

### **TEST REPORT**

SLIP RESISTANCE CLASSIFICATION OF **NEW PEDESTRIAN SURFACE MATERIALS** 

AS 4586-2013 Appendix A - Wet Pendulum Testing

**Prepared For:** 

**National Flooring Distributors** 

**Product Description:** 

NFD Belize, Brown, Flooring Panel, 23x30cm

Issue Date: 17-02-2021

Page: 1 of 6







## **Independent Slip Testing Services**

(a) +61 (b) 411 600 733 | 1/2 +64 (c) 279 735 266 | www.gpcsliptesting.com

TEST REPORT- Wet Pendulum Slip Resistance Classification (Australian Standard)

**National Flooring Distributors Report Prepared for:** 

Page #: 2 of 6 58 Blanck Street Program #: 8005

Ormeau OLD 4208

**Test Date:** 17-02-2021

**Test Site:** Independent Slip Testing Services- Slip Resistance Testing Facility (Lota Headquarters QLD Australia)

**Testing Technician:** 

**Testing Instrument:** Pendulum Skid Tester with Slider 96 (4S) rubber

Testing Instrument Serial #: SK1105 (W1)

### TESTING SPECIMEN DESCRIPTION, SIZE, COLOUR, TYPE, & COATING (if applicable)

NFD Belize, Brown, Flooring Panel, Sample Size 23x30cm

- NFD Belize, Brown, Flooring Panel, Sample Size 23x30cm
- NFD Belize, Brown, Flooring Panel, Sample Size 23x30cm
- NFD Belize, Brown, Flooring Panel, Sample Size 23x30cm NFD Belize, Brown, Flooring Panel, Sample Size 23x30cm

Surface Condition: Structured Cleaning: Tested as received

Fixed/ Unfixed: Unfixed Rz Mean: n/a **Environmental Conditions:** Air conditioning Air Temp: 23 Deg.C Direction of Test: As indicated on underside of sample Slope: n/a

### AS 4586-2013

INTERPRETATION OF THE WET PENDULUM RESULTS					
Classification	Pendulum mean BPN Slider 96 (4S) rubber				
P5	>54				
P4	45-54				
P3	35-44				
P2	25-34				
P1	12-24				
PO	<12				

### **TEST RESULTS**

#1 Result:	40 BPN	Slider condition (P400):	83 BPN
#2 Result:	40 BPN	Slider condition (Lapping):	59 BPN
#3 Result:	37 BPN	Temperature adjustment:	N/A
#4 Result:	35 BPN	Carpet surface tested dry:	N/A
#5 Result:	35 BPN		

### **CLASSIFICATION**

CLASSIFICATION	PENDULUM MEAN BPN (4S rubber)
Р3	37

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

^ 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

^NCC Code provides reference for ramps up to 1:8

### DISCLAIMER:

DISCLAIMMEN:
ISTS accepts no civil liability or responsibility for any actions whatsoever that may arise as a result of the tests and the publication and issue of this test report. The test report is intended for viewing purposes solely for the named recipient identified above. The slip test report remains the property of ISTS. This report contains privileged and confidential information. The unauthorised reproduction





Signatory: Mick Walton

Accredited for compliance with ISO/IEC 17025 testing and calibration. NATA is a signatory to the APLAC mutual recognition arrangement for the mutual recognition of the equivalence of testing, calibration and inspection reports.

Testing was carried out using the Wet Pendulum Test Method in accordance with Australian Standard AS 4586-2013 Appendix A



# Independent Slip Testing Services +61 (0) 411 600 733 +64 (0) 279 735 266 www.gpcsliptesting.com

WET TEST RESULTS INTERPRETATION GUIDE (Part 1)- NATIONAL CONSTRUCTION CODE (AUSTRALIAN STANDARD) Page #: 3 of 6

### INTERPRETING WET TEST RESULTS

### How to interpret your wet test report...

Wet test results offer six possible outcomes- classification 'P0', 'P1', 'P2', 'P3', 'P4' or 'P5'.

The classification 'P0' reflects a lesser slip resistant surface, while 'P5' classification reflects the greatest slip resistance classification.

There are two parts to this interpretation guide- Firstly the 'National Construction Code requirements', and secondly 'Other Particular Applications' recommendations.

For the 'Global Product Classification' test results refer additional #Note below.

