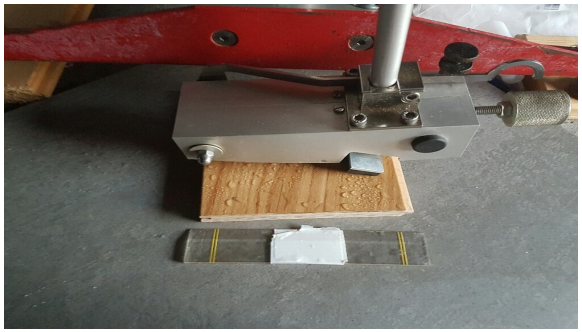
Increasing Safety by Reducing Risk

BS7976 -2 Pendulum Slip Test



Contents:

Customer: CoverTec

Test Number: FS10176

Operator: Glenn MacLaughlan

Date of Test: 1 st December 2016

On Site: Sample Sent To Office

Pendulum Calibration Number: C2825

Pendulum serial number: SK1628

Slider Type : FourS 96

Contaminate Description: Water

Surface: Wood

Please read attached document for guidance: Understanding your slip report

Calibration Checks Done:

lapping accepted 65+/-3	64	63	63	63	**62**
Glass accepted:7+/-3	9	8	8	8	**8**

Theory

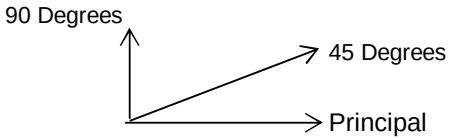
A site assessment is an important component in determining the slip risk of any given floor. The HSE's pedestrian slip potential model highlights important environmental factors in a slip. Contaminating substances, frequency and methods of cleaning, types of footwear and likely pedestrian behaviour all affect the potential for a slip incident and are given due consideration.

Research carried out by the Health and Safety Laboratory, in conjunction with the UK Slip Resistance Group (UKSRG), has shown that it is possible to assess the characteristics of floor surface materials needed for satisfactory slip resistance. The Health and Safety Laboratory has developed a "reliable and robust" test method that forms the basis of Floor Safes assessment procedure.

The pendulum skid test forms the basis of the coefficient of dynamic friction measurement of a floor. A calibrated 'foot' swings from a horizontal point of release, strikes the flooring surface for a known distance, then reads the "pendulum test value" on its over swing. The rubber slider that contacts the floor is constructed of '4S' rubber (Standard Simulated Shoe Sole) and is designed to replicate the most common slipping motion experienced by pedestrians wearing shoes. A softer, more malleable, rubber (TRL rubber) may be used to simulate a barefoot or casual shoe slip. Pendulum testing is one of the few methods that models the formation of a hydrodynamic squeeze film between the floor and shoe sole, a major factor in a wet slip.

Test surfaces are subject to eight measurements of the PTV with the first three being discounted from calculations of the mean.

A prepared standard rubber slider attached to a weighted 'shoe' is allowed to swing from a horizontal point of release. The slider is mounted on a spring loaded bracket and makes contact with the floor for a known distance. The height to which the shoe travels after contacting the floor gives a reading of the Pendulum Test Value (PTV, formally known as SRV Slip Resistance Value). The dynamic coefficient of friction of a test surface has a direct and measurable effect on the PTV reading obtained.



HSE Guidelines for pedestrian slip

0 – 24 High Risk for Slip potential

25 – 35 Moderate Risk for Slip Potential

36+ Low Risk for slip potential.

Test Swings	1	2	3	4	5	6	7	8	Result PTV	Risk level of slip potential
Dry Principal	72	71	70	68	70	70	70	70	**70**	**Low**
Dry 45 degree	73	72	71	71	71	71	71	71	**71**	**Low**
Dry 90 Degrees	70	69	69	69	69	69	69	69	**69**	**Low**
								Result	**70ptv**	**Low Risk**
Wet Principal	46	45	45	45	45	45	45	45	**45**	**Low**
Wet 45 degree	48	47	46	46	46	46	46	46	**46**	**Low**
Wet 90 Degrees	45	44	44	44	44	44	44	44	**44**	**Low**
								Result	**45 ptv**	**Low Risk**

A sample of smooth wood had one coat of CoverTec Glaze Guard Satin applied. The sample was then tested using the BS7976 Pendulum Slip Tester. In both wet and dry conditions the surface proved to have a safe and satisfactory level of slip resistance and would be classified as 'low risk for slip potential'

Glenn MacLaughlan is the Director of Floor Safe Ltd. The company was started in 2007 and over the last 9 years has provided pendulum slip testing for many major UK businesses. Clients include: .

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The Pendulum Slip Value Readings were correct at the time of test. However this does not indicate the readings will remain the same this can be due to the installation, daily maintenance and the volume of foot falls.
If a sample has been sent for lab testing we highly recommend a re-test in situ.
Reported results in no way imply that the flooring under test is approved or endorsed by Floor Safe Ltd
Floor Safe Ltd do not give or assume warranty or condition, express or implied, statutory or otherwise, as to condition, quality, performance, merchantability or fitness for the purpose of the test subject and all such warranties and conditions are hereby excluded save to the extent that such exclusion is absolutely prohibited by law. Floor Safe Ltd shall not be liable for any subsequent loss or damage incurred by the client as a result of information contained within this report. **Results given herein refer only to areas or sample tested by Floor Safe Ltd**

Calibration Certificate

Manufacturer's Machine ID Number	**SK1628**
Item Tested	**TRRL Type Skid Tester**
Calibration Certificate Number	**C2825**
Customer Name	**Floor safe Ltd**
Date Calibrated	**17/10/2016**
Expiry Date	**16/10/2017**

We certify that this machine has been calibrated in accordance with BS EN 1097-8 : 2009,BS EN 13036:part 4:2011 and BS7976:Part 3:2002

The procedures used are contained in the company's Quality Manual, which has been accredited under ISO 9001:2000

Findings and adjustments are recorded in the Customer Report Form supplied with this Certificate.

The instrument should be re-calibrated within one year of the calibration date.
(BS EN 1097-8:2009 Clause D.1.1 & BS7976 –3 2002 Clause 4 note 2)

Authorised by

WESSEX PRECISION INSTRUMENTS LTD

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