

Testing of Slip Resistance in accordance with AS4586:2013

Materials Performance

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Laboratory No. 165

Corporate Site 212

Accredited for compliance to ISO/IEC 17025 - Testing

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1 Introduction

This report describes the testing of Slip resistance in accordance with AS4586:2013 App-A Wet Pendulum test method for the specimens as requested by the client.

2 Specimen Description

9 types of specimens were supplied by the client.

The details of the specimen as provided by the client as below:

Manufacturer: Stellmann Pty Ltd, 448 City Road, South Melbourne, VIC 3205
Product Trade Name: Stellmann non-slip clear PRO & Stellmann aqualine PU PRO
Product Code: Not provided
Product Type: Applied Clear Pro to Ceramic and PU Pro to Cement sheet.
Colour Identification: Clear and light Grey
Product description: Stellmann Non-slip clear PRO with P3 soft, P3, P4, P5 slip rating applied to Ceramic tile,
Stellmann grey PU PRO without non-slip particles and with P3 soft, P3, P4
And P5 slip Rating Applied to cement sheet.

1. **Stellmann Non-Slip Clear P3 Soft**
2. **Stellmann Non-Slip Clear P3**
3. **Stellmann Non-Slip Clear P4**
4. **Stellmann Non-Slip Clear P5**
5. **Stellmann Aqualine PU PRO P3**
6. **Stellmann Aqualine PU PRO P4**
7. **Stellmann Aqualine PU PRO P5**
8. **Stellmann Aqualine PU PRO P3 Soft**
9. **Stellmann Aqualine PU PRO**

Specimens were received on 16/08/2024 and 05/09/2024

CSIRO were not involved in specimens' selection.

3 Test Methods

AS4586:2013 Appendix A sets out the method for the measurement of the frictional characteristics of new pedestrian surface materials under wet conditions using pendulum friction tester, the frictional characteristics of each specimen shall be assessed by determining the wet dynamic friction between the specimen and the slider of the pendulum swinging in the vertical plane.

A pendulum friction tester shall be constructed, and shall comply with the following:

- a) All bearing and working parts of the instrument shall be enclosed as much as practicable,
- b) When not in use on site, the apparatus shall be used and stored in the dust-free environment that not subject to significant temperature variations.
- c) The pendulum friction apparatus shall be calibrated to ensure compliance with BS 7976-3 or CEN/TS16165.

The testing was undertaken at lab conditions ~21.0 °C.

The testing was undertaken by A. Menisi on 2, 3, 5/09/2024 and the results relate to the specimen as supplied

4 Results

Pendulum Friction Tester: ERM 030.040 (S/N:1726, Calibration valid till 12/12/2025),
Slider 55, Batch #44 (expired on 16/11/2024) & Slider 96, Batch #27 (expired on 16/11/2024),
Cleaning: Deionized water.

➤ **Stellmann Non-Slip Clear:**

1. Stellmann Non-Slip Clear P3 Soft/ Slider 55

Temperature: 21.2 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		41	41	41	41
SW8557/2		42	41	41	41.33
SW8557/3		41	41	40	40.67
SW8557/4		40	40	40	40
SW8557/5		43	43	43	43
Mean SRV			~41		
Slip Resistance classification			P4 Class		

2. Stellmann Non-Slip Clear P3 Soft/ Slider 96

Temperature: 21.0 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		46	45	45	45.33
SW8557/2		46	47	46	46.33
SW8557/3		48	48	47	47.67
SW8557/4		48	48	47	47.67
SW8557/5		50	49	49	49.33
Mean SRV			~47		
Slip Resistance classification			P4 Class		

3. Stellmann Non-Slip Clear P3/ Slider 55

Temperature: 21.3 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		63	63	61	62.33
SW8557/2		65	65	64	64.67
SW8557/3		61	62	61	61.33
SW8557/4		61	62	62	61.67
SW8557/5		60	60	60	60
Mean SRV			62		
Slip Resistance classification			P5 Class		

4. Stellmann Non-Slip Clear P3/ Slider 96

Temperature: 21.1 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		47	47	46	46.67
SW8557/2		47	47	47	47
SW8557/3		49	49	48	48.67
SW8557/4		51	50	49	50
SW8557/5		51	50	50	50.33
Mean SRV			~49		
Slip Resistance classification			P4 Class		

5. Stellmann Non-Slip Clear P4/ Slider 55

Temperature: 21.3 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		64	63	64	63.67
SW8557/2		63	64	64	63.67
SW8557/3		61	61	62	61.33
SW8557/4		61	62	62	61.67
SW8557/5		60	60	60	60
Mean SRV			~62		
Slip Resistance classification			P5 Class		

