

World Ceramic Tiles Forum

ISO TC 189 WG 10

Slip resistance test methods





- ◆ ISO TC 189 (WG10):
 - ◆ “Slip resistance of pedestrian surfaces”
 - ◆ Set up has been decided on Plenary Meeting July 2014 in Clemson
 - ◆ Opening meeting will take place in Feb. 25/26.2015 in London
- ◆ Following the work in CEN TC 339
 - ◆ “Slip resistance of pedestrian surfaces - Method of evaluation”
 - ◆ Started in 1998, chair since Dec. 2010
- ◆ Why work on a harmonised test method for slip resistance ?

Slip resistance – worldwide exports



- Ramp Test shoe
- Pendulum UK
- GMG 200
- Bot 3000
- Pendulum Spain
- Slip alert
- Foot-Floor Tester
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- Tortus
- Floorside Control
- Pendulum Bricks
- Tribometer
- Ramp Test B
- Barfoot
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About 20% of world production is being exported



- ◆ What is the situation today?
 - ◆ Producer face growing responsibility for slip accidents
 - ◆ Most states with different tests (only EU 28 Memberstates)
 - ◆ Slip resistance is part of CE-marking (safety of product; DoP)
- ◆ This is confusing and a growing burden to exporting producer
 - ◆ High costs for having to carry out many different tests on same product
 - ◆ High costs and burden to enclose information in DoP's
 - ◆ Rising threat of liability
 - ◆ 2 Bill. €/year; i.e. € 34.000 per accident (German Health and Safety Insurance)



◆ Challenge:

- ◆ Make Product safer
- ◆ Make testing easier and comparable
- ◆ Provide a (portable?) test requested by labour safety authority
- ◆ Avoid unnecessary burden, costs and legal risks

◆ Solution:

- ◆ find *the “right” slip resistance test*
- ◆ harmonize slip resistance tests
 - ◆ Mandate to CEN TC 339 (“Slip resistance of pedestrian surfaces - Method of evaluation”)
 - ◆ ISO TC 189 WG 10



◆ How to find the “right” test method?

➤ What is the right test?

- reflect safety for pedestrian
- repeatable
- reliable
- Easy to handle

- Not : coefficient of friction (cof) values

Slip resistance test – find the right test



- ◆ How to find the “right” test method?
- ◆ Two Options:
 - 1) “reinvent the wheel” or
 - 2) take what we have
- ◆ Option 1 - CEN TC 339 made a survey in Europe
 - ◆ Which test methods are standardized and/or commonly in use?
- ◆ Result of survey:
 - ◆ More than 20 different test standards for all kind of flooring materials
 - ◆ most commonly used test methods in EU
 - ◆ **Ramp test** (barefoot and shoed) laboratory test (all kind of uses)
 - ◆ **Pendulum** portable test
 - ◆ **Tribometer** portable test
- ◆ At least 7 different pendulum tests and 5 different friction tests

(no profiled floors)

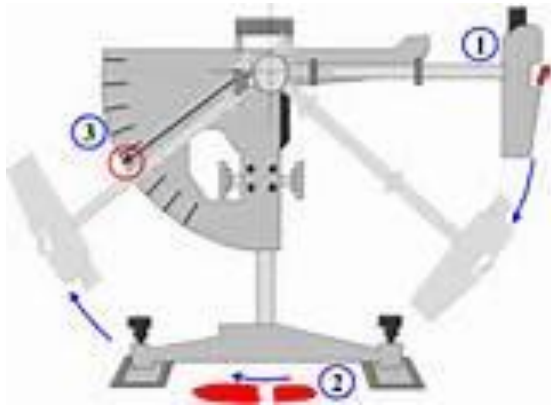
Slip resistance tests – ramp test

- Ramp test
- classification according intended use for all kind of uses and surfaces
- (structured or not structured)
- Classes R9 (lowest) to R 13 (highest)



Slip resistance test – Pendulum test

- Pendulum test
- is a mobile test
- Gives d_{cof}^* values
- is limited on structured surfaces



* Dynamic coefficient of friction

Slip resistance test – Tribometer test

- Tribometer test
- is a mobile test
- Gives dcof * values
- is limited on structured surfaces
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* Dynamic coefficient of friction



- ◆ 1. step towards harmonisation: CEN TC 339 agreed to specify the most commonly used test methods in TS 16165
 - ◆ Ramp test (barefoot and shoed) laboratory test (all kind of uses)
 - ◆ Pendulum portable test
 - ◆ Tribometer portable test

(At least 7 different pendulum tests and 5 different friction tests are in use in Europe only)

- ◆ Benefit:
 - ◆ reduced and easier testing (“one” test for 28 Memberstates)
 - ◆ substantially reduced burden and costs
 - ◆ Improved legal security through well defined repeatable and reliable tests (state of the art)



- ◆ All ISO-members are welcome and invited to work in TC 189 WG 10
- ◆ Kick off meeting will take place on Feb. 25/26. 2015 in London
- ◆ In preparation of this meeting all information on national situation in WCTF Member states are very much appreciated and welcome
 - ◆ Please send directly to: Fellhauer@Fliesenverband.de



Thank you for your attention

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