



Security.Improved

## **INFORMATION ON STANDARDS FOR ELECTRONIC SECURITY SYSTEMS**

This is an uncontrolled document.

The purpose of this document is to list the primary “technical” standards that NACOSS Gold and Systems Silver approved companies need to comply with when they install security systems (intruder and hold-up alarm systems, CCTV systems and access control systems).

This document does not give details about standards for every kind of security system, nor does this document give information about the additional NSI requirements that approved companies must meet such as those given in the NSI Regulations, Criteria for Approval, Codes of Practice and Technical Bulletins etc.

The information in this document is valid as at April 2012. No responsibility is accepted for errors or omissions, or for maintaining this document up-to-date. The purpose of this document is simply to provide information at this time about the standards applicable to the main types of security system.

Standards marked \*\* must be held. Standards marked \* must be held if relevant to the work carried out. Standards not marked do not need to be held (but this is not to say that the unmarked standards might not be useful to you).

Most of the standards that are listed in this document are included in the on-line subscription to BSI standards available to NSI approved companies and applicants via the NSI website ([www.nsi.org.uk](http://www.nsi.org.uk)) for an annual subscription of £90.

### **Intruder and Hold-up Alarm Systems**

*Note: Scheme 1 is running in parallel with Scheme 2 up until 31 May 2012 when PD 6662:2004 will be withdrawn. From 1 June 2012 all new I&HASs must be specified to PD 6662:2010.*

Scheme 1: UK scheme described in BSI Published Document PD 6662:2010 for intruder and hold-up alarm systems (I&HAS) installed in buildings

#### *Overall Scheme Document*

PD 6662:2010\*\* “Scheme for the application of European standards for intrusion and hold-up alarm systems”

Note 1: PD 6662:2010 is a British Standards Institution (BSI) Published Document, which describes a scheme for the implementation of European Standards (EN 50131 and EN 50136) in the UK and calls up as normative the System Standards and the Component Standards listed below.

Note 2: Where an alarm system is specified and installed to PD 6662:2010 under the “EN-based” regime, it would not be fully accurate to claim simply that the alarm system “complies with EN 50131”. Therefore, claims of compliance in the UK are made against PD 6662 “which is the UK implementation of EN 50131”.

Note 3: PD 6662:2010 is used for I&HAS with wired and/or with wire-free interconnections.

### System Standards called up by PD 6662:2010

Note: The “system standards” listed below are principally for installing companies. However, the BS EN 50136 series is also for providers and/or manufacturers of alarm transmission systems and alarm transmission equipment.

BS 8243:2010\*\* “Installation and configuration of intruder alarm systems designed to generate confirmed alarm conditions – Code of practice”

BS 8473:2006+A1:2008\*\* “Intruder and hold-up alarm systems – Management of false alarms – Code of practice”

BS EN 50131-1:2006+A1:2009\*\* “Alarm systems – Intrusion and hold-up systems – Part 1: System requirements”

BS EN 50131-8:2009\* “Alarm systems – Intrusion and hold-up systems – Part 8: Security fog device/systems”

BS EN 50136-1-1:1998+A2:2008\*\* “Alarm systems – Alarm transmission systems and equipment – Part 1-1: General requirements for alarm transmission systems”

BS EN 50136-1-2:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-2: Requirements for systems using dedicated alarm paths”

BS EN 50136-1-3:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-3: Requirements for systems with digital communicators using the public switched telephone network”

BS EN 50136-1-4:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-4: Requirements for systems with voice communicators using the public switched telephone network”

BS EN 50136-1-5:2008 “Alarm systems – Alarm transmission systems and equipment – Part 1-5: Requirements for Packet Switched Network PSN”

DD 263:2010\*\* “Intruder and hold-up alarm systems – Commissioning, maintenance and remote support – Code of practice”

DD CLC/TS 50131-7:2008\*\* “Alarm Systems – Intrusion Systems – Part 7: Application guidelines”

*Note: It is acceptable to hold a copy of the 2010 edition of DD CLC/TS 50131-7 as an alternative to holding the 2008 edition.*

Component Standards called up by PD 6662:2010

*Note: The “component standards” listed below are principally for manufacturers. Those marked\* must be held if relevant to the work being carried out.*

BS 4737-3.0:1988 “Intruder alarm systems in buildings – Part 3: Section 3.0: Specifications for components – General requirements”

BS 4737-3.1:1977\* “Intruder alarm systems in buildings – Part 3: Section 3.1: Specifications for components – Continuous wiring”