6. Stellmann Non-Slip Clear P4/ Slider 96

Temperature: 21.2 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		51	51	51	51
SW8557/2		52	51	51	51.33
SW8557/3		52	52	52	52
SW8557/4		52	52	51	51.67
SW8557/5		52	53	52	52.33
Mean SRV			~52		
Slip Resistance classification			P4 Class		

7. Stellmann Non-Slip Clear P5/ Slider 55

Temperature: 21.3 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		67	67	66	66.67
SW8557/2		59	59	59	59
SW8557/3		63	63	64	63.33
SW8557/4		62	62	62	62
SW8557/5		65	65	65	65

Mean SRV	~63
Slip Resistance classification	P5 Class

8. Stellmann Non-Slip Clear P5/ Slider 96

Temperature: 21.2 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		58	58	57	57.67
SW8557/2		57	56	56	56.33
SW8557/3		59	58	57	58
SW8557/4		59	58	58	58.33
SW8557/5		59	58	58	58.33
Mean SRV			~58		
Slip Resistance classification			P5 Class		

➤ Stellmann Aqualine PU PRO:

9. Stellmann Aqualine PU PRO P3/ Slider 55

Temperature: 21.1 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		50	50	49	49.67
SW8557/2		44	45	44	44.33
SW8557/3		47	46	46	46.33
SW8557/4		48	48	48	48
SW8557/5		53	53	53	53
Mean SRV			~48		
Slip Resistance classification			P5 Class		

10. Stellmann Aqualine PU PRO P3/ Slider 96

Temperature: 21.3 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		48	48	47	47.67
SW8557/2		49	49	49	49
SW8557/3		50	48	49	49
SW8557/4		51	51	51	51
SW8557/5		51	51	50	50.67
Mean SRV			~49		
Slip Resistance classification			P4 Class		

11. Stellmann Aqualine PU PRO P4/ Slider 55

Temperature: 21.1 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		45	45	45	45
SW8557/2		51	51	51	51
SW8557/3		54	54	54	54
SW8557/4		53	53	53	53
SW8557/5		52	52	52	52
Mean SRV			51		
Slip Resistance classification			P5 Class		

12. Stellmann Aqualine PU PRO P4/ Slider 96

Temperature: 21.3 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		55	55	55	55
SW8557/2		55	55	55	55
SW8557/3		56	56	56	56
SW8557/4		58	57	58	57.67
SW8557/5		56	56	56	56
Mean SRV			~56		
Slip Resistance classification			P5 Class		

13. Stellmann Aqualine PU PRO P5/ Slider 55

Temperature: 21.1 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		54	54	54	54
SW8557/2		51	51	51	51
SW8557/3		52	51	51	51.33
SW8557/4		52	53	53	52.67
SW8557/5		49	49	49	49
Mean SRV			~52		
Slip Resistance classification			P5 Class		

14. Stellmann Aqualine PU PRO P5/ Slider 96

Temperature: 21.4 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		62	62	61	61.67
SW8557/2		61	61	61	61
SW8557/3		60	61	61	60.67
SW8557/4		63	64	62	63
SW8557/5		60	60	58	59.33
Mean SRV			~61		
Slip Resistance classification			P5 Class		

➤ Stellmann Aqualine PU PRO P3 Soft:

15. Stellmann Aqualine PU PRO P3 Soft/ Slider 96 - wet conditions

Temperature: 21.5 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		37	36	37	36.67
SW8557/2		38	37	37	37.33
SW8557/3		39	38	38	38.33
SW8557/4		39	39	39	39
SW8557/5		41	41	40	40.67
Mean SRV			~38		
Slip Resistance classification			P3 Class		

➤ Stellmann Aqualine PU PRO:

