



BSI Standards Publication

Security and resilience — Vehicle security barriers

Part 1: Performance requirement, vehicle impact
test method and performance rating

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National foreword

This British Standard is the UK implementation of ISO 22343-1:2023. It supersedes PAS 68:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GW/3, Private Security Management & Services.

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

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Published by BSI Standards Limited 2024

ICS 93.080.30

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2023.

Amendments/corrigenda issued since publication

Date	Text affected
31 January 2024	Correction to supersession details in national foreword

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First edition
2023-09

Security and resilience — Vehicle security barriers —

Part 1: Performance requirement, vehicle impact test method and performance rating

Sécurité et résilience — Barrières de sécurité pour véhicules —

*Partie 1: Exigence de performance, méthode d'essai d'impact de
véhicule et évaluation des performances*



Reference number
ISO 22343-1:2023(E)

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Published in Switzerland

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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 document 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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 292, *Security and resilience*.

This first edition cancels and replaces IWA 14-1:2013, which has been technically revised.

The main changes are as follows:

- this document has been brought into line with modern technology and practices;
- all figures have been reviewed and surface-placed barriers have been explicitly identified;
- additional reporting of furthest part of vehicle beyond vehicle security barrier datum;
- there has been a general review of all text and structure to provide clarification to test houses and other interested parties.

A list of all parts in the ISO 22343 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Security and resilience — Vehicle security barriers —

Part 1:

Performance requirement, vehicle impact test method and performance rating

1 Scope

This document specifies impact performance requirements for a vehicle security barrier (VSB) and a test method for rating its performance when subjected to a single impact by a test vehicle not driven by a human being. It is applicable to test methods for vehicle penetration distances not exceeding 25 m.

This document is applicable to all manufacturers and procurers of VSBs, where they are used to protect people in any public or private location from the impact of vehicle attacks.

This document does not apply to the performance of a VSB or its control apparatus when subjected to:

- slow speed encroachment;
- slow speed nudging and ramming;
- blast explosion;
- ballistic impact;
- manual attack, with the aid of the vehicle (multiple impacts at slow speed);
- manual attack, with the aid of tools (excluding vehicles);
- electrical manipulation;
- attack on the control systems by any means.

NOTE 1 For manual attack, a variety of test methods exist. For assessing intruder resistance of building components, see LPS 1175^[6].

NOTE 2 The VSB is designed and tested on the basis of:

- a) vehicle type, mass and speed of the assessed vehicle-borne threat;
- b) its geographical application (e.g. climate conditions);
- c) intended site location (e.g. rigid or non-rigid soil/finished surface).

It does not apply to guidance on design, the operational suitability of a VSB or other impact test methods.

NOTE 3 Guidance on the selection and specification of a VSB by type and operational suitability is given in ISO 22343-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22300, *Security and resilience — Vocabulary*