

EasyProtect Floor Graphic and the Australian Standard for Slip Resistance.

Slip and fall injuries are a leading cause of liability claims. The largest settlement in Australia to date for a single slip and fall accident is believed to be \$2.75 million, with the average out of court settlement currently in the order of \$75,000. Ensuring that the products you use to manufacture floor graphics have been tested for compliance with the relevant standard is therefore crucial in minimising your possible exposure to costly litigation.

To quote one personal injury specialist lawyers website: *"In the case of walking surfaces, minimum safe coefficients of friction may apply. If a slip occurs as a result of the surface not meeting that standard then damages to the extent of injury will be payable. Call us for a no obligation free appraisal of your claim - and no win no fee advice."*

In this Technical Tip sheet we will give you an overview and summary of the requirements for anti slip coatings and their application in a public space. The information in this publication is NOT legal advice and we recommend you obtain the *Australian Standard AS/NZS 4586:2004 Slip Resistance Classification of New Pedestrian Surface Materials* and CSIRO publication *HB197:1999 An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials* to assess the suitability and compliance of EasyProtect Floor Graphic varnish for your intended application. These publications are available from Standards Australia.

The Australian Standard

Australian Standard AS4586 details four test methods for determining the slip resistance of a pedestrian surface: the wet pendulum test, dry floor friction test, wet barefoot ramp test and oil wet ramp test. Which of these tests your graphic needs to be certified with depends on the position in which it will be installed and the requirements of the managers or owners of the building or venue. Laboratory testing by an accredited agency using these four tests will reveal a "slip rating" which can be used to ensure that graphics placed in these public spaces are unlikely to contribute to a slip and fall accident and the subsequent possibility for legal action. Many managers of shopping centres and public areas will require proof of compliance with a tender or quote, without which you may not even be considered.

While these four basic tests measure the "slipperiness" of the graphic surface in different ways and under different circumstances they do not take into consideration wear and tear that may reduce the anti slip properties over time. Some venue managers may also require you to provide an additional rating called the "Scrub Test Rating" which gives an indication of the expected "safe life" of the anti slip surface before it will have to be replaced.

Test Results and Certification of EasyProtect Floor Graphic Varnish

EasyProtect Floor Graphic has been tested and certified according to the four slip measurement tests and scrub test, the results of which are shown below.

Slip resistance test results for EasyProtect Floor Graphic (482-5700 A/R)		
TEST	TESTING AGENCY	RATING CERTIFICATION
Oil Wet Ramp Test	LGA Institute (Germany)	R10
Wet Pendulum Test	CSIRO (Australia)	TBA results pending
Dry Floor Friction Test	CSIRO (Australia)	TBA results pending
Wet Barefoot Ramp Test	CSIRO (Australia)	TBA results pending
Scrub Test	CSIRO (Australia)	TBA results pending

Oil Wet ramp test revealed an anti slip performance of 14 degrees achieving the rating R10 (on a scale of R9 to R13). At the time of writing results from other tests were not yet available, check with Colour Components for results.

This Technical Tip sheet will be updated as test results are reported - check our web site www.colourcomponents.com.au

Placement of EasyProtect Floor Graphics

Following is a summary of locations where the certified slip rating of EasyProtect Floor Graphic meets or exceeds the recommended Australian Standard rating.

NOTE: This table is a summary of recommendations contained in CSIRO/Standards Australia HB197:1999 and is intended as a guide only. It remains your responsibility to assess the suitability of floor graphics with reference to the full Standard prior to placing in public areas.

Summary of common locations for which the recommended test rating is met or exceeded by a new floor graphic treated with easyProtect.		
Location	Recommended minimum rating Wet Pendulum Test	Recommended minimum rating Oil Wet Ramp Test
External Colonnade, walkways and pedestrian crossings	W	R10
Entry Foyers hotel, office, public buildings - wet	X	R10
Entry Foyers hotel, office, public buildings - dry	Z	R9
Shopping Centre, excluding food court	Z	R9
Shopping Centre - food court	X	R10
Internal Ramps, slopes (greater than 2 degrees) - dry	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 serving areas	X	R10
Hospitals and aged care facilities - dry areas	Z	R9
Supermarket aisles except fresh food areas	Z	R9
Shop and supermarket fresh fruit and vegetable areas	X	R10
Toilet facilities in offices, hotels, shopping centres	X	R10
Undercover concourse areas of sports stadium	X	R10
Sales areas for unpackaged bread, cakes and pastries		R10
Sales areas for unpackaged cheese and cheese products		R10
Hairdressing salons		R9
Garages, multi storey car park, car parks		R10
Schools And Kindergartens		
Entrance halls, corridors, assembly halls		R9
Classrooms, group rooms		R9
Stairs		R9
Toilets, washrooms		R10
Machine rooms for wood working		R10
Special rooms for handicrafts		R10

Source: CSIRO/Standards Australia HB197:1999

While this list is by no means comprehensive or complete, the R10 certification of EasyProtect Floor graphic means the product may be used with confidence in a wide variety of 'dry' public areas, transforming an inexpensive digital print on self adhesive media in to an ideal floor promotion or short term advertisement. Products with higher slip ratings (up to R13) are also available from Colour Components including UV cured screen printed coatings for high volume manufacture.

Areas such as swimming pools and gymnasiums where there is a high probability wet floors and bare foot traffic, is covered by the Wet Barefoot Ramp Test. This Technical Tip sheet will be updated to include the results and recommendations for these areas as Wet Barefoot test reports become available.

Be aware these basic tests do not take into account deterioration of anti slip properties from wear and tear of the floor graphic surface over time. The life of floor graphics depends on the amount of foot traffic, cleaning, damage etc. Maintenance and replacement cycle of graphics should allow for this deterioration. A Scrub Test gives an indication of graphic life but results cannot universally predict useful life in every circumstance and testing for individual circumstances may be required.