BS 4737-3.2:1977\* “Intruder alarm systems in buildings – Part 3: Section 3.2: Specifications for components – Foil on glass”

BS 4737-3.3:1977 “Intruder alarm systems in buildings – Part 3: Section 3.3: Specifications for components – Protective switches”

*Note: BS 4737-3.3:1977 remains applicable to non-magnetic switches.*

BS 4737-3.5:1978 “Intruder alarm systems in buildings – Part 3: Section 3.5: Specifications for components – Ultrasonic movement detectors”

Amendment AMD 3249 – March 1980

Amendment AMD 3867 – Jan 1982

BS 4737-3.6:1978 “Intruder alarm systems in buildings – Part 3: Section 3.6: Specifications for components – Acoustic detectors”

Amendment AMD 3250 – March 1980

BS 4737-3.8:1978 “Intruder alarm systems in buildings – Part 3: Section 3.8: Specifications for components – Volumetric capacitive detectors”

Amendment AMD 3252 – March 1980

BS 4737-3.9:1978 “Intruder alarm systems in buildings – Part 3: Section 3.9: Specifications for components – Pressure mats”

Amendment AMD 3253 – March 1980

BS 4737-3.10:1978 “Intruder alarm systems in buildings – Part 3: Section 3.10: Specifications for components – Vibration detectors”

Amendment AMD 3254 – March 1980

BS 4737-3.12:1978 “Intruder alarm systems in buildings – Part 3: Section 3.12: Specifications for components – Beam interruption detectors”

Amendment AMD 3256 – March 1980

BS 4737-3.13:1978 “Intruder alarm systems in buildings – Part 3: Section 3.13: Specifications for components – Capacitive proximity detectors”

Amendment AMD 3257 – March 1980

BS 4737-3.14:1986 “Intruder alarm systems in buildings – Part 3: Section 3.14: Specifications for components – Specification for deliberately-operated devices”

BS EN 50131-2-2:2008 “Alarm systems – Intrusion and hold-up systems – Part 2-2: Intrusion detectors – Passive infrared detectors”

BS EN 50131-2-3:2008 “Alarm systems – Intrusion and hold-up systems – Part 2-3: Requirements for microwave detectors”

BS EN 50131-2-4:2008 “Alarm systems – Intrusion and hold-up systems – Part 2-4: Requirements for combined passive infrared and microwave detectors”

BS EN 50131-2-5:2008 “Alarm systems – Intrusion and hold-up systems – Part 2-5: Requirements for combined passive infrared and ultrasonic detectors”

BS EN 50131-2-6:2008 “Alarm systems – Intrusion and hold-up systems – Part 2-6: Opening contacts (magnetic)”

BS EN 50131-3:2009 “Alarm systems – Intrusion and hold-up systems – Part 3: Control and indicating equipment”

BS EN 50131-4:2009 “Alarm systems – Intrusion and hold-up systems – Part 4: Warning devices”

BS EN 50131-5-3:2005+A1:2008 “Alarm systems – Intrusion systems – Part 5-3: Requirements for interconnections equipment using radio frequency techniques”

BS EN 50131-6:2008 “Alarm systems – Intrusion systems – Part 6: Power supplies”

BS EN 50131-8:2009\* “Alarm systems – Intrusion and hold-up systems – Part 8: Security fog device/systems”

BS EN 50136-2-1:1998 “Alarm systems – Alarm transmission systems and equipment – Part 2-1: General requirements for alarm transmission equipment”

BS EN 50136-2-2:1998 “Alarm systems – Alarm transmission systems and equipment – Part 2-2: Requirements for equipment used in systems using dedicated alarm paths”

BS EN 50136-2-3:1998 “Alarm systems – Alarm transmission systems and equipment – Part 2-3: Requirements for equipment used in systems with digital communicators using the public switched telephone network”

BS EN 50136-2-4:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-4: Requirements for systems with voice communicators using the public switched telephone network”

DD CLC/TS 50131-2-7-1:2009 “Alarm systems – Intrusion and hold-up systems – Part 2-7-1: Intrusion detectors – Glass break detectors (acoustic)

DD CLC/TS 50131-2-7-2:2009 “Alarm systems – Intrusion and hold-up systems – Part 2-7-2: Intrusion detectors – Glass break detectors (passive)

DD CLC/TS 50131-2-7-3:2009 “Alarm systems – Intrusion and hold-up systems – Part 2-7-3: Intrusion detectors – Glass break detectors (active)

Scheme 2: UK scheme described in BSI Published Document PD 6662:2004 for intruder and hold-up alarm systems (I&HAS) installed in buildings

