BS ISO 23013:2016

BSI Standards Publication

Road vehicles — Determination of resistance to forced entry of security glass constructions used in vehicle glazing — Test of glazing systems

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National foreword

This British Standard is the UK implementation of ISO 23013:2016.

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A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Road vehicles — Determination of resistance to forced entry of security glass constructions used in vehicle glazing — Test of glazing systems

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 35, *Lighting and visibility*.

Introduction

The vast majority of potential attacks using hand-held implements can be narrowed down to two basic types of attack: attack with a sharp instrument and attack with a blunt instrument. Such attacks are reproduced by these procedures using standardized tests. The levels of energy/force used in the tests are designed to reflect strength of attack that is within the limits of human capability.

As the construction of the window frame plays a particularly important role in providing resistance to forced entry, any glazing requiring classification approval by this International Standard needs to be tested within its own original car body section, e.g. its own door assembly.

By defining performance levels of attack resistance, it is possible to classify the intruder resistance properties of a given glazing within a system part.

Road vehicles — Determination of resistance to forced entry of security glass constructions used in vehicle glazing — Test of glazing systems

1 Scope

This International Standard provides test procedures that are designed to assess levels of resistance to forced entry provided by security glazing used in vehicles. Security glazing to be tested shall provide a certain (higher) level of protection against vehicle intrusion than standard safety glazing. This International Standard does not apply to conventional safety glazing material that meets the requirements of international automotive glazing material standards similar, but not limited to ECE R43.

This International Standard's goal is to quantify how much resistance can be provided by particular system parts (security glazing with associated part of the car body) against rapid unauthorized entry into vehicles. The test methods used have been designed more to simulate opportunist theft attacks using simple implements, which could be easily carried about a person rather than by "calculated theft" using specialist tools which a professional thief might use. That range of tools is limited to hand-held and non-powered instruments that could physically provide access to a vehicle.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 513, *Classification and application of hard cutting materials for metal removal with defined cutting edges — Designation of the main groups and groups of application*

ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 4130, *Road vehicles — Three-dimensional reference system and fiducial marks — Definitions*

EN 10027-2, *Designation systems for steels — Part 2: Numerical system*

DIN 5131, *Hatchets*

DIN 7287, *Steel axes and hatchets — Technical specifications*

DIN 53479, *Testing of Plastics and Elastomers; Determination of Density*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
attack test
predetermined series of blows to a specific area of a *system part* (3.13) applied with well-defined energy levels and a *standardized tool* (3.12)

3.2
blunt attack
attempt to break into a vehicle where the energy of attack is exerted onto the *system part* (3.13) by a blunt or rounded impacting tool