# Slip Resistance Tests on Coated Panels

*for*

# Duram

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|---|---|
| Date: | 4th August 2006 |
| File Reference Number: | SSMS1128/R1 |
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# Slip Resistance Tests on Coated Panels

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## Duram

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|---|---|
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# Contents

# Introduction

In accordance with the instructions contained in your email dated 23rd June 2006, we have carried out slip resistance tests on two samples of coated aluminium panels.

This report describes the method of testing and presents the results of tests conducted on 27th – 31st July 2006.

# Background

Two samples were received from yourselves on 3rd July 2006, the panels were identified in the laboratory as follows:-

| Sample Ref | | Description |
|---|---|---|
| **Bureau Veritas** | **Duram** | |
| EP 3044 | Protectakote white UVR Aliphatic PGH, Sample 1 | 1 No. aluminium sheet of approximately 210 x 295 x 0.25mm coated with a white textured coating |
| EP 3045 | Protectakote black Aromatic PU, Sample 2 | 1 No. aluminium sheet of approximately 210 x 300 x 0.25mm coated with a black textured coating. |

# Details of Testing

The slip resistance tests were carried out on the coated surfaces in accordance with methods described in BS 8204 : 1994, BS 7976-2 : 2002 and the Guidance recommended by the UK Slip Resistance Group. In each tests two rubber sliders were used, namely the four S (Standard Simulated Shoe Sole) and the TRRL Rubber.

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

# Test Results

The results of tests are summarised in Table 1 below.

**Table 1 : Results of Slip Resistance Tests**

| Sample (Note 1) | Slip Resistance Value (SRV) | | | | Coefficient of Friction μ | | | |
|---|---|---|---|---|---|---|---|---|
| | 4 S Rubber | | TRRL Rubber | | 4S Rubber | | TRRL Rubber | |
| | Dry | Wet | Dry | Wet | Dry | Wet | Dry | Wet |
| EP3044/0° | 56 | 39 | 93 | 61 | 0.61 | 0.40 | 1.18 | 0.68 |
| EP3044/90° | 57 | 47 | 93 | 57 | 0.63 | 0.50 | 1.18 | 0.63 |
| EP3045/0° | 57 | 32 | 99 | 39 | 0.63 | 0.32 | 1.29 | 0.40 |
| EP3045/90° | 58 | 36 | 96 | 47 | 0.64 | 0.37 | 1.23 | 0.50 |

Note 1 The samples were tested in two directions at right angles to each other

# Discussion

When assessing the slip resistance of a floor using the TRL Portable Skid Resistance tester, 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 |
| 25 to 35 | Moderate |
| 35 to 65 | Low |
| Above 65 | Extremely Low |
| **TRRL Pendulum value** | **Potential for slip** |
| 19 and below | High |
| 20 to 39 | Moderate |
| 40 to 74 | Low |
| Above 75 | Extremely Low |

Therefore, on the basis of the test results given in Table 1, the following can be concluded;

In the dry conditions using the 4S rubber slider, both samples fell in the 'Low' potential for slip category.

Using the TRRL rubber slider in the dry conditions, both samples fell in the 'Extremely Low' potential for slip category.

When tested in the wet conditions using the 4S slider, Sample EP3044 fell in the 'Low' potential for slip, whilst Sample EP3045 fell between 'Low' and 'Moderate' potential for slip categories.

Using the TRRL rubber slider in the wet conditions, the samples fell mostly in the 'Low' potential for slip category except for Sample 3045 (in direction 0°) which fell in the 'Moderate' 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.