#### Overall Scheme Document

PD 6662:2004\*\* “Scheme for the application of European Standards for intruder and hold-up alarm systems”

Amendment AMD 16155 January 2006

Amendment AMD 16248 March 2006

*Note 1: PD 6662:2004 is a British Standards Institution (BSI) Published Document, which describes a scheme for the implementation of European Standards (EN 50131 and EN 50136) in the UK and calls up as normative the System Standards and the Component Standards listed below.*

*Note 2: Where an alarm system is specified and installed to PD 6662: 2004 under the new “EN-based” regime, it would not be fully accurate to claim simply that the alarm system “complies with EN 50131”. Therefore, claims of compliance in the UK are made against PD 6662 “which is the UK implementation of EN 50131”.*

*Note 3: PD 6662:2004 is used for I&HAS with wired and/or with wire-free interconnections.*

#### System Standards called up by PD 6662:2004

*Note: The “system standards” below are principally for installing companies. However, the BS EN 50136 series is also for providers and/or manufacturers of alarm transmission systems and alarm transmission equipment.*

prEN 50131-1:2004\*\* “Alarm systems – Intrusion and hold-up systems – Part 1: System requirements”

*Note:* Published by BSI as a Draft for Public Comment - Ref: DPC 04/30080013 DC.

BS EN 50136-1-1:1998\*\* “Alarm systems – Alarm transmission systems and equipment – Part 1-1: General requirements for alarm transmission systems”

BS EN 50136-1-2:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-2: Requirements for systems using dedicated alarm paths”

BS EN 50136-1-3:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-3: Requirements for systems with digital communicators using the public switched telephone network”

BS EN 50136-1-4:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-4: Requirements for systems with voice communicators using the public switched telephone network”

DD CLC/TS 50131-7:2003\*\* “Alarm Systems – Intrusion Systems – Part 7: Application guidelines”

DD 243:2004\*\* “Installation and configuration of intruder alarm systems designed to generate confirmed alarm conditions – Code of practice”

#### Component Standards called up by PD 6662:2004

*Note:* The “component standards” below are principally for manufacturers. Those marked\* must be held if relevant to the work being carried out.

BS 4737-3.0:1988 “Intruder alarm systems in buildings – Part 3: Section 3.0: Specifications for components – General requirements”

BS 4737-3.1:1977\* “Intruder alarm systems in buildings – Part 3: Section 3.1: Specifications for components – Continuous wiring”

BS 4737-3.2:1977\* “Intruder alarm systems in buildings – Part 3: Section 3.2: Specifications for components – Foil on glass”

BS 4737-3.3:1977 “Intruder alarm systems in buildings – Part 3: Section 3.3: Specifications for components – Protective switches”

*Note:* BS 4737-3.3:1977 remains applicable to non-magnetic switches, but was superseded by DD CLC/TS 50131-2-6: 2004, “Alarm systems – Intrusion systems – Part 2-6: Requirements for opening contacts (magnetic)” on 1 April 2007.

BS 4737-3.5:1978 “Intruder alarm systems in buildings – Part 3: Section 3.5: Specifications for components – Ultrasonic movement detectors”

Amendment AMD 3249 – March 1980

Amendment AMD 3867 – Jan 1982

BS 4737-3.6:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.6: Specifications for components – Acoustic detectors”  
Amendment AMD 3250 – March 1980

BS 4737-3.8:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.8: Specifications for components – Volumetric capacitive  
detectors”  
Amendment AMD 3252 – March 1980

BS 4737-3.9:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.9: Specifications for components – Pressure mats”  
Amendment AMD 3253 – March 1980

BS 4737-3.10:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.10: Specifications for components – Vibration detectors”  
Amendment AMD 3254 – March 1980

BS 4737-3.11:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.11: Specifications for components – Rigid printed-circuit  
wiring”  
Amendment AMD 3255 – March 1980

BS 4737-3.12:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.12: Specifications for components – Beam interruption  
detectors”  
Amendment AMD 3256 – March 1980

BS 4737-3.13:1978 “Intruder alarm systems in buildings – Part 3:  
Section 3.13: Specifications for components – Capacitive proximity  
detectors”  
Amendment AMD 3257 – March 1980

BS 4737-3.14:1986 “Intruder alarm systems in buildings – Part 3:  
Section 3.14: Specifications for components – Specification for  
deliberately-operated devices”

BS EN 50131-5-3:2005 “Alarm systems – Intrusion systems – Part 5-3:  
Requirements for interconnections equipment using radio frequency  
techniques”

