Marking table for PD 6662:2017 applying European standards for intruder and hold-up alarm systems (I&HAS) and applying BS 8243:2021 for I&HAS incorporating alarm confirmation technology

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NSI applies this marking table to NACOSS Gold and Systems Silver approved companies when inspecting Intruder and Hold-Up Alarm Systems (I&HAS) installed to PD 6662:2017 and the standards called-up by PD 6662:2017.

NSI applies Section W of this marking table when inspecting security fog devices to BS EN 50131-8.

De-merit marks (points) are given in relation to PD 6662:2017, the BS EN 50131 series, DD CLC/TS 50131-7:2010, BS 8243, BS 8473 and BS 4737:Section 3 (various parts).

Notes may also be raised on NSI Inspection Reports in relation to PD 6662: 2017, and/or the standards called up by PD 6662, for which no specific reference has been made in this marking table.

We draw your attention to NSI Technical Bulletins 0040 "Guidance on the implementation of PD 6662:2017" and 0059 "Publication of BS 8243:2021 - Design, installation and configuration of intruder and hold-up alarm systems designed to generate confirmed alarm conditions. Code of Practice".

Note: Requirements relating to confirmation/verification of hold-up alarms only apply when necessary, for example to regain police response under the provisions of the NPCC policy.

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Marking table for PD 6662:2017 / BS 8243:2021 intruder and hold-up alarm systems

This marking table is divided into Sections A to W as listed below.

Item	Title
A	Documentation
B	System requirements
C	Tamper protection
D	Tamper and substitution detection
E	Environmental precautions
F	Interconnections
G	Faults and other functions
H	Operation
J	Setting and unsetting
K	Event recording
L	Processing and indication
M	Power supplies
N	Warning devices
P	Notification
R	Detection devices – General
S	Detection devices - Common
T	Detection devices - Uncommon
U	Hold-up devices
V	External key box for retaining keys
W	Security fog devices

Notes

1. Each section of this marking table contains one or more deviations (see pages 4 to 30 below).
2. Each deviation is given a clause reference (e.g. BS EN 50131-1/17: 4), a code (e.g. B1A) and a point (for example, 2 Points).
3. NSI Inspection Reports detail deviations by clause, code, description, points.

   Example: BS EN 50131-1/17:4 B1A I&HAS does not have mandatory functions for detection, triggering, processing, notification, or means to operate. 2 Points.
4. Points are awarded for each individual deviation except that the maximum number of points awarded in relation to Section A (Documentation) is 1 Point.
5. The total number of points awarded results in a grading (A to E). A = 0 points, B = 1-2 points, C = 3-5 points, D = 6-8 points and E = 9 points or more. The I&HAS will normally require a re-inspection if Grade D or E is achieved.

Clause	Code	Deviation	Points
A. DOCUMENTATION			
NSI Regulation: A.3	A01	The correct NSI Certificate was not issued within one month.	1
BS EN 50131-1/17: 14.1/2	A02	I&HAS documentation errors or omissions (for example, incomplete and/or ambiguous); no documented risk assessment.	1
TS 50131-7/10: Annex G	A03	Information required by Annex G of TS 50131-7/10 is not included in the system design proposal.	1
BS 8243: Annex D	A04	Information required by Annex D of BS 8243 is not included in the system design proposal and/or the as-fitted document.	1
BS 8243: 4.1.1	A05	In respect of a new/modified I&HAS there is no evidence that the client has been advised to consult with their insurers.	1

