



Slip Resistance of Coated Aluminium Panel Samples

for

Zest Polyurethane

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Zest Polyurethane

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Contents

	Page
Introduction	4
Sample Details	4
Details of Testing	4
Test Results	5
Discussion	6
Quality Statement	6
Plate 1	7

Introduction

In accordance with the instructions of Mr Andrew Hearn we have conducted slip resistance testing of two samples of coated aluminium panels.

This report describes the method of test, presents the results and provides a discussion of the results.

Sample Details

Two coated aluminium panel samples were received from New Venture Products Limited. The panels which each measured approximately 325 x 225mm were marked as follows:

Sample 1	:	Protecta – Kote, UVR Yellow WR, 2 coats
Sample 2	:	Protecta – Kote with True Grip

the thickness of the panels and the textured coatings was 0.75mm (Sample 1) and 1.1mm (Samples 2). The samples were given our reference numbers EP 3223 (Sample 1) and EP 3224 (Sample 2).

Details of Testing

The slip resistance tests were carried out on the samples in accordance with methods described in BS 7976-2: 2002 and the Guidance recommended by the UK Slip Resistance Group. A rubber slider, namely the four S (Standard Simulated Shoe Sole), was used to conduct the slip testing.

The testing was carried out using a calibrated TRRL Portable Skid Resistance Tester, an instrument devised by the Transport Research Laboratory.

In the test method a given area of the floor is swept by the rubber slider which is located at the end of a pendulum, the retardation which is caused by the friction is measured by the extent which the pendulum fails to reach its original release height.

This measurement which is referred to as the slip resistance value (SRV) is recorded on a scale and relates to the dynamic coefficient of friction.

The panel samples were tested parallel, perpendicular and at 45° to their long sides.

The testing was performed in the following order:

1. Dry and wet conditions along direction 1 (parallel with long side)
2. Dry and wet conditions along direction 2 (perpendicular to long side)
3. Dry and wet conditions at 45° to the long side

Test Results

The test results are summarised in Table 1.

Table 1 – Results of the Slip Resistance Tests

Sample	Test condition	Direction	SRV (Slip Resistance Value)
EP 3223	Dry	1	57
	Dry	2	61
	Dry	45°	61
	Wet	1	30
	Wet	2	32
	Wet	45°	32
EP 3224	Dry	1	65
	Dry	2	66
	Dry	45°	66
	Wet	1	50
	Wet	2	50
	Wet	45°	51

Discussion

When assessing the slip resistance of a flooring surface using the TRL Portable Skid Resistance tester in combination with the 4S (Standard Simulated Shoe Sole) rubber slider, the following classification has gained wide acceptance especially by the UK Slip Resistance Group.

Table 2 – Classification of the Potential for Slip

Four S Pendulum Value	Potential for Slip
25 and below	High
23 to 35	Moderate
35 to 65	Low
Above 65	Extremely low

The results of the tests therefore show that Sample 1 (EP 3223) fell in the ‘low’ potential for slip category when tested in the dry condition. However, when tested in the wet condition the sample fell in the ‘moderate’ for slip category.

Sample 2 (EP 3224) fell in the ‘low’ to ‘extremely low’ potential for slip categories when tested in the dry condition. When tested in the wet condition the sample fell in the ‘low’ potential for slip category.

Quality Statement

We confirm that in preparing this report we have exercised all reasonable skill and care.

Any information relating to the sample received for testing has been supplied by the client unless otherwise specified.

This report does not provide ‘product approval’ status but shows only the results of the material or sample tested.

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Plate 1
Sample 1 being tested for slip resistance