PROJECT FLOORS

the up-to-date company

Slip Resistance FAQs

What are AS/NZS4586 & AS/NZS3661.1?

AS/NZS4586 is the slip resistance standard in use in Australia. AS/NZ3661.1 is an older standard, the recognized standard to use under the NZ Building Code.

Can I use 4586 test results?

Yes. Both 4586 & 3661 use the same pendulum method of testing the slip rating of the floor, so any tile tested using the pendulum method under 4586 can be translated into the 3661 standard. 4586 has two alternative tests using the ramp method of assessing the slip rating – these tests give "R" rating (R9, R10, etc). The ramp method of testing is not recognized under 3661 or the New Zealand Building Code.

What's the difference?

4586 is a more comprehensive standard. It includes four different methods of testing, depending on the intended usage of the floor area. It also includes a list of recommended minimum slip requirements for different locations (HB197). Under 3661 every potentially wet access route requires at least a 0.4 pass. 4586 has specific recommendations, for example entrance lobbies require less slip resistance than swimming pool surrounds.

What is Accelerated Wear testing?

Accelerated Wear is a method of testing tiles to project their non-slip properties into the future. Accelerated Wear testing is not compulsory under the NZ Building Code, however Acceptable Solution D1/AS1 states that all surfaces should meet the durability requirements of the Building Code B2, where the suggested lifespan of a non-slip surface is at least five years with normal maintenance. Many non-slip tiles decrease in slip resistance dramatically after installation so Accelerated Wear testing prior to specification provides assurance that the surface will maintain its non-slip properties and meet the durability requirement.

Where do I need to specify slip resistant surfaces?

Acceptable Solution D1/AS1 states that adequate slip resistance is required on all public access routes, including access into and within buildings.

Adequate slip resistance: defined as meeting coefficient of friction of not less than 0.4 when tested in accordance with AS/NZS 3661.1. When a surface will remain dry under normal usage, almost all surfaces will provide adequate slip resistance and do not need to be tested. D1/AS1 lists these surfaces as having an acceptable dry slip resistance: timber, cement, concrete, marble, granite, slate, terrazzo, sandstone, ceramic tile, clay pavers, concrete pavers, fibre cement sheet, rubber tiles, vinyl, linoleum, carpet and timber composite. When a surface may get wet under normal circumstances, it should be tested under AS/NZS 3661.1 to prove its suitability.

Residential:

- 'Public access route' is defined as the pathway to the front door. As this access route would usually get wet under normal circumstances, a tile that passes 0.4 when wet is required. Decks, pool areas, bathrooms and laundries are not public areas and therefore are not required to be slip resistant.

Commercial:

- 'Access within buildings' is considered to be the public access between private areas of the building, e.g. corridors and bathrooms. Both of these spaces would remain dry under normal use.
- 'Access into buildings' can often become wet during normal use, so require a surface that will pass 0.4 when wet.
- D1/AS1 also provides a guide for the transition zone between 'wet under normal usage' and 'dry under normal usage'. This zone can use either water absorbent matting for an area sufficient to absorb most water from shoes (suggested as minimum 1.8 metres), or an extended area of the wet slip resistant surface (suggested to be 6-10m from where the ground gets wet from rain, e.g. from entrance door or if there is an awning or overhang outside, from the outside edge of this).