

Secure storage units — Requirements, classification and methods of test for resistance to burglary —

Part 1: Safes, strongroom doors and strongrooms

The European Standard EN 1143-1:1997, with the incorporation of amendment A1:2001 and A2:2002, has the status of a British Standard

ICS 03.060

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee GW/2, Safes, upon which the following bodies were represented:

- Association of Burglary Insurance Surveyors
- Association of Security Consultants
- British Bankers' Association
- British Retail Consortium
- British Security Industry Association
- Building Societies Association
- Federation of the Electronics Industry
- Loss Prevention Council
- Master Locksmiths' Association
- Post Office
- Security Facilities Executive

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National foreword

This part of BS EN 1143 has been prepared by Technical Committee GW/2 and is the English language version of EN 1143-1:1997 *Secure storage units — Requirements, classification and methods of test for resistance to burglary — Part 1: Safes, strongroom doors and strongrooms*, including amendments A1:2001 and A2:2002, published by the European Committee for Standardization (CEN).

It was assumed during the preparation of this standard that it would be used and applied by those who are appropriately qualified and experienced.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 31 and a back cover.

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English version

Secure storage units — Requirements, classification and methods of test for resistance to burglary — Part 1: Safes, strongroom doors and strongrooms

(includes amendments A1:2001 and A2:2002)

Unités de stockage en lieux sûrs —
Prescriptions, classification et méthodes de test
pour la résistance à l'effraction —
Partie 1: Coffres forts, portes fortes et
chambres fortes
(inclut les amendements A1:2001 et A2:2002)

Wertbehältnisse — Anforderungen,
Klassifizierung und Methoden zur Prüfung des
Widerstandes gegen Einbruchdiebstahl —
Teil 1: Geldschränke, Tresorraumtüren und
Tresorräume
(enthält Änderungen A1:2001 und A2:2002)

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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 263, Secure storage of cash, valuables and data media, the Secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 1997, and conflicting national standards shall be withdrawn at the latest by July 1997.

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Foreword to amendment A1

This amendment EN 1143-1:1997/A1:2001 to EN 1143-1:1997 has been prepared by Technical Committee CEN/TC 263, Secure storage of cash, valuables and data media, the Secretariat of which is held by BSI.

This amendment to the European Standard EN 1143-1:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This amendment has been prepared by Working Group 1 of CEN/TC 263, Secure storage of cash, valuables and data media, to add requirements for safes for currency exchange machines, teller assist machines, currency recycling machines, and automated teller machines (ATM safes). It also includes a change to the normative references and changes to permit accessories in strongrooms and strongroom doors (4.2.1), to alter the length and BV values for diamond core drills (Table A.12, column "D or S") and to add new general requirements (4.2.3, 4.2.4 and 4.2.5).

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Foreword to amendment A2

This amendment EN 1143-1:1997/A2:2002 to EN 1143-1:1997 has been prepared by Technical Committee CEN/TC 263, Secure storage of cash, valuables and data media, the Secretariat of which is held by BSI.

This amendment to the European Standard EN 1143-1:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2002, and conflicting national standards shall be withdrawn at the latest by July 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Working Group 1 of CEN/TC 263, Secure storage of cash, valuables and data media, prepared this amendment. It gives requirements and a corresponding test for a CD designation, denoting resistance to diamond core drilling, for strongroom doors and strongrooms.

Contents

	Page	Page
Foreword	2	Table A.1 — Hand (dis)assembling tools 26
Introduction	5	Table A.2 — Hand gripping tools 26
1 Scope	5	Table A.3 — Hand levering tools 26
2 Normative references	5	Table A.4 — Hand sawing/filing/cutting and drilling tools 27
3 Definitions	5	Table A.5 — Hand hammering tools 27
4 Classification and requirements	8	Table A.6 — Specially made tools 27
5 Technical documentation	9	Table A.7 — Electric powered tools, without impact 28
6 Test specimen	12	Table A.8 — Electric powered rotary tools, with impact option 28
7 Tool attack test	12	Table A.9 — Electric power impacting machine tools, without rotation 28
8 Anchoring strength test	19	Table A.10 — Electric power grinding/slitting machine tools 29
9 Explosive test	21	Table A.11 — Thermal cutting/melting tools 29
10 Diamond drilling test	24	Table A.12 — Accessories for tools of Table A.1 up to Table A.11 30
11 Test report	25	Table A.13 — Miscellaneous tools 31
12 Marking	25	Table A.14 — Non-tools 31
Annex A (normative) Attack tools	26	
Figure 1 — Example of an ATM system	7	
Figure 2 — Schematic diagram showing the internal space of an ATM safe through which a door opening tool attack shall not pass	17	
Figure 3 — Example of loading equipment	22	
Table 1 — Minimum requirements for classification of safes (excluding ATM safes) into resistance grades	10	
Table 2 — Minimum requirements for classification of strongroom doors and strongrooms into resistance grades	11	
Table 3 — Minimum requirements for classification of ATM safes into resistance grades	11	
Table 4 — Minimum requirements for CD designation of strongroom doors and strongrooms by a diamond drilling test	21	
Table 5 — Explosive charge mass for resistance grades II to XIII	21	

Introduction

Tests are made, the results of which are used to classify the resistance to burglary. The resistance classification can also be used for designing security systems with the provision that, depending on the criminal, the conditions at the place of the crime and the availability of tools, considerably longer times are likely to occur in real burglary attacks than in a test.

Manual tests are included whose results and repeatability is dependant on the skill of the testing team. Machine related tests are under development and may be included when the standard is revised.

1 Scope

This European Standard establishes the basis for testing and classifying free-standing safes, built-in safes (floor and wall), ATM safes and ATM bases, strongroom doors and strongrooms (with or without a door) according to their burglary resistance.

2 Normative references

This European Standard incorporates by dated or undated reference, 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.

ENV 1300:1999, *Secure storage units — Classification of high security locks according to their resistance to unauthorized opening*.

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1

safe

storage unit which protects its contents against burglary and when closed has at least one internal side ≤ 1 m length

3.2

free-standing safe

safe whose protection against burglary depends only upon the materials and construction of its primary manufacture and not upon materials added or attached during installation

3.3

built-in safe

safe whose protection against burglary is partly dependent upon materials incorporated into it, or attached to it, during installation

NOTE Under-floor safes and wall safes are special types of built-in safes.

3.4

strongroom

storage unit which protects against burglary and when closed has internal side lengths in all directions > 1 m

NOTE Strongrooms may be cast in-situ, constructed from prefabricated elements or a combination of both.

3.5

strongroom door

door with lock(s), boltwork and frame intended for giving access to a strongroom

3.6

accessories

installations/devices which are in the structure or which pass through the structure of the strongroom or strongroom door(s) for ventilation or for deposit of cash and valuables

NOTE Accessories may be always open, usually open (but can be closed in case of emergency), or closed (but can be opened if necessary).

3.7

operating time

time during which a tool is used attempting to create a change in the test specimen

3.8

resistance unit; RU

burglary resistance which results from one minute's use of a tool carrying the coefficient of 1 and the basic value 0

3.9

resistance grade

classification designation for burglary resistance

3.10

resistance value

numerical value in resistance units calculated for each test

3.11

basic value; BV

a number in resistance units, allocated to a specific tool

NOTE The basic value represents problems in obtaining, transporting, using and operating the relevant tool at the site in question and the necessary knowledge and experience for its efficient use.

3.12

tool coefficient

number in resistance units per minute allocated to a group of tools

NOTE The tool coefficient represents factors such as noise, smoke, fumes and other effects, which increase the likelihood of a burglary attack being detected.

3.13

boltwork

mechanism by which a shut door is held such that until it is in the withdrawn position the door cannot be opened

3.14

lock

device able to recognize a coded input and which performs a blocking function on the boltwork or the door

3.15

relocking device

system comprising blocking and detecting elements which will prevent the boltwork from being withdrawn if a burglary attack is detected

NOTE A relocking device can be part of the locking mechanism (e.g. active or live relocker) or an independent unit (e.g. passive relocker).

3.16

to close

to move the door so it becomes possible to bolt it

3.17

to bolt

to throw the boltwork or the bolt of the lock (if there is no boltwork) to a position where it fixes the door in a closed position

3.18

to lock

to block a thrown boltwork by action of a lock

3.19**ATM (automatic teller machine)**

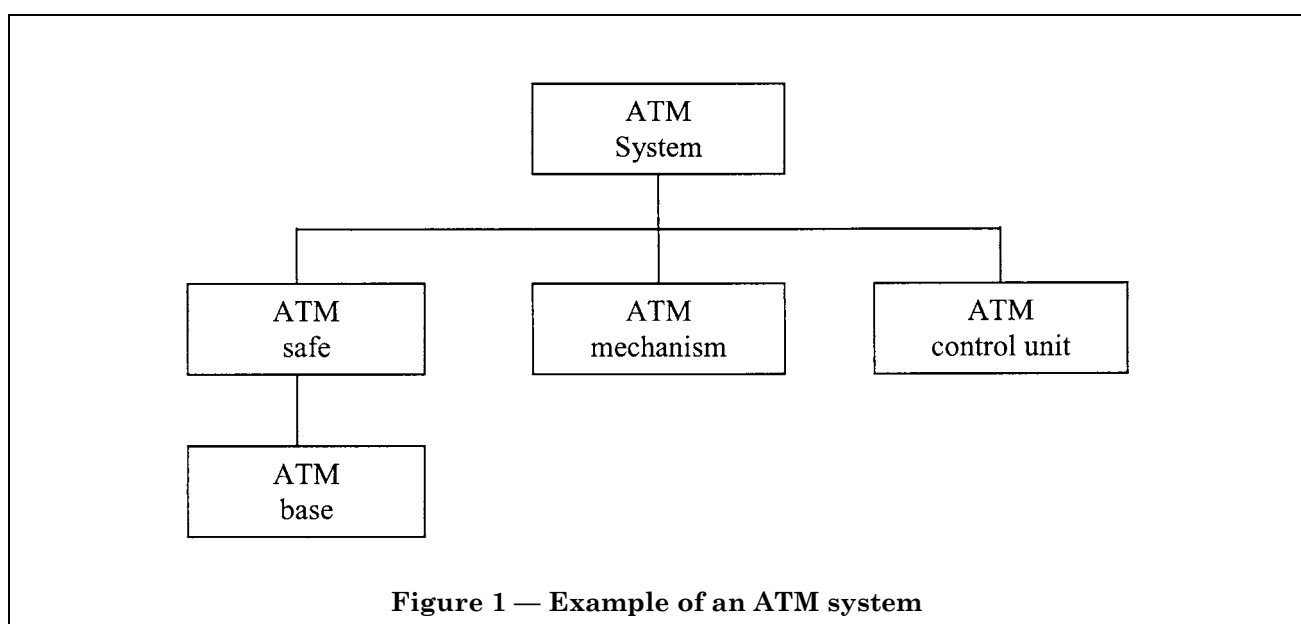
means for holding and automatically issuing cash and/or valuables and which may also accept and store deposits of cash and/or valuables

NOTE For the purpose of this standard, automated teller machines, currency exchange machines, currency recycling machines and machines such as teller assist machines which are used only by authorized employees of financial institutions, are all types of ATM.

3.20**ATM system**

assembly of sub-units which provides an ATM function and affords security to cash and/or valuables stored within the ATM safe

NOTE An example of an ATM system is shown in Figure 1.



NOTE Of the sub-units shown in Figure 1, the ATM mechanism and the ATM control unit are not tested according to this standard.

3.21**ATM safe**

safe forming part of an ATM system

3.22**ATM base**

any integral part of an ATM system located between the ATM safe and the surface to which it is to be anchored

3.23**internal space**

that part of the interior of an ATM safe which is bounded by the inside surfaces of the ATM safe body and the boltwork cover plate(s)