4. Ramps steeper than 1:14 (4.1 degrees) up to but not steeper than 1:8 (7.1 degrees) (when wet)

- Step 1. Note the test location described in the left side column of your report, and the corresponding test result 'P' classification achieved (listed in the far right side column)
- Step 2. From this interpretation guide, identify the most appropriately related location description described in either 'TABLE 3A' (Part 1) or 'TABLE 3B' (Part 2) . Note the 'P' classification listed to the right of this description.
- Step 3. If the test result classification listed meets (or exceeds) the related 'P' classification from 'TABLE 3A' or 'TABLE 3B', the test surface is meeting the relevant requirement.
- #Note. For 'Global Product Classification' test reports the 'TABLE 3A' or 'TABLE 3B' descriptions assist in identifying the product's suitability for various applications.

* TABLE 3A	Mi	ni	mu	m w	et	per	ıdulı	ım	tes

NATIONAL CONSTRUCTION CODE COMPLIANCE CLASSIFICATIONS ect recult classifications to meet

National Construction Code requirements.					
	Location				
Stair Treads and Sta	irway Landings in Buildings - Covered by NCC Volumes 1 - 2				
1. Stair treads and a s	stairway landing (when dry)	P3			
2. Stair treads and a s	P4				
	eads and Landings in Buildings - Covered by NCC Volumes 1 - 2 tair non-skid nosing strip and a stairway landing	P3			
2. Wet stair tread, a s	stair non-skid nosing strip and a stairway landing	P4			
Ramps in Buildings -	Covered by NCC Volumes 1 - 2	•			
1. Ramps not steeper	than 1:14 (4.1 degrees) gradient (when dry)	P3			
2. Ramps not steeper	than 1:14 (4.1 degrees) gradient (when wet)	P4			
3. Ramps steeper than 1:14 (4.1degrees)up to but not steeper than 1:8 (7.1 degrees) (when dry)		P4			

\*TABLE 2 Classification of Pedestrian Surface Materials according to the AS 4586-2013 wet pendulum test

CLASSIFICATION	Pendulum* mean BPN		
CLASSIFICATION	Four S rubber ( Slider 96 )	TRL rubber ( Slider 55 )	
P5	>54	>44	
P4	45-54	40-44	
Р3	35-44	35-39	
P2	25-34	20-34	
P1	12-24	< 20	
Р0	<12	-	

#### TREATMENT OPTIONS

For test results that achieve a result below recommendations, the following treatment options are available to increase slip resistance and Reduce Your Risk!

While ISTS is solely an audit service, following is a short list of common types of treatments we see our clients using to improve the slip resistance of various pedestrian surface materials.

Cleaning procedures Minimising detergent residue build up or other contaminants.

Acid etching Increasing surface texture.

Coatings and sealers Surface coatings and penetrative types.

Surface texture Coatings, etchants, sandblasting, shot blasting, etc. Surface replacement May be the most cost effective option in some instances.

An internet search for 'flooring treatments' will identify surface treatment professionals in your local area. 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**

P5

\*Table 3A- HB198:2014 "Guide to the specification and testing of slip resistance of pedestrian surfaces" Standards Australia Limited 2014.

\*Table 2- AS 4586-2013 "Slip resistance classification of new pedestrian surface materials".

nb. The information provided is intended as a guide only, consult the referenced publications for further information in regards to measurement results and recommendations.



## Independent Slip Testing Services

+61 (0) 411 600 733

7+64 (0) 279 735 266 www.gpcsliptesting.com

WET TEST RESULTS INTERPRETATION GUIDE (Part 2)- OTHER APPLICATIONS...NON NCC (AUSTRALIAN STANDARD) Page #: 4 of 6

TABLE 3B

Minimum wet pendulum test result classifications for other applications where the NCC does not apply.

