

Resilient floor coverings — Determination of the effect of loaded heavy duty castors

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British Standard

ICS 97.150

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National foreword

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Summary of pages

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English version

Resilient floor coverings — Determination of the effect of loaded heavy duty castors

Revêtements de sol résilients — Détermination
de l'effet de roulettes fortement chargées

Elastische Bodenbeläge — Bestimmung
des Verhaltens gegenüber Schwerlastrollen

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CEN

European Committee for Standardization
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 134, Resilient and textile floor coverings, the Secretariat of which is held by BSI.

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1 Scope

This European Standard describes a method for determining the effect caused by the use of loaded heavy duty castors on a resilient floor covering and its joints, as they roll and reverse. It is intended to simulate the effects of trolleys and other equipment fitted with castors, which can be used in offices and light industry. It consists of two test methods, one for the assessment of the floor surface and one for the assessment of adhesion.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies:

ISO 606:1982, *Short-pitch transmission precision roller chains and chain wheels*.

ISO 468:1982, *Surface roughness — Parameters, their values and general rules for specifying requirements*.

EN 309:1992, *Wood particleboards — Definition and classification*.

3 Principle

A floor covering with one or more joints, hot-welded or cold-sealed where necessary, is trafficked by a heavy loaded swivel castor. The castor moves backwards and forwards, and turns and reverses. The profile of the surface is measured before and after the test, and any damage is evaluated. The adhesion between floor covering and the substrate is measured in test and control areas.

4 Apparatus and materials

4.1 *Test rig*, comprising the following (see Figure 1).

4.1.1 *Supporting table*, level and having dimensions at least equal to (700×800) mm which supports the test specimens while they are trafficked by the loaded castor described below.

4.1.2 *Swivel castor*, with the design shown in Figure 2. It has a polyamide wheel with a Brinell hardness of (11 ± 1) HB (when measured with a 10 mm ball and a load of 5 kN), a diameter of (115 ± 5) mm and width of (40 ± 1) mm. The wheel has a cylindrical travelling surface and its edges are chamfered with a radius of 1 mm.

