

Specification for

Security seals

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Consumer and Contract Goods Standards Policy Committee (CCM/-) to Technical Committee CCM/45, upon which the following bodies were represented:

- Association for Payment Clearing Services
- Association of Burglary Insurance Surveyors
- Association of Chief Police Officers of England and Wales
- Association of Metropolitan Authorities
- British Retailers' Association
- British Security Industry Association
- British Telecommunications plc
- Construction Security Advisory Service
- Consumer Policy Committee of BSI
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Holdings)
- EEA (The Association of Electronics, Telecommunications and Business Equipment Industries)
- Electrical Contractors' Association
- Electrical Contractors' Association of Scotland
- Electrical Installation Equipment Manufacturers' Association (BEAMA Ltd.)
- Electricity Industry in United Kingdom
- Fire Brigades' Union
- Home Office Crime Prevention Centre
- Institution of Electrical and Electronics Incorporated Engineers
- Lloyd's Syndicates
- Loss Prevention Council
- Metropolitan Police
- Ministry of Defence
- National Approval Council for Security Systems
- National Association of Goldsmiths of Great Britain and Ireland
- National Association of Security Services
- Post Office
- Royal Institute of British Architects
- Security Services Association
- Tobacco Advisory Council
- Wine and Spirit Security Liaison Ltd.

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

This British Standard, having been prepared under the direction of the Consumer and Contract Goods Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 28 February 1992

© BSI 07-1999

The following BSI references relate to the work on this standard:
Committee reference CCM/45
Draft for comment 91/37560 DC

ISBN 0 580 20387 5

- British Airways plc
- HM Customs and Excise
- Road Haulage Association Ltd.

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Performance	1
4 Marking and labelling	3
Appendix A Methods of test for security seals	4
Appendix B Guidance on the selection and use of security seals	5
Table 1 — Classification of security seals	2
Table 2 — Environmental tests for electronic seals	3
Publication(s) referred to	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Consumer and Contract Goods Standards Policy Committee in response to requests from suppliers and users of security seals for objective requirements to determine the suitability of sealing devices for security applications. Such applications include the sealing of containers, enclosures and secure areas to provide indication of their continued integrity and to deter opportunist tampering. It should be noted that security seals are not necessarily locks but are merely indicators of unauthorized conventional entry into a container, enclosure or secure area.

The principal user requirements for security seals are identified as follows.

- a) The materials and construction should be able to satisfactorily resist the environments of intended use.
- b) Correct emplacement should be relatively simple and capable of being checked easily.
- c) Evidence of tampering should be readily visible to the unaided eye, assuming normal vision and average lighting conditions.
- d) Component parts should be difficult to counterfeit or substitute.
- e) Each seal, other than a general purpose seal, should carry a unique identification.

In order to meet the requirements of users for varying levels of physical security, seals are classified in this standard into four grades although all may, and in some applications should, be used in conjunction with other physical security means such as padlocks.

HM Customs and Excise have indicated acceptance of the requirements of this British Standard in principle and a willingness to be guided by it in the general approval of security seals; they do, however, reserve the right to set different criteria in specific circumstances requiring special considerations.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing surveillance, which may be coupled with assessment of a supplier's quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes will be forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations. In particular, attention is drawn to "Directions as to the Sealing of Electricity Meters" issued under Schedule 7 Paragraph 6(1) of the Electricity Act 1989 and to Section 17 of the Gas Act 1983.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for the performance and testing of security seals used for the physical securing of containers, enclosures and secure areas.

The standard is not applicable to related products used, for example, as cable ties. Security bags, labels and tamper-evident packaging are also excluded.

The security aspects considered are those concerned with tampering with a seal in use and do not relate to compromise of the efficacy of a seal prior to application.

Guidance on the selection and use of security seals is given for information in Appendix B.

NOTE The titles of the publications referred to in this British Standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard, the following definitions apply.

2.1

security seal

passive locking device providing a deterrent against, and indication of, tampering with or unauthorized entry into a container, enclosure or secure area

2.2

general purpose (class GP) security seal

single-use security seal performing primarily an indicative function, in which its physical strength may be relatively unimportant, in applications where individual traceability through an audit trail is not required

2.3

uniquely identified (classes A, B and C) security seal

security seal performing a function for which its physical strength may be important in applications where individual traceability through an audit trail is required

2.4

electronic seal

security seal, the operating principles of which are based primarily upon electronic indication rather than visible damage or destruction

2.5

container

receptacle that is closed for the retention of items or indicators of value or to prevent release of, or addition to, its contents

2.6

enclosure

area or location closed in for the retention of its contents

2.7

secure area

compound or enclosure incorporating devices at points of entry to deter, detect and indicate unauthorized entry and/or exit

2.8

pivot wire

rigid strand of hardened and tempered high carbon steel used for arbors and pivots in clock making

3 Performance

3.1 Classification

Security seals shall be tested in accordance with Appendix A and classified according to the level of physical security provided, as given in Table 1. All of the minimum values in Table 1 for a given classification shall be complied with for that classification to be claimed for a particular type of seal [see 4.1 c)], with the exception that electronic seals reliant solely upon inductive force for their indicative performance shall be classified only according to the security test time determined as in A.2.4.

Breakage and/or loss of efficacy, i.e. the compromise of any essential security feature(s), of a security seal in any one of the tests carried out in accordance with A.1 at a value less than the minimum specified in Table 1 for a given class of seal shall constitute a failure of the seal to satisfy the requirements for that classification.

NOTE A maximum tensile strength, generally not exceeding 50 N, is appropriate for class GP or class A seals used on equipment requiring manual release, such as fire extinguishers and doors.

All class GP security seals shall incorporate a generic identification which shall be incapable of being removed or altered without incurring visible damage to the seal.

All other security seals shall incorporate a system of unique numbering, or other unique identification [see 4.1 d)], for record purposes, which shall be incapable of being removed or altered without incurring visible damage to the seal.