Clause	Code	Deviation	Points
PD 6662/17: 4	A07	a) I&HAS component is not marked in accordance with BS EN 50131-1/17: 15 (applies where PD 6662 refers to a BS EN or DD/CLC TS component standard).	1
		b) No statement from the manufacturer that component is suitable for use in PD 6662 systems at the required Grade and Environmental Class (applies where PD 6662 refers to a BS 4737 component standard or no standard).	1
BS 9263: 5 BS 9263: Annex A	A08	No evidence the I&HAS has been commissioned in accordance with BS 9263, Annex A and/or functional and operational test not recorded.	1
TS 50131-7/10: 10.6 / 11.2	A09	No system record (log book) supplied; no handover checklist and/or customer signature on completion certificate.	1
BS 8243: Annex D.7 PD6662/17: A.5	A10	For BS 8243 systems using a remote device to set and unset; information required by PD 6662/17: Annex 5.4 or BS 8243:2021, Annex D.7 not included in system design proposal.	1
BS 8243: 4.3	A11	Client not provided, in writing, with details of the actions to be taken by the ARC upon receipt of a transmission fault signal(s).	1
BS 8243: 6.1	A12	No evidence there is written agreement from the client authorizing the ARC to isolate detectors, AMDs or VLDs due to repetitive false alarms.	1
BS 8243: 6.4.1	A13	Where necessary, no evidence client has been advised to have additional locks for the initial entry door, independent of the IAS.	1

Clause	Code	Deviation	Points
B. SYSTEM REQUIREMENTS			
Mandatory and additional functions			
BS EN 50131-1/17: 4	B01	a) I&HAS does not have mandatory functions for detection, triggering, processing, notification, or means to operate.	2
		b) Additional functions and/or other applications influence the correct operation of the mandatory functions.	2
Grading			
BS EN 50131-1/17: 6	B02	a) I&HAS is not graded; Grade of I&HAS is higher than the Grade of the lowest graded component within it.	2
		b) Grade of sub-system (if any) is higher than the Grade of the lowest graded component within the sub-system.	2
		c) Component shared by more than one sub-system (for example, CIE, SPT, ATS, WD, PS) does not meet the Grade of the highest graded sub-system.	2
		d) An optional function is provided (e.g. masking in a Grade 2 I&HAS) that does not meet the applicable requirements of the Grade (e.g. Grade 3) for which compliance is claimed.	1
Siting of equipment			
TS 50131-7/10: 7.3.2.1/2	B03	a) CIE and/or SPT is not located within the supervised premises; is not located within the area supervised by the sub-system (if any) with the highest Grade.	2
BS 8243: 6.4.1		b) CIE and/or ACE (includes those used to operate sub-systems) is not located so as to prevent unauthorised persons observing operation of the keypad(s) – unless shielded or scrambled to prevent the code being seen.	2

Clause	Code	Deviation	Points
HAS using confirmed technology / Use of duress codes			
BS 8243: A.1	B04	a) Hold-up device on CIE and/or ACE is not segregated from the main keys; is not dedicated to hold-up; does not contain two separate buttons.	1
		b) Hold-up device on CIE and/or ACE is not programmed engineer only and/or the default is not "off".	1
BS 8243: 5.1.3		c) Single action hold-up device is used.	1
		d) *Code not in use*	
		e) Portable hold-up devices: are not dedicated to hold-up and/or incorporate other functionality; do not have two separate buttons with synchronized push to activate.	1
		f) HAS not installed to minimize risk of accidental operation and/or false activation.	2
		g) Hold-up devices on CIE and/or ACE enabled where there is risk of accidental operation.	2
BS 8243: 5.1.3	B05	a) Duress codes are used where the risk does not warrant the use of such codes and/or where the police have not permitted the use of such codes.	1
BS 8243: A.1		b) Duress code facility is not programmed engineer only and/or the default is not "off".	1
Facilities to aid filtering of intruder alarms			
BS 8243/10: 6.2	B06	a) False alarm filtering techniques are not applied (either set/unset signals or mis-operation signals – BS 8243:2010 systems only).	1
BS 8243/21: 6.2		b) I&HAS not configured to indicate to the ARC whether the system is set or unset (BS 8243:2021 systems only).	1

