



R Ratings & PTV: a practical cross-reference

R-ratings and Pendulum Test Values are produced by different test methods, so there is no official one-to-one conversion. The ranges below are a useful industry guide only for quickly understanding where the two systems broadly sit alongside one another.

The important bit: use the indicative comparison to understand the level of performance, but specify from the actual test result for the product, finish and condition you intend to use. Real products overlap the ranges – for example, R10 surfaces can achieve PTV 36+ and R11 surfaces can achieve PTV 50+.

Indicative R Rating to PTV guide

R Rating	PTV	Slip potential
R9	PTV 20–24	High slip potential
R10	PTV 25–35	Moderate slip potential
R11	PTV 36–44	Low slip potential
R12	PTV 45–54	Low slip potential
R13	PTV 55+	Low slip potential

Not an official conversion. These broad PTV bands are a commonly published industry cross-reference, not a standardised equivalence. Different test methods, contaminants, sliders, finishes and product constructions mean results can overlap. Always check the manufacturer's actual wet PTV and test conditions where PTV performance matters.

How HSE interprets Pendulum Test Values

Pendulum Test Value	HSE interpretation
PTV 0–24	High slip potential
PTV 25–35	Moderate slip potential
PTV 36+	Low slip potential

Slider 96 is generally used for shod pedestrian assessment. HSE advises Slider 55 for barefoot areas. Wet and dry results are not interchangeable, and slopes, contamination, cleaning and wear all matter.



Which slip resistance should I look for?

There is no single number that suits every room. Think about whether the floor will be wet or dry, shod or barefoot, level or sloping, how it will be cleaned, and what contamination is realistically likely.

When it comes to residential use your initiative, don't be put off by a polished surface if you like the look, just think practically.

Bathroom floor

Look for: a genuine wet test result where regular splashing is expected. PTV 36+ is a useful low-slip potential benchmark. For bare foot use, check the appropriate bare foot test data rather than relying on R rating alone.

Wet room / shower

Look for: wet bare foot performance. Ask for pendulum data using the appropriate barefoot slider and/or relevant barefoot ramp classification. Soap, shampoo and drainage can materially affect risk.

Residential kitchen

Look for: a finish suited to occasional water or food contamination without becoming unnecessarily difficult to clean. R10 is common, but where wet performance matters ask for the actual wet PTV.

Entrance / lobby

Look for: wet PTV data because rainwater is tracked inside. PTV 36+ is a strong reference point for low slip potential on level surfaces, alongside sensible matting and cleaning strategy.

Poolside / changing

Look for: wet barefoot data first. Do not assume an R11 tile automatically makes a pool surround suitable. Check the exact finish, drainage, barefoot test condition and project requirements.

External terrace

Look for: wet performance, drainage, slope and likely contamination from rain, leaves or algae. R11 is common for external porcelain, but actual wet PTV data gives a more useful UK reference.

Commercial kitchen

Look for: performance under realistic greasy or food-contaminated conditions, not simply water. Higher R classes are common, but cleaning regime and contaminant type are part of the specification.

Public / commercial areas

Look for: the installed environment: footfall, entrances, spill risk, cleaning, gradients and user profile. Specify measurable performance rather than choosing a finish from the R label alone.

Before you specify

- Confirm whether the quoted PTV was wet or dry
- Check the slider / test condition used.
- Make sure the result applies to the exact finish being ordered. Consider slope, drainage, contamination, cleaning and wear.
- Ask for the current manufacturer test report where performance is critical.

About this guide

This guide has been put together by Aura Surfaces following our own research into slip resistance testing, recognised industry guidance and our experience working with porcelain surfaces. It is intended as a practical reference for designers, contractors and clients.

Slip resistance can be affected by finish, wet or dry conditions, footwear or barefoot use, contamination, cleaning, installation and wear. Always check the individual product test data and project requirements before final specification.

Need help making sense of slip ratings?

If you're working on a project that needs to be clear about slip resistance, get in touch. We can help you understand the test data, compare finishes and identify the right questions to ask before specifying a surface.

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