BS EN 50131-6:1998 “Alarm systems – Intrusion systems – Part 6:  
Power supplies”  
Amendment – May 1999

BS EN 50136-2-1:1998 “Alarm systems – Alarm transmission systems  
and equipment – Part 2-1: General requirements for alarm transmission  
equipment”  
Amendment – December 1998

BS EN 50136-2-2:1998 “Alarm systems – Alarm transmission systems and equipment – Part 2-2: Requirements for equipment used in systems using dedicated alarm paths”

BS EN 50136-2-3:1998 “Alarm systems – Alarm transmission systems and equipment – Part 2-3: Requirements for equipment used in systems with digital communicators using the public switched telephone network”

BS EN 50136-2-4:1998 “Alarm systems – Alarm transmission systems and equipment – Part 1-4: Requirements for systems with voice communicators using the public switched telephone network”

DD CLC/TS 50131-2-2:2004 “Alarm systems – Intrusion systems – Part 2-2: Requirements for passive infrared detectors”

*Note: DD CLC/TS 50131-2-2:2004 replaced BS 4737-3.7:1978 on 1 October 2006.*

DD CLC/TS 50131-2-3:2004 “Alarm systems – Intrusion systems – Part 2-3: Requirements for microwave detectors”

*Note: DD CLC/TS 50131-2-3:2004 replaced BS 4737-3.4:1978 on 1 October 2006.*

DD CLC/TS 50131-2-4:2004, “Alarm systems – Intrusion systems – Part 2-4: Requirements for combined passive infrared and microwave detectors”

DD CLC/TS 50131-2-5:2004, “Alarm systems – Intrusion systems – Part 2-5: Requirements for combined passive infrared and ultrasonic detectors”

DD CLC/TS 50131-2-6:2004, “Alarm systems – Intrusion systems – Part 2-6: Requirements for opening contacts (magnetic)”

*Note: DD CLC/TS 50131-2-6:2004 replaced BS 4737-3.3:1978 on 1 April 2007.*

DD CLC/TS 50131-3:2003, “Alarm systems – Intrusion systems – Part 3: Control and indicating equipment”

## **CCTV Systems**

*Note: Scheme 1 is running in parallel with Scheme 2.*

### **Scheme 1: British Standard Code of Practice BS 8418**

BS 8418:2010\* “Installation and remote monitoring of detector-activated CCTV systems – Code of practice”



*Note 1: BS 8418 is a BSI code of practice for detector activated CCTV systems that must be monitored at a Remote Video Response Centre (RVRC) complying with "Category II" of BS 5979 "Remote centres receiving signals from fire and security systems - Code of practice".*

*Note 2: BS 8418 calls up as normative BS EN 50132-7 "Alarm systems - CCTV surveillance systems for use in security applications - Part 7: Application guidelines".*

## **Scheme 2: NSI Code of Practice**

**NSI Code of Practice NCP 104 (Issue 2)\*\* "Design, installation and maintenance of CCTV Systems**

*Note 1: NCP 104 calls up as normative BS EN 50131-7 "Alarm systems - CCTV surveillance systems for use in security applications - Part 7: Application guidelines".*

*Note 2: NCP 104 is for use by NSI NACOSS Gold and Systems Silver approved companies.*

## **Access Control Systems**

*Note: Scheme 1 is running in parallel with Scheme 2.*

### **Scheme 1: NSI Codes of Practice**

**NACOSS Gold Code of Practice NACP 30\*\* "Planning, installation and maintenance of access control systems (for use by NACOSS Gold approved companies)**

**NSI Systems Silver Code of Practice ICP 30\*\* "Planning, installation and maintenance of access control systems (for use by NSI Systems Silver approved companies)**

*Note: NACP 30 and ICP 30 are the same in terms of technical content.*

### **Scheme 2: European Standard EN 50133**

**BS EN 50133-1:1997\* "Alarm systems – Access control systems for use in security applications – Part 1: System requirements"**

**BS EN 50133-7:1999\* "Alarm systems – Access control systems for use in security applications – Part 7: Application guidelines"**

*Note 1: BS EN 50133-1 and -7 have not been widely adopted due to lack of compliant equipment.*

*Note 2: As an alternative to using BS EN 50133-1 and -7, compliance with NSI NACP 30: NACOSS Gold code of practice for the planning, installation and maintenance of access control systems, or NSI ICP 30: Systems Silver code of practice for the planning, installation and maintenance of access control systems, are accepted until further notice.*

*Note 3: NACP 30 and ICP 30 are due to be superseded by NSI Code of Practice NCP 109 "Design, installation and maintenance of access control systems".*