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**Independent Slip Testing Services**

GLOBAL PRODUCT CLASSIFICATION

# TEST REPORT

**SLIP RESISTANCE CLASSIFICATION OF  
NEW PEDESTRIAN SURFACE MATERIALS  
AS/NZS.4586:2004**

Appendix A - Wet Pendulum Testing

*Prepared For:*

**Advance Flooring Company**

*Product Description:*

**Neoflex (with Fresh Finish)**

*Test Date:*

**22/05/2015**



# Independent Slip Testing Services

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Report Prepared for: Advance Flooring Company  
 PO Box 13184  
 Auckland 1643 New Zealand

Page #: 1 of 1  
 Contract #: 2008

Test Date: 22/05/2015  
 Test Site: Independent Slip Testing Services- Slip Resistance Laboratory (Lota QLD)  
 Testing Technician: M.Walton  
 Testing Instrument: Mastrad Wet Pendulum Skid Tester with 4S rubber slider  
 Testing Instrument Serial #: SK1225 (W2)

| TESTING SPECIMENS DESCRIPTION, SIZE & COATING (If applicable) |   |           |                    |
|---|---|-----------|--------------------|
| 1.  | 1 x Neoflex (with Fresh Finish), Black Vinyl, 30x30cm |           |                    |
| 2.  | 1 x Neoflex (with Fresh Finish), Black Vinyl, 30x30cm |           |                    |
| 3.  | 1 x Neoflex (with Fresh Finish), Black Vinyl, 30x30cm |           |                    |
| 4.  | 1 x Neoflex (with Fresh Finish), Black Vinyl, 30x30cm |           |                    |
| 5.  | 1 x Neoflex (with Fresh Finish), Black Vinyl, 30x30cm |           |                    |
| Surface Condition:  | Fine Textured   | Cleaning: | Tested as received |
| Fixed/ Unfixed:   | Unfixed   | Rz Mean:  | n/a                |
| Environmental Conditions:                                     | Internal- Non airconditioned                          | Air Temp: | 22 Deg.C           |
| Direction of Test:  | As indicated on underside of sample                   | Slope:    | n/a                |

| INTERPRETATION OF THE WET PENDULUM RESULTS |                               |   |
|--|-------------------------------|---|
| Classification                             | Pendulum mean BPN (4S rubber) | Notional contribution of the floor surface to the risk of slipping when wet |
| V  | >54                           | Very Low  |
| W  | 45-54                         | Low   |
| X  | 35-44                         | Moderate  |
| Y  | 25-34                         | High  |
| Z  | <25                           | Very High   |

**TEST RESULTS**

|          |            |        |                             |        |
|----------|------------|--------|-----------------------------|--------|
| Specimen | #1 Result: | 32 bpn |                             |        |
|          | #2 Result: | 28 bpn |                             |        |
|          | #3 Result: | 28 bpn | Slider condition (P400):    | 84 BPN |
|          | #4 Result: | 28 bpn | Slider condition (Lapping): | n/a    |
|          | #5 Result: | 28 bpn | Temperature adjustment:     | n/a    |

**CLASSIFICATION**

| CLASSIFICATION | PENDULUM MEAN BPN (4S rubber) | NOTIONAL CONTRIBUTION OF THE FLOOR SURFACE TO THE RISK OF SLIPPING WHEN WET |
|----------------|-------------------------------|---|
| <b>Y</b>       | <b>29 BPN</b>                 | <b>High</b>   |

The mean results of the five specimens is reported (rounded to nearest whole number)

^ When an individual result both below the result classification and below the mean result minus 20% shall be considered of lower classification

|  |     |
|--|-----|
| Maximum Slope Design Value (when dry): | n/a |
| Maximum Slope Design Value (when wet): | n/a |

**DISCLAIMER:**

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NATA Accreditation #14967

Signature: Mick Walton



Testing was carried out using the Wet Pendulum Test Method (Using 4S rubber slider) in accordance with New Zealand Standard AS/NZS.4586:2004



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## WET TEST RESULTS INTERPRETATION GUIDE (NZ)

### INTERPRETING WET TEST RESULTS

- Step 1** Compare description of reported test location to the most relevant location description in Table 1. \* Note the pendulum classification for that location.
- Step 2** Note the recommended pendulum classification BPN range (Four S rubber) in Table 2.
- Step 3** Compare the recommended BPN range to the actual test report result.

