



Reduce Your Risk!

A Guide for the Comparison of Wet Slip Resistance Measurement Results to Standards Australia Recommendations (HB197:1999)

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 pendulum classification BPN range (Four S rubber) in Table 2.
- Step 3** Note the equivalent contribution to risk classification in Table 3.
- Step 4** Compare the recommended BPN range to the actual test report result.

If the test result falls within the recommended BPN range for that test area, the surface meets the recommendations.

*TABLE 1
PEDESTRIAN FLOORING SELECTION GUIDE- MINIMUM PENDULUM OR RAMP
RECOMMENDATIONS FOR SPECIFIC LOCATIONS (HB197:1999)

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

Additional Notes & References

R' Ratings

NB. The Ramp 'R' ratings are achieved using the ramp test method. An 'R' rating can not be achieved for in-situ testing. There is no direct correlation between 'R' ratings and wet pendulum test results.

Dry testing Results

Dry slip resistance measurement results have two possible results:
Moderate to Very Low Risk (F) or
High to Very High Risk (G).

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 surface materials, Standards Australia/ Standards New Zealand, 2004
*Table 3- AS/NZS.4663:2004
Slip resistance measurement of existing pedestrian surfaces, Standards Australia/ Standards New Zealand, 2004

*TABLE 2

Classification of Pedestrian Surface Materials (AS/NZS.4586 :2004)

Pendulum* mean BPN		Classification
Four S rubber	TRL rubber	
>54	>44	V
45-54	40-44	W
35-44	-	X
25-34	-	Y
<25	-	Z

*TABLE 3

Interpretation of the wet pendulum results (AS/NZS.4663:2004)

Pendulum* mean BPN		Notional contribution of the floor surface to the risk of slipping when water wet
Four S rubber	TRL rubber	
>54	>44	Very Low
45-54	40-44	Low
35-44	-	Moderate
25-34	-	High
<25	-	Very High

Treatment Options

If the test results achieve a BPN result below the recommendations there are often options 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 Often used on tiled surfaces. Can vary in performance with different tile types.
- Wet sand/ Soda blasting Used 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 A replacement or alternate surface may be the most cost effective option in some circumstances.

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, cleanability and life expectancy.

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