Clause	Code	Deviation	Points
IAS confirmation			
BS 8243: 4.2.1	B07	a) IAS does not incorporate at least one form of confirmation technology.	2
BS 8243: 5.1.1		b) Detectors installed outside the supervised premises contribute to the generation of audibly, visually or sequentially confirmed alarms.	2
BS 8243: 5.2.1	B08	a) At least two separate alarm conditions, each from independent detectors, are not reported separately to the CIE within the confirmation time.	1
		b) Detectors are not independent and/or are of the same technology and have overlapping areas of coverage.	1
		c) Confirmation time is not between 30 and 60 minutes.	1
BS 8243: 5.2.3	B09	a) When areas of coverage overlap, movement detectors are incorrectly configured in that at least one dual technology movement detector is not present and/or movement detector housings are not generally 2.5 metres apart.	1
BS 8243: 5.2.4		b) When areas of coverage do not overlap, movement detectors are incorrectly configured in that detectors are not located to minimize false alarms (e.g. due to environmental effects).	1
BS 8243: 5.2.5	B10	Configuration not regarded as offering a sequentially confirmed alarm condition has been used.	1
	B11	a) *Code not in use*	
		b) *Code not in use*	
BS 8243: A.5.2	B12	a) Alarm condition occurs when IAS is reinstated at end of confirmation time.	1
		b) No signal is sent from CIE to ARC when detectors have been inhibited on reinstatement of the IAS.	1

Clause	Code	Deviation	Points
		c) The process of reinstatement removes the intruder alarm condition so there is no indication that an alarm condition has occurred and that a restore is required.	1
HAS confirmation (where required for police response)			
BS 8243: 4.2.2	B13	HAS does not incorporate one or a combination of audio, visual, sequential or telephone confirmation (call back) technologies.	2
BS 8243: 5.2.2	B14	a) At least two separate alarm conditions are not reported separately to the CIE within the confirmation time.	1
		b) Signals are not from two or more hold-up devices separately identifiable at the CIE and/or are not from a multi action hold-up device.	1
		c) Hold up confirmation time is not between 8 and 20 hours.	1
BS 8243: 5.5		d) Telephone call back as a means of confirmation used on non-domestic / non-residential premises.	1
		e) ARC's procedure for callback not shared with user/client and/or no evidence that guidance has been given to user/client on their responsibilities in respect of a HAS activation.	1
	B15	a) *Code not in use*	
		b) *Code not in use*	
BS 8243: A.5.3	B16	a) HAS is not reinstated and/or is incorrectly reinstated at expiry of the confirmation time (e.g. alarms occur on reinstatement and/or active hold-up devices are not inhibited).	1
		b) No signal is sent from CIE to ARC when hold-up devices have been inhibited on reinstatement of the IAS.	1

Clause	Code	Deviation	Points
		c) The process of reinstatement removes the hold-up alarm condition so there is no indication that an alarm condition has occurred and that a restore is required.	1
Audio confirmation of intruder detection and hold-up			
BS 8243: 5.3.2	B17	a) Audio is not transmitted to the ARC when a detector and/or a hold-up device is activated.	2
BS 8243: 5.3.1		b) ALDs are not sited to avoid noise sources that can interfere with audio listen-in by the ARC operator.	2
BS 8243: 5.3.2	B18	a) Hold-up devices, CIE and notification equipment are not within the expected range of an ALD, in parts of the supervised premises where there is audio confirmation.	1
		b) *Code not in use*	
		c) ALD covering the occupied part of the premises and associated detectors is not isolated from the IAS when part of the IAS is set.	1
		d) In an I&HS containing subsystems, ALDs NOT in the activating area capable of providing audio capabilities.	1
BS 8243: 5.3.2	B19	Audio capability is not available to cover audio confirmation of all hold-up devices.	2
	B20	a) *Code not in use*	
		b) *Code not in use*	
		c) *Code not in use*	
BS 8243: 5.3.2	B21	Except after an alarm condition is received at the ARC, means available for the ARC to listen-in to the premises are other than those accessible via the service personnel functions of the CIE.	1
Audio confirmation of AMD activation			
BS 8243: 5.3.3	B22	Audio is not transmitted to the ARC when an audio monitoring device (AMD) is activated.	2

