REPORT 29290/F
UNIQ SUPADEK
SLIP RESISTANCE TESTING

Sandberg LLP 5 Carpenters Place London SW4 7TD

Tel: 020 7565 7000 Fax: 020 7565 7101 email: clapham@sandberg.co.uk web: www.sandberg.co.uk



INVESTIGATION INSPECTION MATERIALS TESTING

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SLIP RESISTANCE TESTING

Uniq Extrusions Ltd Unit 28 Rassau Industrial Estate Ebbw Vale Blaenau Gwent NP23 5SD

For the attention of Mr S O'Leary

This report comprises 2 pages of text Table 1 of 1 sheet Appendix A of 1 sheet

21 February 2006

Partners: T Carbray N C D Sandberg M J O'Brien J L Pickering S M Pringle S C Clarke D J Ellis P Tate
Senior Associates: A A Willmott R A Rogerson J M Caldon
Associates: J D French Dr R M Harris R A Lilly R H Gostomski G S Mayers E T Boyce D Hunt P Sotiropoulos R D Easthope
Consultants: A C E Sandberg OBE K B Morgan D J Pain Prof F M Burdekin

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INVESTIGATION INSPECTION
TESTING MATERIALS

### **REPORT 29290/F**

### **UNIQ SUPADEK**

## SLIP RESISTANCE TESTING

**Instruction:** Your Purchase Order No. 602 of 10 February 2006.

#### 1. INTRODUCTION

We were instructed to undertake testing of two Supadek samples in order to establish slip resistance characteristics.

#### 2. SAMPLES RECEIVED

The samples were received at Sandberg laboratories on 14 February 2006.

Sandberg Reference	Material	Description	
F65253	Supadek light texture	Extrusion 300 x 220 x 40mm	
F65254	Supadek heavier texture	Extrusion 300 x 220 x 40mm	

A photocopy of the texture type and layout is given in Appendix A.

#### 3. TEST METHODS AND TEST RESULTS

Each sample was tested in accordance with BS 7976-2:2002 using the TRL Portable skid resistance tester (pendulum tester). Tests were carried out in dry and wet conditions using slider 96 rubber<sup>1</sup>.

Surface roughness measurements were made on both the smooth part and the textured part of each sample. Texture depth was not measured.

The test results are given in Table 1.

#### 4. SUMMARY OF RESULTS

The dry PTV results ranged from 51 to 65.

The wet PTV results ranged from 42 to 48.

The TRL pendulum tester has a range of readings from 0 to 150, high values indicating good slip resistance. Guidance on the interpretation of results using the Four S Slider is suggested by the UK Slip Resistance Group<sup>2</sup> as follows:-

Potential For Slip	Pendulum Test Value		
High	0 to 24		
Moderate	25 to 35		
Low	36 +		

The surface roughness measurements are a guide to slip resistance particularly in borderline regions. It is recognised that increased roughness of the floor surface can give an improvement in slip resistance in wet conditions.

The surface roughness results ranged from 4.8 to 27.6 µmR<sub>z</sub>.

Surfaces contaminated with pure water generally require a surface roughness of at least  $10\mu m R_z$  to provide a moderate level of slip resistance and at least  $20\mu m R_z$  to indicate low slip potential: more viscous contaminants require higher surface roughness<sup>3</sup>.

The results reported here relate to the surfaces as tested. It should be noted however, that the slip resistance of surfaces in service can be changed by various factors such as abrasion, polishing and contamination. Overall assessment of the potential for slip should take into account conditions of use and the environment, in addition to test results.

Uniq Extrusions Ltd Unit 28 Rassau Industrial Estate Ebbw Vale Blaenau Gwent NP23 5SD

for Sandberg LLP

Doug Hunt Chief Technician

For the attention of Mr S O'Leary

CMD/RAR/tb

21 February 2006

The measurement of floor slip resistance guidelines recommended by the UK Slip Resistance Group, Issue 3, 2005.

Roughness measurements should not be relied upon of themselves to judge the likely slip resistance of a floor.

# SANDBERG



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Table 1

# SLIP RESISTANCE TESTING USING THE PENDULUM TESTER BS 7976:Part2:2002

Site:	N/A
Date of Test	15 February 2006
Rubber Slider Type:	96 (formerly known as 4S)
Material Under Test:	Uniq Supadek, 300 x 220 x 40mm

Sample No.	Material	Surface Roughness <sup>1</sup> R <sub>z</sub> , µm		Ambient Temperature, °C	Orientation		sist <mark>ance</mark> lue
		Plain	Texture			Dry	Wet
						Mean	Mean
F65253	Light texture	4.8	27.6	20	Along	51	45
					Across	64	44
F65254	Heavier texture	5.2	26.5	20	Along	51	48
					Across	65	42

<sup>1</sup> Surface roughness is not covered by our UKAS accreditation