



TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.
Technical and Test Institute for Constructions Prague

Akreditovaná zkušební laboratoř, Autorizovaná osoba, Certifikační orgán, Inspekční orgán
Accredited Test Laboratory, Authorised Body, Certification Body, Inspection Body

Branch 0300 Plzeň - Accredited testing laboratory No. 1018.1, CIA,
according ČSN EN ISO/IEC 17025

REPORT

No. 030 – 052526

on determination of ceramic tiles

Customer: Tubądzin Management Group Sp. z o.o.

Cedrovice Parcela 11

95-035 Ozorków

Poland

Order no.: TZU-001

from 2015-11-16

Order No.: Z030150412

Enclosures: –

This Report has been made in duplicate. The first original copy is for the customer, the other will be filed along with other documentation in TZÚS Plzeň.

Person responsible for the wording of this Report:

Ing. Hana Kotorová
Report Author

Person responsible for the correctness of this Report:



Plzeň 30th November 2015

Vít Ruml
testing laboratory manager

Statement:

- 1) The test results relate to the items under test (samples) only.
- 2) This report may not be reproduced otherwise than complete without the written consent of TZÚS.

Technický a zkušební ústav stavební Praha, s. p., Pobočka 0300 - Plzeň,
☎: 377 243 331, ☎: 377 430 345, Fax: +420 377 430 347, Internat.: +420 377 244 158,
Bankovní spojení (Bank): KB Praha 1 Czech Republic, ú.č.: 1501-931/0100

Zahradní 15, 326 00 Plzeň, Česká republika
✉ e-mail: kotorova@tzus.cz, www.tzus.cz
IČ: 000 15679 DIČ: CZ00015679

1 Initial Data

1.1 Assignment

- Execution of tests of slipperiness of ceramic tiles according the requirement of the client:
 - **determination of slipperiness – walking methods – ramp test** (barefoot method) according **DIN 51097, P CEN/TS 16165 (method A)**

1.2 Samples

- Sample specification: ceramic tiles dry – pressed declared EN 14411, Bla, annex G type: MODERN IPE format: 223x898/148x898 mm
- Producer: **Tubądzin Management Group Sp. z o.o.**, Cedrovice Parcela 11, **95-035 Ozorków, Poland**
- Samples supplied on 20. 11. 2015
- Tests were initiated on: 2015-11-25
- Tests were completed on: 2015-11-30.

2 Sampling Method

The test samples were supplied by the customers. The samples were recorded this way:
no. sample: VZ 030151262



3 Testing Procedures

DIN 51097

Testing of floor coverings determination of anti – slip properties wet-loaded barefoot areas; walking method – ramp test

P CEN/TS 16165

Determination of slip resistance of pedestrian surfaces – Methods of evaluation

4 Measurements and Tests

4.1 Determination of slipperiness – walking methods – ramp test (barefoot method) DIN 51097, P CEN/TS 16165 (method A)

Testing samples	Critical angle of slip classification according DIN 51097
Type MODERN IPE	21,0° B

5 Conclusion

- Based on the results of the test pursuant to DIN 51097, P CEN/TS 16165 (method A) the tested ceramic tiles dry – pressed declared EN 14411, Bla, annex G type: MODERN IPE format: 223x898/148x898 mm, produced in the Tubądzin Management Group Sp. z o.o., Cedrovice Parcela 11, 95-035 Ozorków, Poland classified in group B (angle of slip 21°) and can be used for assembly of safe paving, e.g. corridors for walking barefoot, if not fall below A, showers, galleries pools, bottom of pools in the area for non-swimmers, if in some parts of the water depth is less than 80 cm, bottom of the pool with waves in space for non-swimmers, movable bottom, pool, ladders and stairs outside the pool, sauna and relaxation rooms, unless they fall under A etc. They can be used even into group A is prescribed (Group A – e.g. the corridors for walking barefoot (mostly dry), joint and separate dressing rooms, bottom of pools in the area for non-swimmers, when the whole area of water depth greater than 80 cm, sauna and relaxation rooms (mostly dry) etc.)

It should be pointed out that to ensure proper slip resistant function of ceramic tiles in the sense of stated conclusion, it is needed to maintain surface in clean conditions and without significant wear. Other properties were not subject to testing.

END OF REPORT

