

**ÉMI Non-Profit Limited Liability Company for Quality Control and Innovation in Building
Central Laboratory**

Special Laboratory Unit for Mechanics
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Test laboratory accredited under No. NAT-1-1110/2010 by the Hungarian Accreditation Board (NAT)

Subject No.: M-244/2012

Date: 11 May 2012

Test Report

on the

**Examination of the Slip Resistance Performance of an Anti-slip Coating of Escalator
Steps according to DIN 51130:1991**

Customer: SAFE WALKWAY Bt.

Customer's address: 9023 Győr, Szabolcska u. 49., Hungary

Customer's consultant: Mr. SZABÓ, Róbert

Date of order: 23 April 2012

The test results apply only to the tested sample piece.

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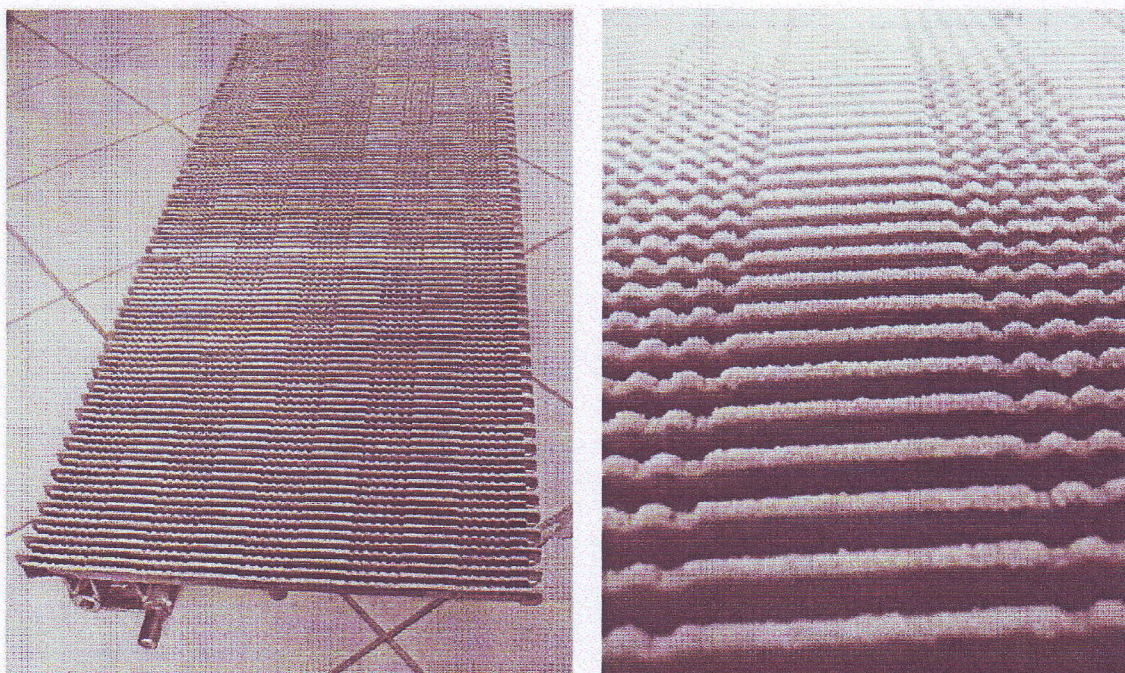
This Test Report consists of 3 (three) numbered pages and 1 (one) attachment.

1. BACKGROUND

The Customer asked for the examination of the slip resistance performance of an anti-slip coating of escalator steps according to the standard DIN 51130:1991 (Testing of floor coverings – Determination of slip resistance – Work rooms and areas of work with increased risk of slipping – Walking method – ramp test).

2. DATA

The Customer submitted one test specimen to the Special Laboratory Unit for Mechanics of ÉMI Non-profit Ltd on 23 April 2012. The test specimen had a surface area of 1000 mm x 400 mm and had been taken as a sample by the Customer.



Photographs of the test specimen and its surface profile

3. TESTS AND TEST RESULTS

Place of tests: ÉMI Non-profit Ltd, Special Laboratory Unit for Mechanics

Date: 09 May 2012

Test specimen: sample piece of an escalator step with anti-slip coating

3.1. Determination of slip resistance

We carried out the test according to the standard DIN 51130:1991 (Testing of floor coverings – Determination of slip resistance – Work rooms and areas of work with increased risk of slipping – Walking method – ramp test). The inclination angle of the platform of the test equipment can be adjusted between 0° and 45°.

We installed the test specimen onto the test equipment according to the description of the referred standard and then we applied engine oil of the 10W-40 type in the amount of 100 ml on its surface. The test was carried out three times while the inclination angle of the platform was raised up to 35°, and no slip occurred in the course of the test process.

The standard DIN 51130:1991 defines five performance classes for the slip resistance of platforms as follows:

Average inclination angle	Performance class
6°-10°	R9
11°-19°	R10
20°-27°	R11
28°-35°	R12
>35°	R13

Accordingly, the escalator step with the tested anti-slip coating meets the requirements for Performance Class R13.

4. INSTRUMENTS USED FOR THE TEST

Type of test	Name and number of the instrument	Way of check
Measurement of length	Measuring tape No. 22	Calibrated

5. MEASUREMENT INACCURACY

Angle measurement: $\pm 1^\circ$

6. ATTACHMENT

6.1. Sampling report

Budapest, 11 May 2012

The test was carried out by:
signed
BOROS Dániel
Laboratory Technician

This Test Report was prepared by:
signed
TERJEK Anita
Test Engineer

Seal: ÉMI Non-Profit Limited Liability Company for Quality Control and Innovation in Building

Revised by:
signed
TÖRÖKNÉ HORVÁTH Éva
Manager of the Special Laboratory Unit