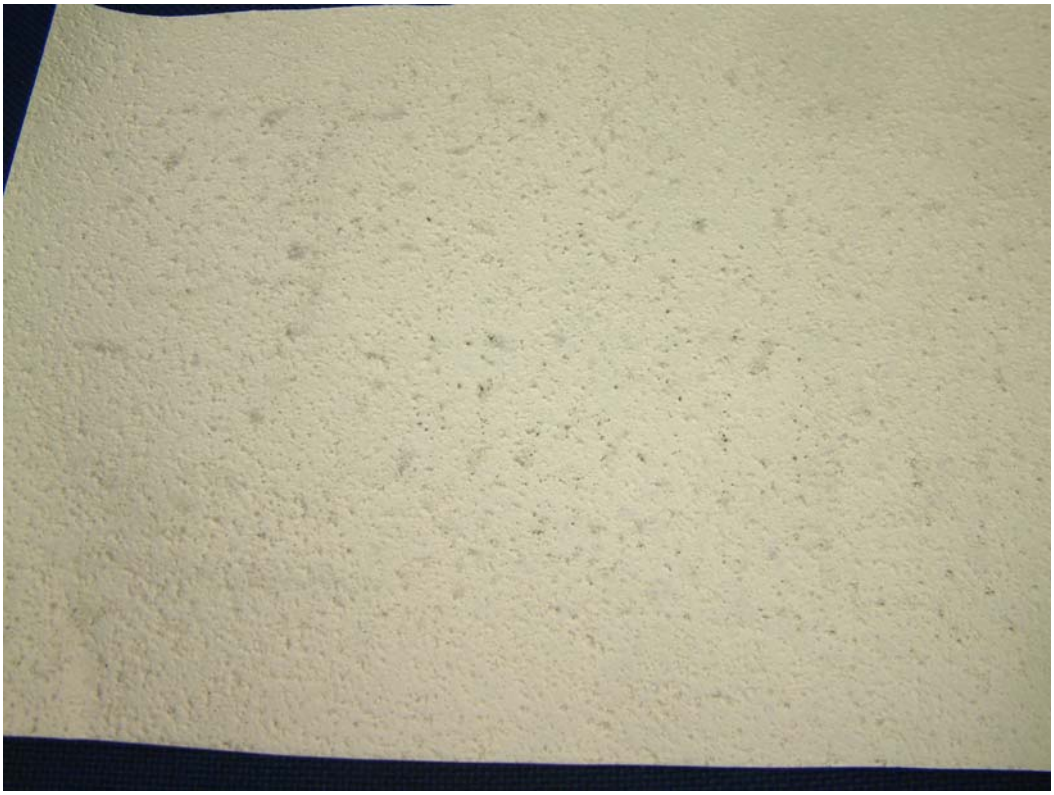

Plate 1
Sample 1

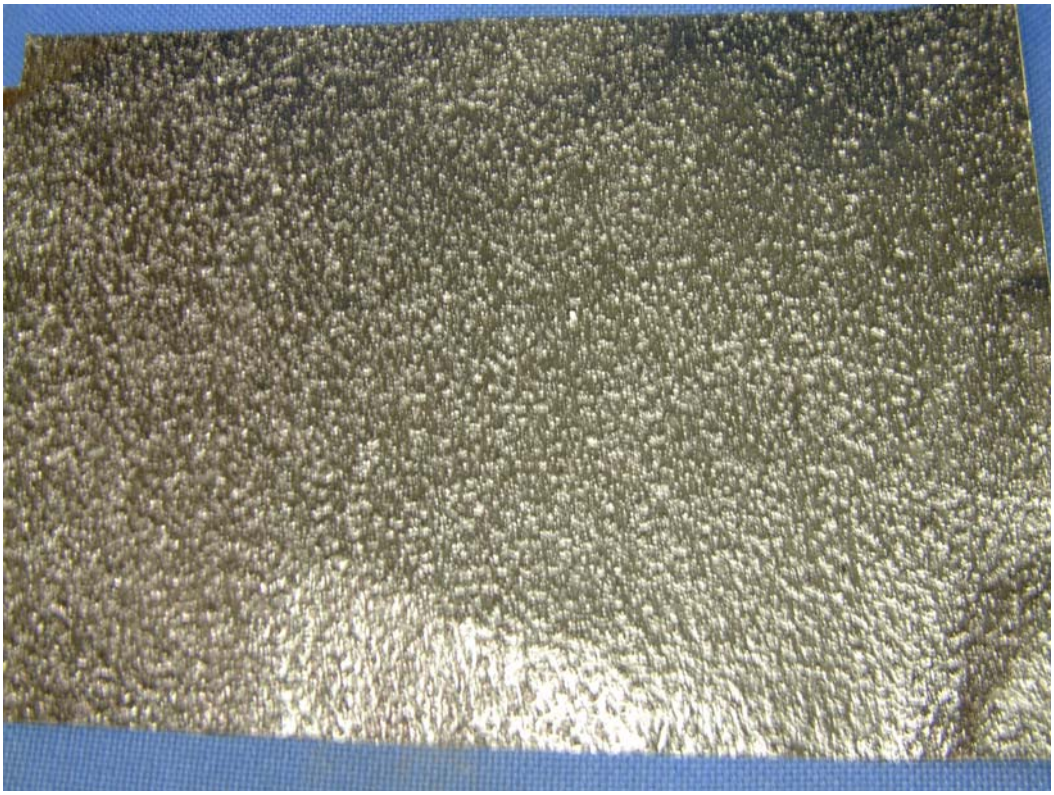

Plate 2
Sample 2