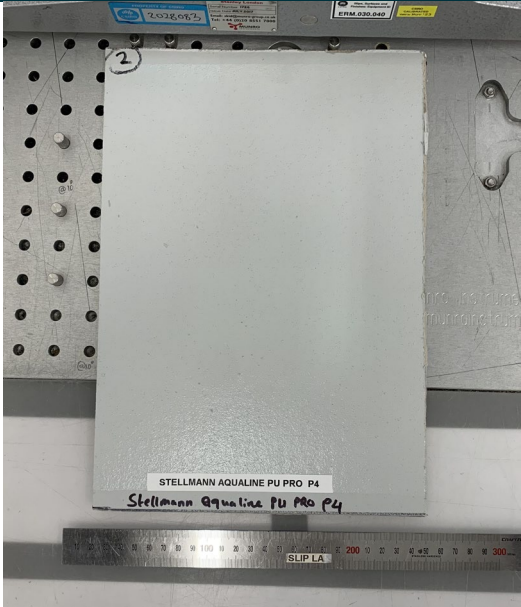
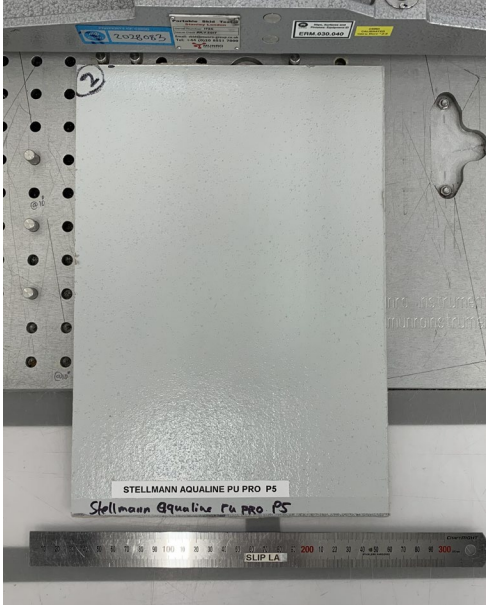
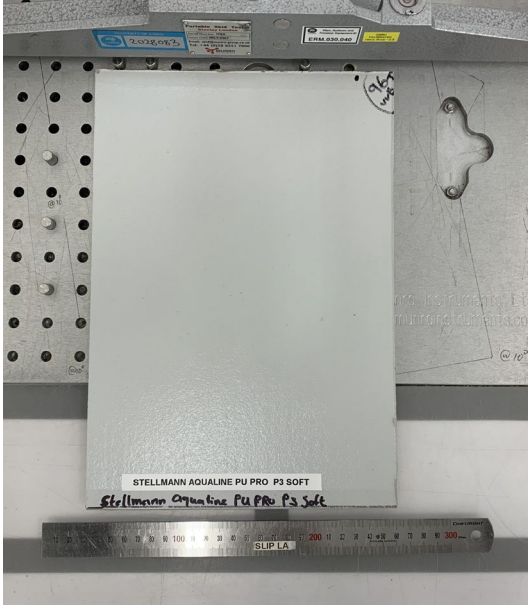
16. Stellmann Aqualine PU PRO/ Slider 96 - dry conditions

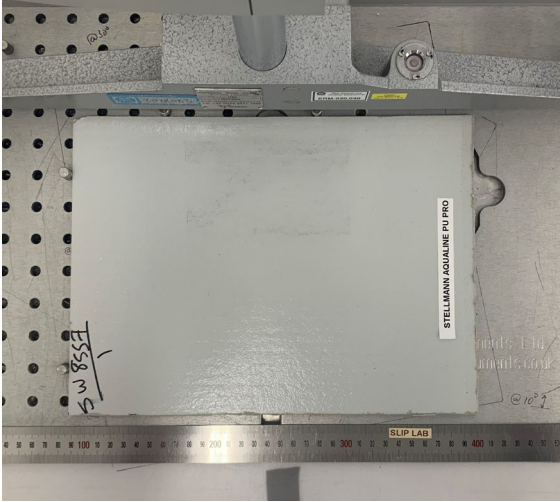
Temperature: 21.5 °C

CSIRO number	Specimen	Reading 3	Reading 4	Reading 5	Average
SW8557/1		67	67	67	67
SW8557/2		66	67	67	66.67
SW8557/3		63	64	64	63.67
SW8557/4		63	64	64	63.67
SW8557/5		63	63	63	63
Mean SRV			~65		
Slip Resistance classification			P5 Class		

Appendix A Specimen Photos

Stellmann Non-Slip Clear P3 Soft  A photograph of a rectangular, light brown, fibrous specimen labeled 'STELLMANN NON SLIP CLEAR P3 SOFT'. It is held in a metal testing frame with a perforated back. A ruler at the bottom shows the specimen is approximately 200mm wide. A label 'SLIP LA' is visible on the ruler.	Stellmann Non-Slip Clear P3  A photograph of a rectangular, light brown, fibrous specimen labeled 'STELLMANN NON SLIP CLEAR P3'. It is held in a metal testing frame with a perforated back. A ruler at the bottom shows the specimen is approximately 200mm wide. A label 'SLIP LA' is visible on the ruler.
Stellmann Non-Slip Clear P4  A photograph of a rectangular, light brown, fibrous specimen labeled 'STELLMANN NON SLIP CLEAR P4'. It is held in a metal testing frame with a perforated back. A ruler at the bottom shows the specimen is approximately 200mm wide. A label 'SLIP LA' is visible on the ruler.	Stellmann Non-Slip Clear P5  A photograph of a rectangular, light brown, fibrous specimen labeled 'STELLMANN NON SLIP CLEAR P5'. It is held in a metal testing frame with a perforated back. A ruler at the bottom shows the specimen is approximately 200mm wide. A label 'SLIP LA' is visible on the ruler.

Stellmann Aqualine PU PRO P3 	Stellmann Aqualine PU PRO P4 
Stellmann Aqualine PU PRO P5 	Stellmann Aqualine PU PRO P3 Soft 

Stellmann Aqualine PU PRO	Stellmann Aqualine PU PRO
	

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