Clause	Code	Deviation	Points
BS 8243: 5.3.3	B23	Detectors, CIE and notification equipment are not within the expected range of an AMD/ALD in parts of the supervised premises where there is audio confirmation.	1
	B24	a) *Code not in use*	
		b) *Code not in use*	
		c) *Code not in use*	
BS 8243: 5.2.3	B25	Except when an AMD has triggered, means available for the ARC to listen-in to the premises are other than those accessible via the service personnel functions of the CIE.	1
Visual confirmation			
BS 8243: 5.4	B26	Imaging devices are not sited to avoid light sources that interfere with viewing by the ARC and/or the ARC does not receive a clear image due to inadequate illumination of field of view.	1
	B27	*Code not in use*	
	B28	*Code not in use*	
C. TAMPER PROTECTION			
BS EN 50131-1/17: 8.7.1	C01	a) Housings are not sufficiently robust to prevent undetected access to internal elements without visible damage.	2
		b) All terminals and means of mechanical and electronic adjustment not located within I&HAS component housings.	2
BS EN 50131-1/17: 8.7.1	C02	a) Normal means of access to internal elements of CIE, ACE, WD, detector and/or hold-up device does not require the use of an appropriate tool.	2
		b) Means to adjust the field of view of a detector is accessible to unauthorised persons (unless protected from tampering or tampering will be detected).	2

Clause	Code	Deviation	Points
D. TAMPER AND SUBSTITUTION DETECTION			
BS EN 50131-1/17: 8.7.2	D01	a) I&HAS components (except portable devices and Type A ACE) do not include tamper detection in accordance with Table 11 of BS EN 50131-1/17 and/or tamper detection does not function in both set and unset states.	2
		b) Magnetic and/or mechanically actuated switches (contacts) are not provided with tamper detection of opening by normal means (except in cases where it is impractical).	2
		c) Junction boxes are not provided with tamper detection of opening by normal means in Grades 3 and 4 (Grade 3 exempt if I&HAS includes protection against substitution of signals, messages or components).	2
BS EN 50131-1/17: 8.7.2	D02	a) Tamper detection does not meet the requirements for the type of tampering to be detected (see Table 12 of BS EN 50131-1/17).	2
		b) Wire-free I&HAS components do not have tamper detection of removal from mounting in Grades 2, 3 and 4.	2
		c) Wired I&HAS components do not have tamper detection of removal from mounting in Grades 3 and 4 (optional in Grade 3 for junction boxes, opening contacts (magnetic), lock state contacts, bolt contacts, hold-up devices, concealed flush mounted shock detectors, break glass detectors designed to be secured to glass).	2
		d) Detectors do not have tamper detection of the means to adjust their orientation in Grades 3 and 4 (where orientation adjustment is possible or affects the operation of the detector).	2

Clause	Code	Deviation	Points
BS 8243: 5.3.1 / 5.4	D03	Tamper detection for AMDs and/or ALDs and/or VMDs and/or the circuit interconnections for these devices not in accordance with BS EN 50131-1.	2
BS EN 50131-1/17: 8.7.3	D04	No means to detect substitution of I&HAS components in Grade 4 (or in Grade 3 if provided) and/or tamper signal is not generated in either the set or unset condition when substitution is detected.	2
BS EN 50131-1/17: 8.7.4	D05	Substitution of I&HAS components is not detected within 10 seconds in Grade 4 (or 100 seconds in Grade 3 if provided).	2
E. ENVIRONMENTAL PRECAUTIONS			
BS EN 50131-1/17: 5	E01	I&HAS component(s) not classified (I, II, III, IV) according to environmental capability; component(s) installed in environmental conditions unsuitable for Environmental Class (e.g. indoor classified component installed outside).	1
BS EN 50131-1/17: 12	E02	Functioning of I&HAS adversely influenced by environmental conditions and/or when exposed to EMC conditions.	1
F. INTERCONNECTIONS			
BS EN 50131-1/17: 8.8.3	F01	Tamper or fault signal is not generated (see Table 19 of BS EN 50131-1/17) if interconnections are not available for 100 seconds in Grades 1, 2 and 3, or for 10 seconds in Grade 4 (not applicable to portable devices at all grades).	2
TS 50131-7/10: 7.3.3.1	F02	Cables are not of suitable size for the load and/or the effects of voltage drop; cables are run in mains trunking or conduit without segregation.	1
TS 50131-7/10: 7.3.3.1	F03	Mains cables are not segregated from all other extra low voltage (ELV) alarm cables/printed circuit boards within the CIE.	1
TS 50131-7/10: 7.3.3.1	F04	Wiring joints are not electrically and mechanically secure; are inadequately protected for insulation.	1

