

BS 4737-3.30:2015



BSI Standards Publication

# Intruder alarm systems in buildings

Part 3: Specifications for components

Section 3.30: Specification for insulated and sheathed cables for interconnecting wiring

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### Summary of pages

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## Foreword

### Publishing information

This part of BS 4737 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 28 February 2015. It was prepared by Subcommittee GW/1/1, *Alarm components*, under the authority of Technical Committee GW/1, *Electronic security systems*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Supersession

This part of BS 4737 supersedes BS 4737-3.30:1986, which is withdrawn.

### Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- The scope has been expanded to include alarm systems (not just intruder alarms) and is no longer specific to PVC cables.
- It provides for three classifications of cable construction.
- It provides a more robust schedule of tests.
- It provides guidance on the application of cables.

### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause J.1.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex C the product shall ...'". This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

### Contractual and legal considerations

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

**Compliance with a British Standard cannot confer immunity from legal obligations.**

## 1 Scope

This specification gives requirements for the construction and performance of insulated and sheathed cables for interconnecting wiring used in alarm systems.

This British standard is applicable to cables intended for use with voltages up to 50 V a.c. or d.c.

This standard excludes cables for fire alarm systems.

## 2 Normative references

BS 4808-1, *Specification for L.F. cables and wires with PVC insulation and PVC sheath for telecommunication – Part 1: General requirements and test methods*

BS 7655-3.2, *Specification for insulating and sheathing materials for cables – Part 3.2: PVC insulating compounds – Hard grade types*

BS 7655-4.2, *Specification for insulating and sheathing materials for cables – Part 4.2: PVC insulating compounds – General application*

BS 7655-6.1, *Specification for insulating and sheathing materials for cables – Thermoplastic sheathing compounds having low emission of corrosive gases, and suitable for use in cables having low emission of smoke when affected by fire – Part 6.1: General application thermoplastic types*

BS EN 50363-8, *Insulating, sheathing and covering materials for low voltage energy cables – Part 8: Halogen-free, thermoplastic sheathing compounds*

BS EN 50363-3, *Insulating, sheathing and covering materials for low voltage energy cables – Part 3: PVC insulating compounds*

BS EN 50363-4-1, *Insulating, sheathing and covering materials for low voltage energy cables – Part 4-1: PVC sheathing compounds*

BS EN 50363-7, *Insulating, sheathing and covering materials for low voltage energy cables – Part 7: Halogen-free, thermoplastic insulating compounds*

BS EN 50395, *Electrical test methods for low voltage energy cables*

BS EN 50396:2000, + A1 2011, *Non electrical test methods for low voltage energy cables*

BS EN 60223-2:2005, *Conductors of insulated cables*

BS EN 60331-1-2:2004, *Tests on electric and optical fibre cables under fire conditions – Part 1: Test for vertical flame propagation for a single insulated conductor cable – Section 2: Procedure for 1 kW pre-mixed flame*

BS EN 61034-1, *Measurements of smoke density of cables burning under defined conditions – Part 1: Test apparatus*

BS EN 61034-2, *Measurements of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements*

BS EN 62230, *Electric cables – Spark-test method*

## 3 Terms, definitions and abbreviations

### 3.1 Terms and definitions

For the purposes of this part of BS 4737, the following terms and definitions apply.

#### 3.1.1 alarm system

applications intended for the protection of life, property or the environment