Slip resistance *for floors*: PTV and what to specify

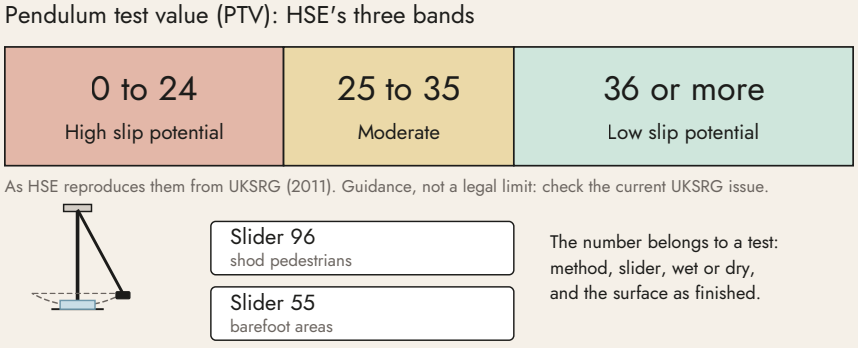
Slip resistance is measured with a pendulum, and HSE reproduces three PTV bands: 0 to 24 high, 25 to 35 moderate, 36 or more low slip potential. They are guidance, not a legal limit. BS 7976 has been replaced by BS EN 16165:2021. No target is given for any room.

Compliance guidance. Read on 5 November 2026 from HSE guidance, UK Slip Resistance Group pages, BSI Knowledge listings, Approved Documents B and M and the Workplace Regulations 1992. The PTV bands are HSE's, reproduced from UKSRG (2011); the current UKSRG Guidelines (Issue 6, 2024) are paid and were not read. This sheet gives no target PTV for any room. Slip is a personal-injury risk: the designer or duty holder sets the requirement and a competent person tests. Check current editions. Guidance, not legal or engineering advice.

AT A GLANCE

Test	Standard (as read)	How it works	Notes
Pendulum, pedestrian surfaces	BS EN 16165:2021 Annex C (replaced BS 7976, withdrawn 25 Feb 2022)	A rubber slider on a swinging arm sweeps the surface, dry or wet. The result is a PTV. Works in the laboratory and on a laid floor.	HSE's preferred method. The UK committee says it is the only one of EN 16165's four methods to rely on for wet slip risk.
Pendulum, natural stone	BS EN 14231:2003	As UKSRG describes it: Slider 55, dry and wet, six specimens, two directions.	BSI: current, under review. Used for stone product data.
Ramp, barefoot	EN 16165 Annex A (DIN 51097 earlier)	A person walks a tilting ramp that is wetted; classes A, B and C by angle. Laboratory only.	HSE has reservations. No correlation with the pendulum (UKSRG).
Ramp, shod, oil	EN 16165 Annex B (DIN 51130 earlier)	A person in boots walks an oiled ramp; R9 to R13 by angle. Laboratory only.	R9 will be slippery wet. R10 spans a wide range of friction (HSE). Not convertible to a PTV.
Roughness (Rz)	Microroughness meter (HSE, UKSRG)	Surface roughness in micrometres: below 10 high, 10 to 20 moderate, 20 or more low slip potential in water-wet pedestrian areas.	A supplement to the pendulum. Not for carpet or undulating or very rough floors.

Descriptions follow HSE's technical information sheet, the BS EN 16165 foreword and introduction, and UKSRG's summary of standards (updated April 2024). The standards themselves were not read in full. Ask for the method, the slider and the condition with every PTV.



HSE's three PTV bands (technical information sheet, table 1, reproduced from UKSRG 2011), with the two sliders HSE names. The pendulum is a schematic. Original drawing by Make Bespoke Studio.

SPECIFICATION WORDING

TEST METHOD

Slip resistance of [floor reference, finish, sealer] is to be tested wet to BS EN 16165:2021 Annex C (pendulum), with Slider [96 / 55 for barefoot areas] [both sliders where the area is used shod and barefoot], by a laboratory competent in the method, following the current UKSRG Guidelines. The report is to give the pendulum test value as [the mean of the readings] with the individual readings, direction and test conditions.

REQUIREMENT

Target PTV [ ] or more in [area], set by [designer / duty holder] on the basis of the risk assessment dated [ ]. [HSE's classification, in which 36 or more is low slip potential, is the reference for reading results.] A result below the target is to be resolved by changing the finish or the material before fabrication starts.

SAMPLE AND REPORT

Test sample: a production sample [size], finished and sealed as the works will be, cut from the approved slab or board. The report is to be issued before fabrication and to name the sample, finish, slider, date, laboratory and operator.

HANDOVER AND MAINTENANCE

Re-test in situ after installation and the first clean, at [number] areas chosen by [designer], to the same method. The cleaning regime and products are to be those used in the test and approved by [workshop] and [sealer maker]. No anti-slip treatment, acid or otherwise, is to be applied without written approval.

TERMS USED

Pendulum test value (PTV)

The result of a pendulum test: how much a standard rubber slider is slowed crossing a surface, so a lower value is a slipperier surface. HSE reproduces UKSRG (2011) bands: 0 to 24 high, 25 to 35 moderate and 36 or more low slip potential.

Slider 96 and Slider 55

The rubber sample on the pendulum. HSE uses Slider 96 for shod pedestrians and Slider 55 for barefoot areas. EN 16165 specifies Slider 57; its UK foreword says Slider 55 as supplied is normally within that range.

Rz microroughness

A measure of surface roughness in micrometres, the mean of several peak-to-valley readings. HSE gives bands for water-wet pedestrian areas: below 10 high, 10 to 20 moderate, 20 or more low slip potential.

R-rating

A German ramp-test classification (R9 to R13) for shod slip resistance with oil contamination; it does not translate directly to a pendulum value.

STANDARDS AND SOURCES

- HSE: Assessing the slip resistance of flooring (GEIS2): tables 1 and 2. First published 2012; web page updated 5 Jun 2023; read 5 Nov 2026.
- HSE: Slips and trips, frequently asked questions: page dated 20 Jun 2025; read 5 Nov 2026.
- BS EN 16165:2021: BSI listing, foreword and introduction read 5 Nov 2026; current. It supersedes BS 7976-1, -2 and -3, withdrawn 25 Feb 2022. Annex text not read.
- UK Slip Resistance Group: Guidelines Issue 6 (2024, paid, not read); 'Meeting standard requirements' (updated Apr 2024) and FAQs read 5 Nov 2026.
- Workplace (Health, Safety and Welfare) Regulations 1992, regulation 12: read 5 Nov 2026.
- Approved Document B volume 2, para 5.17; Approved Document M volume 2, paras 5.18 and 5.21: editions as above; read 5 Nov 2026. BS EN 14231:2003 and BS 8300-2:2018: BSI listings only.

Full guide: https://makebespoke.com/trade/technical/slip-resistance-for-floors. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.