



Commercial kitchen slip resistance guide



Avoid a slip up when specifying safety flooring for your commercial kitchen







In food processing, production and commercial kitchen environments with high traffic and frequent spillages of high viscosity contaminants, the specified safety flooring needs to last the pace and provide slip resistance that is sustainable. Polyflor offers two specialist ranges - Polysafe Apex and Polysafe Ultima ranges which are specifically designed to meet the demands of these busy working areas.

Flooring for commercial kitchens must be fully Health and Safety Executive (HSE) Compliant and provide a low slip potential classification, particularly when there are numerous covers a day and continuous risk of oil, grease and margarine spillages. This is achieved through flooring achieving 40+ on the Pendulum, a dynamic co-efficient of friction slip test method that closely represents a slipping foot and is recommended by the HSE.

In these intensive areas, the regular spillage of cooking oil, grease and wet contaminants creates the potential for the formation of a squeeze film - heavily compressed fluid trapped between shoe and floor which prevents solid-to-solid contact and would pose a slip risk if incorrect flooring is specified. The more viscous the contaminant, the higher level of surface roughness is required for the flooring to penetrate this squeeze film and achieve continued friction between foot and floor. In areas where contaminants are typically cooking oil or margarine, the floor needs to have a minimum surface roughness level of 70 microns so that this squeeze film is penetrated and underfoot safety is provided to staff working in these extreme conditions.

Choosing slip resistant flooring that is sustainable and performs over the long term can be a complex and confusing area for those in the specification chain and is partly attributed to products now entering the market where slip resistant characteristics are promoted that are based solely on transient, ex-factory R ratings derived from the Ramp test (R9 -R13) which are not sustainable. This test takes no account of wear and maintenance over the life of the floor and cannot be set up on-site, meaning products with no particles and just a heavy emboss can achieve R11 or R12 ratings. However, once trafficked over a period of time these pseudo safety floors can be rendered as unclassified on the R Value scale. This provides no comparison to a fully fledged safety

floor with particles through the performance layer. Alternatively, the Pendulum test is a portable unit that can measure the performance of the floor over its life and is used by HSE inspectors if they are testing a floor and assessing a slip complaint.



A good safety floor product should retain its performance characteristics over time, demonstrating outstanding durability and abrasion resistance. In terms of safety floor credentials, all products classified as safety floors and specified to provide slip resistance in wet conditions should meet EN 13845, which is the European standard for particle based safety flooring.

To meet the criteria for the EN 13845 standard, safety flooring must also pass the 50,000 cycles abrasion test (EN 660-2) to demonstrate the longevity of the aggregates and their performance, ensuring long term, sustainable slip resistant performance of the product. This stringent test procedure involves constant cycles of abrasion under pressure with continuous application of grit to replicate accelerated wear over time. Both **Polysafe Apex** and **Ultima** ranges meet these test requirements and have slip resistant particles through the performance layer of the product to ensure continual performance. Sustainability is always key when measuring slip resistance of safety flooring. Safety floor ranges can also be independently assessed and certified by the British Board of Agrément (BBA), indicating



the products are fit for their intended use and will retain their slip resistant characteristics for at least 10 years provided that they are installed to manufacturer's instructions. Generally, if safety flooring is used in appropriate areas and maintained correctly, the slip resistance will tend to improve with age. Over time, the more abrasive aggregates will be left behind and still be carrying out the job of imparting the necessary slip resistance in years to come.

Products currently being sold as 'safety floors' in some instances only have very thin coatings of aggregate applied or include a slightly rougher surface emboss and no embedded particles. These products pass ex-factory ramp tests but only

offer short term slip resistance that reduces after installation, maintenance and wear. In terms of sustainable slip performance, these products offer no credible substitute to a safety vinyl containing aggregates all the way through the performance layer like all flooring products in the Polysafe range.

You can find out more about our fit for purpose, fully sustainable Polysafe Apex and Polysafe Ultima ranges at www.polyflor.com/safety where product samples can be ordered online, free of charge.

Polysafe Apex



2.5mm gauge

Fully HSE Compliant

45+ on RRL Pendulum Wet Test

70 microns + surface roughness

R12 Ramp Test rating

Surface roughness of 70 microns and above

Achieves 50,000 cycles abrasion test to EN 13845 standard

Flexible sheet vinyl which can be welded at the seams and coved to create an impermeable solution, avoiding potential for cracked grout lines within ceramic tiles

Low VOCs

6 shades available

Sustainable slip resistance for the guaranteed life of the product

Polysafe Ultima



2.5mm gauge

Fully HSE Compliant

40+ on RRL Pendulum Wet Test

70 microns + surface roughness

R11 Ramp Test rating

Surface roughness of 70 microns and above

Achieves 50,000 cycles abrasion test to EN 13845 standard

Flexible sheet vinyl which can be welded at the seams and coved to create an impermeable solution, avoiding potential for cracked grout lines within ceramic tiles

Low VOCs

6 shades available

Sustainable slip resistance for the guaranteed life of the product

For further information visit:





