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Secure storage units - Requirements, classification and methods of test for resistance to burglary - Part 2: Deposit systems

Wertbehältnisse - Anforderungen, Klassifizierung und Methoden zur Prüfung des Widerstandes gegen Einbruchdiebstahl - Teil 2: Deposit-Systeme

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Unités de stockage en lieux surs - Exigences, classification et méthodes d'essai pour la résistance a l'effraction - Partie 2: Systemes de dépôt

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Secure storage units - Requirements, classification and methods of test for resistance to burglary - Part 2: Deposit systems

Unités de stockage en lieux sûrs - Prescriptions, classification et méthodes de test pour la résistance à l'effraction - Partie 2: Systèmes de dépôt Wertbehältnisse - Anforderungen, Klassifizierung und Methoden zur Prüfung des Widerstandes gegen Einbruchdiebstahl - Teil 2: Deposit-Systeme

This European Standard was approved by CEN on 8 November 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This European Standard is one of a series of product standards for secure storage units of different types.

This European Standard includes:

- requirements for deposit systems;
- a system for classification;
- test methods. Teh STANDARD PREVIEW

Examples of different types of deposit system are shown in annex A.

A summary of the requirements for deposit systems and the test conditions for the deposit test attacks is given in annex B standards.iteh.ai/catalog/standards/sist/7fafcd31-70c2-4dab-8dfe-60d00b67a3bd/sist-en-1143-2-2002

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, allowing for the fact that, depending on the criminal, the conditions at the place of the crime and the availability of tools, considerably longer times are likely to apply in real burglary attacks than in a test.

Manual tests are included. The results and repeatability of these depend on the skill of the testing team.

A Deposit system comprises a receiving unit, an input unit and in some cases, a chute. This European Standard deals with two types of deposit system:

- night safes which provide depositing services for the customers of financial institutions
- and
- deposit safes which enable the personnel of a company to place money or valuables in safe custody.

Receiving units are basically safes or strongrooms according to EN 1143-1:1997 which have apertures necessary for operation of the Deposit System.

Deposit Systems are classified in a system of grades, corresponding to that of EN 1143-1:1997, according to their resistance to burglary attacks. The burglary resistance is determined by testing which includes test attacks as specified in EN 1143-1:1997 and test attacks that evaluate the security against burglary of the deposit function.

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Deposit Systems may be controlled by programmable controllers. The tests of such Deposit Systems include attempts to influence their function by mechanical or electromechanical attacks; but attempts to influence controller software or hardware are not part of this European Standard.

Several clauses of this European Standard are identical to corresponding clauses of EN 1143-1:1997.

1 Scope

This European Standard specifies requirements and tests for deposit systems, and classifies the systems according to their burglary resistance and their resistance to the theft of deposits.

The standard includes design requirements for deposit systems controlled by programmable controllers. In this European Standard, controller hardware testing is restricted to electric motors, sensors, coils and similar devices; software testing is not part of this standard.

Deposit systems may have devices for functions such as user identification and/or counting and registration of money. Tests and classification of such functions are not included in this European Standard.

This European Standard does not cover protection of persons using the deposit system or the prevention of fraud committed by operators of the system.

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 (including amendments).

EN 1143-1:1997, Secure storage units Requirements, classification and methods of test for resistance to burglary — Part 1: Safes, strongroom doors and strongrooms

EN 1143-1/prA1, Secure storage units - Requirements, classification and methods of tests for resistance to burglary - Part 1: Safes, strongroom doors and strongrooms

ENV 1300, Secure storage units — Classification for high security locks according to their resistance to unauthorized opening

NOTE EN 1143-1/prA1 is expected to be incorporated into EN 1143-1:1997.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply. The terms and definitions in 3.1 are taken from EN 1143-1:1997.

3.1 General

3.1.1

safe

storage unit which protects its contents against burglary and which, when closed, has at least one internal side not exceeding 1 m in length

3.1.2

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

3.1.3

built-in safe

safe whose protection against burglary partly depends 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.

3.1.4

strongroom

storage unit which protects against burglary and whose internal sides, when the unit is closed, all exceed 1 m in length

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

3.1.5

strongroom door

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

3.1.6

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 usually closed (but can be opened if necessary).

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operating time 60d00b67a3bd/sist-en-1143-2-2002

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

3.1.8

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

3.1.9

resistance grade

classification designation for burglary resistance

3.1.10

resistance value

numerical value in resistance units calculated for each test

3.1.11

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.

3.1.12

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.

3.1.13

boltwork

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

3.1.14

lock

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

3.1.15

re-locking device

system comprising blocking and detecting elements which will prevent the bolt work from being withdrawn if a burglary attack is detected standards.iteh.ai)

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3.1.16

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to close

to move the door so it becomes possible to bolt it

3.1.17

to bolt

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

3.1.18

to lock

to block a thrown bolt work by action of a lock

3.2 Deposit system definitions

3.2.1

deposit system

assembly of a receiving unit and an input unit and optionally a chute for their inter-connection

Deposit systems are either deposit safes or night safes.

NOTE A deposit system serves the purpose to securely accept and securely store deposits of cash and/or valuables. The terms "deposit safe" and "night safe" also apply to deposit systems having large size receiving units which may otherwise be categorized as strongrooms.

3.2.2

deposit safe

a deposit system whose requirements are related to the security provisions needed to enable employees to deposit into the receiving unit without having to unlock the receiving unit door

NOTE Deposit safes are normally inside a building.

3.2.3

night safe

a deposit system whose security requirements relate to use by financial institutions for providing a secure receiving service for customer deposits

NOTE 1 Night safes are often accessible from the street.

NOTE 2 Both deposit safes and night safes may be used with special bags, wallets or other containers.

3.2.4

receiving unit

secure storage unit with openings necessary to accommodate a deposit system

3.2.5 iTeh STANDARD PREVIEW

input unit

user-access facility into which deposits are placed for passing into the receiving unit

NOTE Access to input units may be controlled by locks on devices that may provide identification of the depositor.

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60d00b67a3bd/sist-en-1143-2-2002

3.2.6

chute

optional connection between input unit and receiving unit through which the deposit passes

3.2.7

deposit

item placed into the input unit and intended for passing into the receiving unit

NOTE The deposit may be money or valuables that are deposited in special containers, bags or envelopes, or single bank notes or bunches of bank notes.

3.2.8

integrated deposit system

systems controlled by programmable controllers in which the physical deposit sequences cannot be changed through links to devices outside the receiving unit

3.2.9

distributed deposit system

systems controlled by programmable controllers in which the physical deposit sequences are intended to be changed through links to devices outside the receiving unit

3.2.10

base

any part of a Deposit System which is between the receiving unit and the surface to which it is to be anchored

NOTE A base is used to place a Deposit System input unit at a convenient height for use.

3.3

deposit test attack definitions

NOTE The test attacks in 3.3.1 to 3.3.5 are deposit test attacks.

3.3.1

forcing

removal of deposits from the receiving unit through pre-existing holes in this unit by test attacks against the input unit, chute or pre-existing holes in the receiving unit causing destructive changes or visible damage to the deposit system

Forcing can take place before, during or after the depositing procedure.

3.3.2

deposit retrieval

deposit retrieval removal of a deposit from the deposit system, by test attacks without leaving traces detectable by thorough expert examination to prove there has been criminal attack

Deposit retrieval can take place before, during and after the depositing procedure.

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fishina

removal of deposits from the receiving unit through the input unit or any holes pre-existing in the deposit system by test attacks against the input unit, or any pre-existing holes in the deposit system

Fishing takes place after the depositing procedure. Fishing is not intended to cause damage to the system, but may leave visible traces.

3.3.4

repeated trapping

removal of deposits through the input unit or chute by test attacks against the input unit or chute partly performed prior to the depositing procedure, without affecting subsequent proper use of the mechanism and with no visible damage to the deposit system. Repeated trapping takes place before, during and after the depositing procedure (see 3.3.5)

Repeated trapping is only applicable to Night Safes.

3.3.5

trapping last deposit

removal of a deposit through the input unit or chute by test attacks against the input unit or chute partly performed prior to the depositing procedure, possibly affecting subsequent proper use of the mechanism, and possibly resulting in visible damage to the deposit system

Last deposit trapping takes place before and after the depositing procedure.

Trapping last deposit is only applicable to Night Safes.

Repeated trapping (3.3.4) and trapping last deposit may be achieved by introduction of devices that prevent deposits from reaching the receiving unit and enabling deposits to be removed from the deposit system.

3.3.6

visible traces; visible damage

scratches or changes resulting from the action of tools, that can be detected on a photograph taken with an instant camera with its lens placed 1 m away from the trace/damage in a horizontal direction and 1,7 m from the ground

NOTE Traces or damage that can be detected on such a photograph are considered to be visible to the user of the deposit system.

4 Classification and requirements

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4.1 Classification

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Deposit systems are classified to a resistance grade according to Table 1. Deposit safes are classified in grades designated D-A, and night safes are classified in grades designated N-A. A is a roman numeral or 0. https://standards.iteh.ai/catalog/standards/sist/7fafed31-70c2-4dab-8dfe-

60d00b67a3bd/sist-en-1143-2-2002

The resistance grade may be given an EX designation (i.e. D-A EX or N-A EX) indicating compliance with the explosive test requirements. However, the EX designation is not applicable to grade 0 and I.

Deposit Systems in grades 0 and I are classified as Deposit Safes.

Deposit Systems in grade II to V may be classified as Deposit Safes or as Night Safes.

Deposit Systems in grades VI and higher grades are classified as Night Safes.

Deposit Systems having a receiving unit with at least one internal side not exceeding 1 m in length are classified as one of 11 grades (see Table 1).

Deposit Systems having a receiving unit whose internal sides are all longer than 1 m are classified as one of 14 grades (see Table 2).

The EX designation is optional.

NOTE 1 Deposit systems have different requirements within a single resistance grade according to whether all internal sides are longer than 1 m or not.