Clause	Code	Deviation	Points
TS 50131-7/10: H.1.1	F05	Unsuitable flexible cable loops and/or flexible cable loops are not used where necessary.	1
TS 50131-7/10: 7.3.3.1	F06	Cables are not adequately supported; cable entries and conduit ends are not bushed. No cable identification.	1
TS 50131-7/10: 7.3.3.1	F07	Cables are not run inside supervised premises when practical; outside cables are not provided with tamper (e.g. physical) protection.	1
TS 50131-7/10: 7.3.3.1	F08	Cables are not run in positions where there is the least risk of physical damage; cables subject to risk of physical damage are not mechanically protected (e.g. by ducting, trunking or conduit).	1
G. FAULTS AND OTHER FUNCTIONS			
BS EN 50131-1/17: 8.1.4	G01	a) Means to recognise fault conditions specified in Table 1 of BS EN 50131-1/17 are not provided. b) Fault signal/message is not generated when a fault has been present for the required period.	1 1
BS EN 50131-1/17: 8.2.1	G02	Means to detect masking or immunity from masking is not included in detectors in Grade 3 and 4 (such detectors may include movement detectors, shock detectors and glass beak detectors).	2
BS EN 50131-1/17: 8.2.2	G03	Means to detect significant (50%) reduction of specified range is not included in movement detectors in Grade 4.	2
BS EN 50131-1/17: 8.5.1	G04	ATP faults are not indicated to the person setting the system when configured to do so (See Table 1).	1
H. OPERATION			
General			
BS EN 50131-1/17: 8.3	H01	Controls are not clearly and unambiguously marked and logically arranged so as to minimize possibility of incorrect operation.	1

Clause	Code	Deviation	Points
Access levels			
BS EN 50131-1/17: 8.3.1	H02	a) Appropriate levels of access to the functions of I&HAS are not provided via the user interface (Level 4 is not mandatory).	2
		b) Access at level 3 is not prevented until access is permitted by a user with level 2 access, or alternatively items 1, 2, 3 and 4 of BS EN 50131-1/17: 8.3.1 b) have been met in relation to Grades 1, 2 and 3 as appropriate to the Grade	2
		c) Remote access at levels 2, 3 or 4 is not authorised to the equivalent specified in Table 3 of BS EN 50131-1/17.	2
		d) Access at level 4 (if provided) is not prevented until access is permitted by a user with level 2 access and authorised by a user with level 3 access.	2
BS EN 50131-1/17: 8.3.1	H03	a) Access to functions of I&HAS is not restricted in accordance with Table 2 of BS EN 50131-1/17.	2
BS EN 50131-1/17: 8.3.2		b) Permission to gain access to the functions of the I&HAS is not restricted by use of authorisation codes with differs as specified in Table 3 of BS EN 50131-1/17.	2
Restore			
BS EN 50131-1/17: 8.3.9	H04	a) Access to the means of restoring I&HAS is not restricted to users with access levels specified in Table 6 of BS EN 50131-1/17.	1
BS EN 50131-1/17: 8.3.9		b) Possible to remotely restore the I&HAS even though information is not available to determine cause of condition to be restored.	1

Clause	Code	Deviation	Points
BS 8473: 10.1		c) Possible to restore the I&HAS by client and/or owner and/or operator following a sequentially confirmed alarm (BS 8243) or following a tamper condition in Grade 3 and Grade 4.	1
Inhibit/Isolate			
BS EN 50131-1/17: 8.3.10	H05	If means to inhibit is available, access to means of inhibiting functioning of individual or groups of functions is not restricted to users with access levels 2 or 3.	2
BS EN 50131-1/17: 8.3.11	H06	If means to isolate is available, access to means of isolating individual or groups of functions is not restricted to levels 2 or 3 in Grades 1 and 2; to level 3 in Grades 3 and 4.	2
Test			
BS EN 50131-1/17: 8.3.12	H07	a) I&HAS does not have means for a level 2 user to carry out functional (i.e. non-destructive) tests of intrusion detectors and hold-up devices.	1
		b) In Grades 3 and 4, level 1 users have access to test indications, e.g., on detectors	1
Other operations			
BS EN 50131-1/17: 8.3.13	H08	Other operations, if included, which directly or indirectly adversely influence the functions of the I&HAS, are not restricted to users with access at level 3.	2
J. SETTING AND UNSETTING			
SETTING			
Authorisation and setting			
BS EN 50131-1/17: 8.3.4	J01	a) Setting of the I&HAS, or parts thereof, is achieved without the correct authorisation for the Grade of I&HAS.	2
		b) Setting can be achieved whilst parts of the I&HAS are not in a normal condition.	2