**\*TABLE 1**

Pedestrian flooring selection guide- Minimum pendulum or ramp recommendations for specific locations (HB197:1999)

| Location   | Pendulum | Ramp     |
|--|----------|----------|
| 1. External colonnade, walkways & pedestrian crossings               | W        | R10      |
| 2. External ramps  | V        | R11      |
| 3. Entry foyers hotel, office & public buildings -wet areas          | X        | R10      |
| 4. Entry foyers hotel, office & public buildings -dry areas          | Z        | R9       |
| 5. Shopping centre (excluding food court)                            | Z        | R9       |
| 6. Shopping centre food court  | X        | R10      |
| 7. Internal ramps, slopes (greater than 2 degrees) -dry areas        | X        | R10      |
| 8. Lift lobbies above external entry level                           | Z        | R9       |
| 9. Other separate shops inside shopping centres                      | Z        | R9       |
| 10. Other shops with external entrances- entry area                  | X        | R10      |
| 11. Fast food outlets, buffet food servery areas                     | X        | R10      |
| 12. Hospitals and aged care facilities- dry areas                    | Z        | R9       |
| 13. Hospitals and aged care facilities- ensuites                     | X        | A or R10 |
| 14. Supermarket aisles except fresh food areas                       | Z        | R9       |
| 15. Shop and supermarket fresh fruit & vegetable areas               | X        | R10      |
| 16. Communal changing rooms  | X        | A        |
| 17. Swimming pool surrounds and communal shower rooms                | W        | B        |
| 18. Swimming pool ramps and stairs leading to water                  | V        | C        |
| 19. Toilet facilities in offices, hotels, shopping centres           | X        | R10      |
| 20. Undercover concourse areas of sports stadium                     | X        | R10      |
| 21. Accessible internal stair nosings (dry areas)- handrails present | X        | R10      |
| 22. Accessible internal stair nosings (wet areas)- handrails present | W        | B or R11 |
| 23. External stair nosings   | W        | R11      |

**\*TABLE 2**

Classification of Pedestrian Surface Materials (AS/NZS.4586:2004)  
 Interpretation of the Wet Pendulum Results (AS/NZS.4663:2004)

| Pendulum* mean BPN |            | Classification | Notional contribution of the floor surface to the risk of slipping when water wet |
|--------------------|------------|----------------|---|
| Four S rubber      | TRL rubber |                |   |
| >54                | >44        | V              | <b>Very Low</b>   |
| 45-54              | 40-44      | W              | <b>Low</b>  |
| 35-44              | -          | X              | <b>Moderate</b>   |
| 25-34              | -          | Y              | <b>High</b>   |
| <25                | -          | Z              | <b>Very High</b>  |

### TREATMENT OPTIONS

For surfaces that achieve a BPN result below the recommendations the following are options are available to increase slip resistance and Reduce Your Risk!

As a guide, possible styles of treatments we see our clients using to improve slip resistance include:

- Cleaning procedures** Detergent residues can build up over time with heavy detergent use.
- Acid etching** For tiled surfaces. Can vary in performance with different tile types.
- Wet sand/ Soda blasting** To obtain a textured finish to tiles and other hard surfaces (may require sealing).
- Shot blasting** More extreme treatment to wet sand blasting (may require sealing).
- Textured coatings** Ensure a consistent texture is achieved.
- Surface replacement** Replacement surface may be the most cost effective option in some locations

*For treatment suppliers in your local area search the internet for options listed above or in the yellow pages 'flooring treatments' section. ISTS recommends sourcing a number of detailed proposals when considering treatments, outlining expected slip resistance improvements, visual changes, clean ability and life expectancy.*

### ADDITIONAL NOTES & REFERENCES

- R' Ratings** The Ramp 'R' ratings are obtained using the ramp test. An 'R' rating can not be achieved for in-situ testing. There is no correlation between 'R' ratings and wet pendulum test results.
- References** \*Table 1- HB197:1999 "An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials" CSIRO 1999 and Standards Australia 1999  
 \*Table 2- AS/NZS.4586:2004 Slip resistance classification of new pedestrian surfaces & AS/NZS.4663:2004 Slip resistance measurement of existing pedestrian surfaces
- \*The information provided is intended as a guide only, consult the referenced publications for further information in regards to measurement results and recommendations*



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## TEST PRODUCT IMAGE

**Product Description:** Neoflex (with Fresh Finish)

**Test Date:** 22/05/2015

