

## **Scuff Marks Left by Outsoles**

Whether at home or at the gym – scuff marks left on a floor by dark-coloured outsoles raise the alarm for the cleaning brigade. But light-coloured outsoles can also leave scuff marks. And white marks on a floor are just as unsightly.

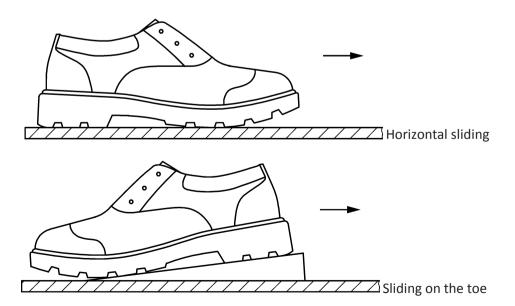
The technical term "marking" refers to the transfer of particles from an outsole to the surface of a floor covering on rubbing.

In the absence of a standard method, marking by outsoles has hitherto been determined at PFI by an in-house test method. Testing necessitated destruction of the shoe or outsole.

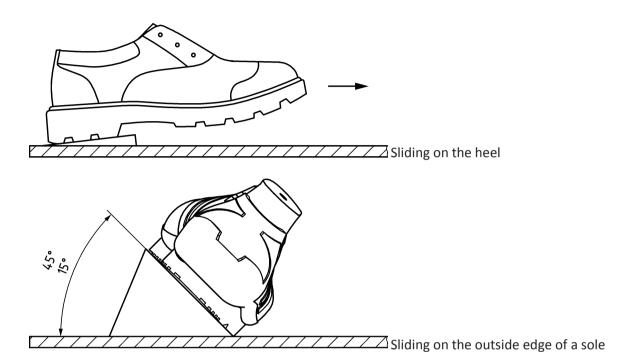
The DIN Standards Committee NA 062-10-11 AA has addressed this topic and developed a test method DIN SPEC 53250 "Footwear - Test methods - Determination of non-marking of outsoles" for uniform application in all test institutes. "DIN SPEC" stands for "DIN Specification" and signifies "development-attended standardisation" by the German Institute for Standardisation (Deutsches Institut für Normung, DIN).

DIN SPEC 53520 describes a test method for determination of outsole marking on a defined surface. The sample is placed on a floor surface, subjected to a defined normal force, and moved horizontally over the floor surface (or the floor surface is moved horizontally to the shoe).

Depending upon the motion sequence (for example, normal walking or sporting activity) at least one of the possible tests has to be performed, as shown schematically.







It is assessed whether a sole leaves scuff marks or not. In addition, the intensity of the marking can also be ascertained. The test method is applicable for shoes, outsoles, and outsole materials and is non-destructive.

The method is valid for all kinds of outsoles for which an appraisal of marking on a surface is required. Test floor surfaces other than those recommended in DIN SPEC 53520 can also be used for product development.

## Further questions will gladly be answered by:

Dipl.-Ing. (FH) Liselotte Vijselaar Head of Physical Test Laboratory at PFI

Tel.: +49-(0)6331–249012,

E-Mail: <u>liselotte.vijselaar@pfi-germany.de</u>