Clause	Code	Deviation	Points
		c) In Grade 1 only, if access level 1 users can start setting (e.g. using a push button), the process cannot be cancelled by a level 1 user and/or the means to start setting is not located inside the supervised premises.	2
Prevention of setting and override			
BS EN 50131-1/17: 8.3.5	J02	Setting of the I&HAS (or part thereof) is not prevented when one or more of the prevention of setting conditions in Table 4 of BS EN 50131-1/17 is present.	2
BS EN 50131-1/17: 8.8.4.2	J03	Setting of the I&HAS is not prevented when a signal or message from at least one component has not been received within the time specified in Table 17 of BS EN 50131-1/17 (60 min for Grade 1, 20 min for Grade 2, 60 seconds for Grade 3, 10 seconds for Grade 4).	2
BS EN 50131-1/17: 8.3.6	J04	a) Users not having the access levels specified in Table 5 of BS EN 50131-1/17 can override conditions preventing setting.	2
		b) Overriding a prevention of set condition would result in the generation of an alarm condition.	2

Completion of setting			
BS 8243: 6.3	J05	a) Completion of setting is achieved by a method that is not listed in 6.3 of BS 8243.	1
BS 8243-21: 6.3.2 PD6662-17: A5.1		b) Setting of IAS using a remote device not in accordance with PD6662:2017, annex A5.1 or BS 8243, clause 6.3.2.	1
BS 8243: 6.3	J06	a) CIE or ACE is not located near to the final exit door when a protective switch (door contact) is used to complete setting.	1
		b) Short delay feature to counteract bouncing is not incorporated when protective switch (door contact) is used to complete setting.	1

Clause	Code	Deviation	Points
BS EN 50131-3/17: 8.3.2.2.2	J07	a) Self-powered digital key does not report low battery condition to the CIE when used to set.	1
		b) IAS sets before low battery condition from digital key is manually acknowledged and/or manual acknowledgements are not logged at Grade 2 and above.	1
Setting indications			
BS EN 50131-1/17: 8.3.7	J08	No time limited (transitory) completion of setting indication to show the user that the I&HAS (or part thereof) has set.	2
TS 50131-7/10: 7.3.4.1	J09	a) No indication provided during setting (in cases where when setting is initiated within supervised premises and completed outside supervised premises).	2
		b) No indication if the maximum time (if any) allowed for setting has been exceeded.	2
TS 50131-7/10: 7.3.5	J10	a) Indication provided during setting is not perceivable throughout the exit route and immediately outside the final exit door.	2
		b) No indication if a detector off the entry route activates during the setting procedure.	2
BS EN 50131-1/17: 8.3.7 c)	J11	No indication of set status provided in Grades 1 & 2, where option 8.3.7 c) of BS EN 50131-1/17 has been adopted (option 8.3.7 c) is not permitted under BS 8243).	1
Setting sub-systems			
TS 50131-7/10: 7.3.2.1	J12	In Grades 3 and 4, setting any sub-system does not also set the sub-system supervising the area in which the CIE is located.	2
UNSETTING			
Authorisation and unsetting			
BS EN 50131-1/17: 8.3.8.1	J13	Unsetting the I&HAS, or parts thereof, is achieved without the correct authorisation for the Grade (see Table 3 of BS EN 50131-1/17 for authorisation code requirements).	2