	•	
Location	Classification	
External Pavements and Ramps		
1. External ramps including sloping driveways, footpaths etc. steeper than 1 in 14 $(4.1^{\circ})$	P5	
2. External ramps including sloping driveways, footpaths, etc., under $1:14 (4.1^{\circ})$ , external sales areas	P4	
(eg. markets), external car park areas, external colonnades, walkways, pedestrian crossings,		
balconies, verandas, carports, driveways, courtyards and roof decks		
3. Undercover car parks	P3	
Hotels, Offices, Public Buildings, Schools and Kindergartens		
1. Entries and access areas including Wet area	p3	
hotels, offices, public buildings, schools, kindergartens,  Transitional area	p P2	
internal lift lobbies and common areas of public buildings Dry area	P1 (see Note 3)	
2. Toilet facilities in offices, hotels and shopping centres	P3	
3. Hotel apartment bathrooms, ensuites and toilets	P2	
4. Hotel apartment kitchens and laundries	P2	
Loading Docks, Commercial Kitchens, Cold Stores, Serving Areas		
1. Loading docks under cover and commercial kitchens	P5	
2. Serving areas behind bars in public hotels and clubs, cold stores and freezers	P4	
Supermarkets and Shopping Centres		
1. Fast food outlets, buffet food servery areas, food courts and fast food dining areas in shopping centres	P3	
2. Shop and supermarket fresh fruit and vegetables area	Р3	
3. Shop entry areas with external entrances	Р3	
4. Supermarket aisles (except fresh food areas)	P1 (see Note 3)	
5. Other separate shops inside shopping centres - wet	Р3	
6. Other separate shops inside shopping centres - dry	P1 (see Note 3)	
Swimming Pools and Sporting Facilities		
1. Swimming pool ramps and stairs leading to water	P5	
2. Swimming pool surrounds and communal shower rooms	P4	
3. Communal changing rooms	Р3	
4. Undercover concourse areas of sports stadiums	Р3	
Hospitals and Aged Care Facilities		
Bathrooms and ensuites in hospitals and aged care facilities		
2. Wards and corridors in hospital and aged care facilities	P2	

*TABLE 2 Classification of Pedestrian Surface Materials according to the
AS 4586-2013 wet pendulum test

Classification	Pendulum*	Pendulum* mean BPN		
Classification	Four S rubber ( Slider 96 )	TRL rubber ( Slider 55 )		
P5	>54	>44		
P4	45-54	40-44		
P3	35-44	35-39		
P2	25-34	20-34		
P1	12-24	< 20		
P0	<12	-		

### P1 (see Note 3)

#### Note 3.

The minimum classification listed in Table 3B is P1. It is inappropriate for Table 3B to list the lower classification, PO, since there is no lower limit on Classification PO.

Notwithstanding, some smooth and polished floor surfaces, which do not achieve Classification P1, may be considered to provide a safe walking environment for normal pedestrians walking at a moderate pace, provided the surface is kept clean and dry; however, should these surfaces become contaminated by either wet or dry materials, or be used by pedestrians in any other manner, then they may become unsafe. Therefore, the type of maintenance, the in-service inspection of floors, other environmental conditions and use should be taken into account when selecting such products.

### **ADDITIONAL NOTES & REFERENCES**

\*Table 3B- HB198:2014 "Guide to the specification and testing of slip resistance of pedestrian surfaces" Standards Australia Limited 2014.

\*Table 2- AS 4586-2013 "Slip resistance classification of new pedestrian surface materials".

nb. The information provided is intended as a guide only, consult the referenced publications for further information in regards to measurement results and recommendations.



# Independent Slip Testing Services \$\times\$ +61 (0) 411 600 733 | \$\text{+64} (0) 279 735 266 | www.gpcsliptesting.com

Page: 5 of 6

### **TEST PRODUCT IMAGE**

Product Description: NFD Belize, Brown, Flooring Panel, 23x30cm

Test Date: 17-02-2021









### **Independent Slip Testing Services** +61 (0) 411 600 733 +64 (0) 279 735 266 www.gpcsliptesting.com

Page: 6 of 6

### **END OF TEST REPORT**

Have a successful day!

### ...Considering pedestrian surface enhancements, or developing your property?



地板产品的抗滑性测量

If you are selecting, purchasing or installing pedestrian surface materials, an independent, accredited classification is a useful tool providing confidence to all stakeholders the product will perform as specified.

Independent Slip Testing Services is the global leader in accredited slip resistance measurement and classification of pedestrian surface materials prior to installation.

see the ISTS 'GPC Results Interpretation Booklet' for guidance on pedestrian surface product selection.

### TILES PAVERS STONE TIMBER VINYL RUBBER METAL TAPES COATINGS GRATINGS CONCRETE CARPETS STEP-NOSINGS TACTILES **MOSAICS GLASS**

Contact us any time if you have questions. Have a successful day!



Recommended Slip Classifications National & Global Guides



www.gpcsliptesting.com