

Surface friction of pavements —

Part 2: Test method for measurement of surface skid resistance using the GripTester braked wheel fixed slip device

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee B/510, Road materials, to Subcommittee B/510/5, Surface characteristics, upon which the following bodies were represented:

- County Surveyors' Society
- Department of the Environment, transport and the Regions
- Institution of Civil Engineers
- Quarry Products Association
- Road Surface Dressing Association
- Society of Chemical Industry

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Brick Development Association
- Britpave
- Department of the Environment, Transport and the Regions (Highways Agency)
- Ministry of Defence

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Terms and definitions	1
3 Equipment	2
4 Calibration and maintenance	3
5 Test procedures	3
6 Sampling	4
7 Precision	4
8 Test results	4
Annex A (informative) Water flow rates	8
Figure 1 — GripTester: General arrangement	5
Figure 2 — GripTester header file layout: ROADS VERSION 3.1	6
Figure 3 — GripTester header file layout: AIRFIELDS VERSION 3.3	7

Foreword

This British Standard has been prepared under the direction of the Building and Civil Engineering Sector Policy and Strategy Committee by Subcommittee B/510/5, Surface characteristics.

This standard is published in two parts. Part 1 is entitled *Method for measuring the surface friction of pavements using a sideways force coefficient routine investigation machine*.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

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1 Scope

This British Standard describes a method for determining the skid resistance of a surface using the GripTester continuous reading braked wheel fixed slip device.

The method is applicable to the following:

- highways: surfacings;
- highways: horizontal signs;
- airport runways;
- flight decks;
- footways;
- pedestrian precincts;
- test panels of surfaces intended for any of the above.

The method is for measurement of skid resistance along a continuous surface on external paved surfaces or indoors. Test speeds can vary from 5 km/h to 130 km/h depending on the application. The measured values can be affected by the test speed.

2 Terms and definitions

For the purposes of this British Standard the following terms and definitions apply.

2.1

skid resistance

property of the trafficked surface which limits relative movement between a vehicle tyre contact patch and the road

2.2

slip resistance

property of the trafficked surface to maintain the adhesion of a pedestrian sole

2.3

frictional force

tangential force generated between the vehicle tyre/pedestrian sole and the trafficked surface

2.4

braked wheel friction tester

apparatus that can be moved over the test surface at a known, steady speed and that includes a test wheel, a system for braking the test wheel and instrumentation for measuring the resulting friction between the test tyre and test surface

2.5

fixed slip

a braking system that forces the test wheel to roll at a fixed reduction of its natural speed

2.6

GripTester

a braked wheel fixed slip device friction tester capable of being manually pushed or towed at up to 130 km/h

2.7

load

dynamic instantaneous vertical force acting on the test wheel

2.8

drag

dynamic instantaneous horizontal force acting on the test wheel