Clause	Code	Deviation	Points
BS 8243: 6.4.1	J14	a) Where a user code is used to unset the system, ACE not located to prevent unauthorised persons from observing the unsetting code *(this also applies to subsystems configured to generate a confirmed alarm if set in isolation from the remainder of the IAS)*.	2
		b) Completion of unsetting is achieved by a method that is not listed in 6.4 of BS 8243.	2
General requirements associated with entry routes			
BS EN 50131-1/17: 8.3.7 b)	J15	Opening the door to the entry route does not start a timed entry procedure (alternative means to detect entry into the supervised premises may be used if it is genuinely not practicable to install a detector to detect the opening of the initial entry door).	1
BS EN 50131-1/17: 8.3.8.2	J16	a) Entry route is not defined; alarm conditions are generated by detectors on the entry route; period to complete unsetting exceeds 45 seconds; alarm condition is not notified if the entry time expires.	1
		b) No entry indication during the entry time; no indication of the completion of unsetting; completion of unsetting is indicated for more than 30 seconds.	1
		c) Intruder alarm condition occurring during the unsetting period is not notified by WD or otherwise indicated locally.	1
		d) Notification of an intruder alarm condition to the ARC is delayed for less than 30 s after operation of the indicator or WD and/or is not delayed until the entry timer has expired.	1
Unlocking the initial entry door unsets the IAS (6.4.2)			
BS 8243: 6.4.2	J17	a) Users are not prevented from gaining entry to the supervised premises before the IAS has been unset through use of a lock with an electrical connection to the IAS according to the methods in 6.4.2 of BS 8243/10.	1

Clause	Code	Deviation	Points
		b) Forcing open the initial entry door: is not detected; or unsets the IAS; or generates a confirmed alarm instead of an unconfirmed alarm; or causes confirmation to be disabled.	1
		c) When forced opening of the initial entry door is detected and an unconfirmed alarm is notified, activation of a further detector does not generate a confirmed alarm signal.	1
		d) Where a powered lock has been utilized to prevent entry through the initial entry door, it has not been identified how the initial entry door will remain secure in the event of a power failure.	1
		e) Where automatic timed unsetting is used, no details of when the IAS is unset and/or how the premises remain secure until users arrive included in the system design proposal and/or as-fitted document.	1
Unlocking the initial entry door disables all confirmation (6.4.3)			
BS 8243: 6.4.3	J18	a) Users are not prevented from gaining entry to the supervised premises before all means of confirmation have been disabled through use of a lock with an electrical connection to the IAS according to the methods in 6.4.3 of BS 8243.	1
		b) Forcing open the initial entry door: is not detected; or unsets the IAS; or generates a confirmed alarm instead of an unconfirmed alarm; or causes confirmation technology to be disabled.	1
		c) Entry timer does not start if the initial entry door is unlocked and opened normally.	1
		d) Where a powered lock has been utilized to prevent entry through the initial entry door, it has not been identified how the initial entry door will remain secure in the event of a power failure.	1

Clause	Code	Deviation	Points
		e) Where automatic timed unsetting is used, no details of when the IAS is unset and/or how the premises remain secure until users arrive included in the system design proposal and/or as-fitted document.	1
Opening the initial entry door disables all confirmation (6.4.4)			
BS 8243: 6.4.1	J19	a) A method was used to detect entry into the supervised premises (e.g. movement detector) when it was practicable to install a means to detect the opening of the initial entry door. b) A movement detector used to detect entry into the supervised premises has been positioned so that its detection area is likely to be blocked by stock or other objects.	1 1
BS 8243: 6.4.4	J20	a) Opening the initial entry door does not disable all means of alarm confirmation and/or confirmed alarms are possible at any time after the initial entry door has been opened. b) Notification of unconfirmed alarm is not delayed until expiry of overall entry time and/or no alarm is notified when an alarm occurs during entry and/or due to expiry of the entry time.	1 1
Completion of unsetting using a digital key (6.4.5)			
BS 8243: 6.4.1	J21	a) A method was used to detect entry into the supervised premises (e.g. movement detector) when it was practicable to install a means to detect the opening of the initial entry door. b) A movement detector used to detect entry into the supervised premises has been positioned so that its detection area is likely to be blocked by stock or other objects	1 1
BS 8243: 6.4.5	J22	a) No digital key reader located within the supervised premises.	1

