

TEST REPORT No. 414009

Customer

S.L. S.r.l.

Via dell'Artigianato, 13/15 - 20882 BELLUSCO (MB) - Italy

Item#

**non-slip flooring in 46 grain corundum
named "SAFETY TREAD"**

Activity



**slip resistance of pedestrian surfaces
(ramp method with shod feet)
in accordance with standards UNI EN 16165:2021
and DIN EN 16165:2023-02**

Results

Slip angle "α_{shod}"	>38°
Classification DIN EN 16165:2023-02 - National Annex NB.2	R13

(#) according to that stated by the customer.

Bellaria-Igea Marina - Italy, 22 February 2024

Chief Executive Officer

Order:
99722

Item origin:
sampled and supplied by the customer

Identification of item received:
2024/0293/D dated 31 January 2024

Activity date:
from 9 febbraio 2024 to 19 febbraio 2024

Activity site:
external laboratory qualified by Istituto Giordano

Contents	Page
Description of item#	2
Normative references	2
Method	2
Results	3

This document is made up of 3 pages and shall not be reproduced except in full without extrapolating parts of interest at the discretion of the customer, with the risk of favoring an incorrect interpretation of the results, except as defined at contractual level.

The results relate only to the item examined, as received, and are valid only in the conditions in which the activity was carried out.

This document is the English translation of the test report No. 414009 dated 22 February 2024 issued in Italian; in case of dispute the only valid version is the Italian one.

Date of translation: 26 February 2024.

The original of this document consists of an electronic document digitally signed pursuant to the applicable Italian Legislation.

Head of Building Materials Laboratory:
Dott. Geol. Gianluca Ferraiolo

Compiler: Francesca Manduchi

Page 1 of 3

Description of item#

The item under examination consists of a non-slip flooring panel in 46 grain corundum, nominal dimensions 100 cm × 50 cm.



Photo of the item

Normative references

Standard	Title
UNI EN 16165:2021	Determinazione della resistenza allo scivolamento delle superfici pedonali - Metodi di valutazione (<i>Determination of slip resistance of pedestrian surfaces - Methods of evaluation</i>)
DIN EN 16165:2023-02 National Annex NB.2	Bestimmung der Rutschhemmung von Fußböden - Ermittlungsverfahren; Deutsche Fassung (<i>Determination of slip resistance of pedestrian surfaces - Methods of evaluation</i>)

Method

Annex B of the UNI EN 16165:2021 and DIN EN 16165:2023-02 standards specifies the test method for determining the slip resistance of pedestrian surfaces using the fit ramp test.

Two test persons wearing shoes are used to determine the slip angle after the pedestrian surface material to be tested has been uniformly coated with oil. The technicians, each in turn, facing the ramp and with an upright posture, move back and forth on the test floor, increasing the angle of inclination, until the safe walking limit is reached. The average slip angle obtained is used to express the degree of slip resistance. The subjective influences on the slip angle are limited by a correction procedure.

(#) according to that stated by the customer; Istituto Giordano declines all responsibility for the information and data provided by the customer that may influence the results.

Results

Panel dimensions	50 cm × 100 cm
Surface structure	Structured
Slip angle "α_{shod}"	>38°
Classification in accordance with standard DIN EN 16165:2023-02 - National Annex NB.2	R13

The following table shows the relation between group classification and the angle of inclination in accordance with standard DIN EN 16165:2023-02 - National Annex NB.2.

Average angle of inclination "α_{shod}"	Group classification
$\alpha_{shod} < 6^\circ$	n.c. (not classifiable)
$6^\circ \leq \alpha_{shod} < 10^\circ$	R 9
$10^\circ \leq \alpha_{shod} < 19^\circ$	R 10
$19^\circ \leq \alpha_{shod} < 27^\circ$	R 11
$27^\circ \leq \alpha_{shod} < 35^\circ$	R 12
$\alpha_{shod} \geq 35^\circ$	R 13