

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

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TEST REPORT

issued by Testing Laboratory No. 1018.3 accredited pursuant to ČSN EN ISO/IEC 17025:2005 by Czech Accreditation Institute

No. 030 - 056939

from determination of anti-slip properties of ceramic tiles

Ordering Party:

CERSANIT S.A.

Address:

Al. Solidarności 36, 25-323 Kielce, Poland

Company ID:

5640001666

Manufacturer:

Cersanit III S.A.

Address:

ul. Uczniowska 21, 58-306 Wałbrzych, Poland

Test sample:

Ceramic tiles: HIMALAYA group Bla 297x598mm

RECLAIMED group Bla 420x420mm IDEAL MARBLE group Bla 326x326mm

Order No.:

Z030 18 0235

Number of pages of the Test Report incl. title page: 4

Pages of Annexes: -

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Vít Rumi

head of the testing department

Plzeň, 2018-07-23

Declaration: 1) The test results in this Report relate only to the tested article and they do not substitute any other documents 2) The Test Report must be copied as a whole only otherwise a written consent of the testing laboratory is needed.

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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 P CEN/TS 16165 (annex A)
 - determination of slipperiness— pendulum test according P CEN/TS 16165 (annex C)
 in dry and in wet condition

1.2 Samples

• Sample specification: Ceramic tiles dry-pressed, EN 14411, Annex G, group Bla,

type:

HIMALAYA 297x598mm RECLAIMED 420x420mm IDEAL MARBLE 326x326mm

- Producer: Cersanit III S.A., ul. Uczniowska 21, 58-306 Wałbrzych, Poland
- Samples supplied on 11.7.2018.

2 Sampling Method

The test samples were supplied by the customers on 11.7.2018.

The samples were recorded this way:

under no. sample

VZ 030180660

HIMALAYA 297x598mm

VZ 030180661

RECLAIMED 420x420mm

VZ 030180662

IDEAL MARBLE 326x326mm

3 Testing Procedures

P CEN/TS 16165: 2013

Determination of slip resistance of pedestrian surfaces – Methods of evaluation

4 Measurements and Tests

4.1 Determination of slipperiness – walking methods – ramp test (wet-loaded barefoot areas method) P CEN/TS 16165 annex A

| testing samples | Critical angle of slip classification according P CEN/TS 16165 (annex At) | |
|-------------------------|---|--|
| HIMALAYA 297x598mm | | |
| sample no. VZ 030180660 | 22,0° B | |



4.2 Determination of slipperiness by method of pendulum test P CEN/TS 16165 Used rubber: S4, slider IRHD 96 room temperature: 21°C

| RECLAIMED 420x420mm sample no. VZ 0301806616 | Pendulum deflection dry | Pendulum deflection wet |
|---|-------------------------|-------------------------|
| 1 | 50*) | 30°) |
| 2 | 50*) | 30*) |
| 3 | 53*) | 30°) |
| Average | 51 | 30 |

^{*)}this value is always the average of 5 measurements

4.3 Determination of slipperiness by method of pendulum test P CEN/TS 16165 Used rubber: S4, slider IRHD 96 room temperature: 21°C

| IDEAL MARBLE 326x326mm sample no. VZ 030180662 | Pendulum deflection dry | Pendulum deflection wet |
|---|-------------------------|-------------------------|
| 1 | 50 ^{*)} | 35*) |
| 2 | 50 ^{*)} | 35 ^{*)} |
| 3 | 51 ^{*)} | 33*) |
| Average | 50 | 34 |



5 Conclusion

5.1 Based on the results of the test pursuant to P CEN/TS 16165 (Annex A) the tested samples of HIMALAYA 297x598mm, produced in the Cersanit III S.A., ul. Uczniowska 21, 58-306 Wałbrzych, Poland, classified in group B

and can be used for assembly of safe paving, e.g. on 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. and 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 pallet in the sense of stated conclusion, it is needed to maintain surface in clean conditions and without significant wear. On the flooring was tested slip, other properties were subject to determination.

5.2 The tested samples of ceramic tiles RECLAIMED 420x420mm produced in the the Cersanit III S.A., ul. Uczniowska 21, 58-306 Wałbrzych, Poland, achieve slip resistance test according to P CEN/TS 16165 (Annex C) swing the pendulum method (average values: 51 (dry), 30 (wet)).

It should be pointed out that to ensure proper slip resistant function of flooring 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.

5.3 The tested samples of ceramic tiles IDEAL MARBLE 326x326mm produced in the Cersanit III S.A., ul. Uczniowska 21, 58-306 Wałbrzych, Poland, achieve slip resistance test according to P CEN/TS 16165 (Annex C) swing the pendulum method (average values: 50 (dry), 34 (wet)).

It should be pointed out that to ensure proper slip resistant function of flooring 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

