



PrintGrip™ R12 rated high traction floor graphic media



Close-up of UV ink-jet
printed surface

PrintGrip™ PE-5000ZW is a slip-resistant print and apply outdoor floor graphic media; no surface lamination is required.

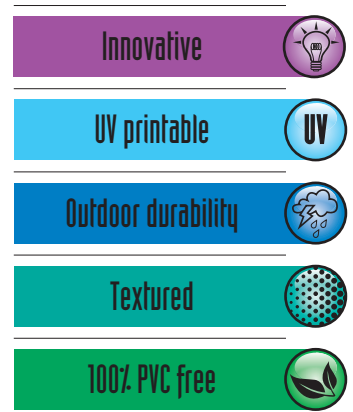
The product provides exceptional levels of grip in wet and dry conditions resulting in a reduced risk of injury. Ideally suited for the growing demand for exterior applied social distancing floor graphics, which are being increasingly deployed across a range of retail outlets, council owned premises and transport hubs.

PrintGrip™ is constructed using a UV stabilised polyethylene film coated with grit. The grit is overcoated with a durable topcoating which is suitable for printing via solvent, eco-solvent, latex and UV ink-jet print methods. PE-5000ZW can also be printed with solvent and UV screen printing inks.

The film is coated with an aggressive 50-micron adhesive offering high adhesion to most paving surfaces including concrete, natural stone and tarmac. Note: due to the high adhesion properties it is not recommended to be applied to other types of surfaces such as indoor floor coverings.

Other available documents relating to PE-5000ZW:

- 1) *PE-5000ZW Processing Guide* for hints and tips relating to printing, cutting and application.
- 2) *PE-5000ZW data sheet*
- 3) *PE-5000ZW Floor Slip Resistance Testing Certificate*

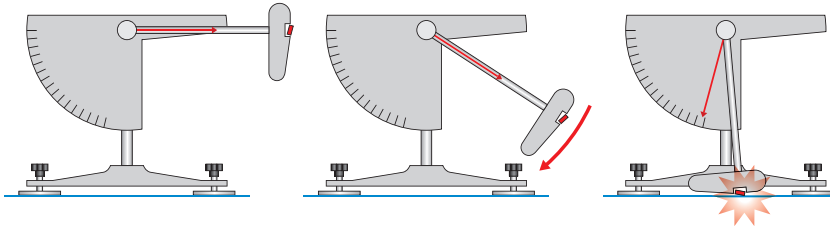




Pendulum Test Values (PTV) / R-rating

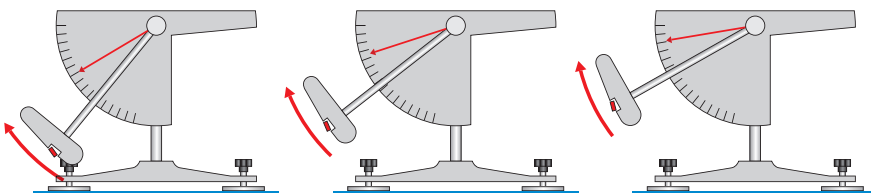
Pendulum tests are used to determine floor graphics anti-slip properties in both wet and dry conditions.

Test method



- 1 The Pendulum is very carefully setup in position.
- 2 The Pendulum Swing Arm is released and falls.
- 3 The 'Slider' makes contact with the floor (Just like a heel) the pointer is moved along its scale by the Pendulum Swinging Arm.

Results



- Result A**
A PTV of 60 is recorded - very good anti slip floor properties.
- Result B**
A PTV of 36 is recorded. The floor just passes the test but any floor slope will reduce this pass mark by approx. 2 PTV for every degree of slope (1.75 Exact).
- Result C**
A PTV of 19 is recorded The floor FAILS the test.
It is likely to cause a serious if not fatal slip injury if not corrected for.

A floor graphic grip effectiveness is essential and PTV values are used to determine the suitability (and therefore the risk) of the products use.

Most floor graphic materials achieve a PTV of between 11 to 34 which equate to R9 or R10 ratings. These materials offer poor and very poor slip characteristics resulting in a likely to certain occurrence of slip injuries.

Note: As an example of anti-slip effectiveness a PTV value of 34 exhibits a 10x higher slip risk when compared to a floor graphic with a PTV of 36.

PrintGrip™ PE-5000ZW achieves a PTV value of 75 (dry) and 68 (wet) which equates to a R12 rating.

The chart below provides an overview of the relation of PTV and R values.

R9 to R13 RATINGS For a floor where a person normally wears shoes	Pendulum Test Value or PTV on a horizontal surface Also known as SRV or Slip Resistance Value	PTV at five degrees of slope Adjust DOWN by 1.76PTV for every degree of slope	Slip characteristics No slope
R 9 (No values below R 9)	11 to 18 PTV	2 to 9 PTV	VERY POOR Slip injuries certain to occur
R 10	18 to 34 PTV	9 to 25 PTV	POOR Slip injuries likely to occur
R 11	34 to 51 PTV	25 to 42 PTV	BETTER But can still fail Pendulum Tests
R 12	51 to 70 PTV	42 to 61 PTV	GOOD Minimum recommended
R 13	70+ PTV	61+ PTV	BEST Especially on slopes and high floor wear areas

R Ratings are determined via testing in accordance with DIN 51130:2004, which is the "Testing of floor coverings; determination of the anti slip properties; workrooms and fields of activities with slip danger; walking method; ramp test German National Standard 2004". This is fully recognised and adopted in the UK