mail : info@modenacentroprove.it - www.modenacentroprove.com
C.C.I.A.A. Modena n. 228587 - Tribunale di Modena n° 2231 - C.F. e P. IVA n. 01592020364

TEST REPORT: 20216932/1

Modena, 08/10/21

CUSTOMER

**GRUPPO BETA SPA - - S.S.569 NR.234 FRAZ. SOLIGNANO NUOVO -
41014 - CASTELVETRO DI MODENA - MO**

MATERIAL and/o SAMPLE to be tested

Porcelain tiles;

Denomination

CONCERT;

Date of sample reception

22/09/2021;

Kind of test executed

Determination of Slipperiness

Referring standards

D.M. 236 - 89 Rif.B.C.R.

Shifting from standards

No one

Equipment

Pullmeter Tortus cod. MCP C142

Subcontracted phases

No one

Sampling made by

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.*

Examiner

Luca Nassetti
p.i. Nassetti Luca

MODENA CENTRO PROVE
Roberto De Pasquale
Ceramic Dept. Responsible
P.I. De Pasquale Roberto

MODENA CENTRO PROVE
Giuseppe Sant'Unione
Director
Sant'Unione dr. Giuseppe



MODENA CENTRO PROVE s.r.l.
Sede legale e Laboratori: 41123 Modena (Italy) - Via Sallustio, 78
Tel. 059822417 r.a. - Fax 059380281 - e-mail : info@modenacentroprove.it - www.modenacentroprove.com
C.C.I.A.A. Modena n. 228587 - Tribunale di Modena n° 2231 - C.F. e P. IVA n. 01592020364

DETERMINATION OF SLIPPERINESS

Beginning date : 27/09/2021

Analysis ending date : 27/09/2021

SAMPLE : Ceramic tiles, marked « **CONCERT** »

The test has been performed using the TORTUS floor friction tester, that measures the dynamic coefficient of friction between a loaded slider and the surface under test.

OPERATING CONDITIONS

- Speed of travel (mm/s) : 17
- Load applied to slider (g) : 200
- Slider's diameter ($\varnothing$) mm : 9

RESULTS

Surface Conditions	Type of course	Coefficient of Friction (COFd) μ
Dry (d) Leather	Straight	0,33
	Oblique right side	0,34
	Oblique left side	0,33

- Average coefficient of friction COFd (μ) : 0,33

Surface Conditions	Type of course	COEFFICIENT of FRICTION (COFw) μ
Wet (water + wetting agent) (w) Hard shoe – heeling rubber 4S	Straight	0,67
	Oblique right side	0,67
	Oblique left side	0,67

- Average coefficient of friction COFw (μ) : 0,67

REQUIREMENTS

- D.M. 236 - 14/06/1989** : > 0.40 μ it is for dry ground/leather for is bathed/rubber

RECOMMENDED VALUES

(B.C.R. Rep. CEC 6/81)

- $\mu < 0.19$: Dangerous
- $0.20 < \mu < 0.39$: Excessive
- $0.40 < \mu < 0.74$: Satisfactory
- $\mu > 0.75$: Excellent

Examiner

Luca Nassetti
p.i. Nassetti Luca

MODENA CENTRO PROVE

Roberto De Pasquale
Ceramic Dept. Responsible
P.I. De Pasquale Roberto

MODENA CENTRO PROVE

Giuseppe Sant'Unione
Director
Sant'Unione dr. Giuseppe