Clause	Code	Deviation	Points
		b) It is possible to unset the IAS during the entry time by means other than a digital key.	1
		c) Unsetting using the digital key is not achieved by means of a single manual action.	1
		d) Unwarranted use of a security code to unset the IAS after expiry of the entry time (e.g. digital key still operates).	2
BS 8243: 6.4.5	J23	When no other alarm condition exists, an unconfirmed alarm does not occur when the entry time expires.	2
BS 8243: 6.4.5	J24	a) When alarm condition(s) occur during unsetting, a sequentially confirmed alarm is not notified to the ARC (this is when the indicator or WD has operated for a minimum of 30 seconds and also the entry timer has expired).	2
		b) When an independent detector activates after the entry time has expired, a sequentially confirmed alarm is not notified to the ARC immediately (overriding the 30 second timer associated with the indicator or WD is only permitted for BS 8243: 6.4.5 systems).	2
		c) When an unconfirmed alarm occurs prior to the start of the entry time, a sequentially confirmed alarm is not notified to the ARC when the entry time expires (provided this is also within the confirmation time).	2
BS 8243: 6.4.5	J25	An unconfirmed alarm is not notified to the ARC prior to, or simultaneously with, a sequentially confirmed alarm.	1
BS EN 50131-3/09: 8.3.2.2.2	J26	a) Digital key does not comply (e.g. the number of differs is not according to the access level and/or not rolling code if user can unset more than 1 metre away from the receiver).	1

Clause	Code	Deviation	Points
		b) Self-powered digital key does not report low battery condition to the CIE when used to unset.	1
		c) Where completion of unsetting can be performed other than at the point of exit from the premises, means are not provided to make the "prevention of setting" and "completion of setting" indications available to the user (for example on the key).	1
Unsetting in conjunction with an ARC (6.4.6)			
BS 8243: 6.4.6	J27	a) Procedures do not ensure that sequentially confirmed alarms are not generated, unless there is a high probability of genuine intrusion or attempted intrusion.	1
		b) *Code not in use*	
		c) No indication for the user at the supervised premises to show that unsetting with the ARC is taking place and/or has been completed.	1
Use of remote device for setting/unsetting systems			
BS 8243: 6.3.2	J28	a) When using a remote device to set/unset the IAS, primary (default) means of setting and unsetting not configured in accordance with BS 8243.	1
		b) Authorised users at premises unable to cancel setting.	1
		c) When setting is initiated there is no timed setting period of between 30 and 60 secs and/or no audible warning throughout the premises to alert persons present to enable them to cancel the setting procedure.	1
		d) Timed setting procedure not cancelled if detector is in an active condition	1
		e) Where configured to do so, the system does not revert to default BS 8243 setting procedure and inform the remote device user.	1

Clause	Code	Deviation	Points
		f) CIE event log does not record the following activities; remote setting, remote unsetting, failure to set and errors.	1
BS 8243: A.9		g) Events related to remote device not associated with user and/or device in event log.	1
K. EVENT RECORDING			
Recording			
BS EN 50131-1/17: 8.10	K01	a) Events specified in Table 21 of BS EN 50131-1/17 are not recorded according to the Grade of I&HAS.	1
		b) Time and date are not recorded, in addition to the event, in Grades 2, 3 and 4.	1
		c) Memory capacity does not meet the requirements of Table 20 of BS EN 50131-1/17 according to the Grade of I&HAS.	1
		d) Means of recording events is not protected against accidental or deliberate deletion or alteration of the contents.	1
BS EN 50131-1/17: 8.10	K02	Timing of events are inaccurate by more than +/- 10 minutes.	0
Transmission to remote location			
BS EN 50131-1/17: 8.10	K03	a) Indication of unsuccessful transmission of events is not provided when event recording is provided at an ARC or other remote location.	1
		b) Remote means of recording does not comply with Table 20 of BS EN 50131-1/17.	1
Permanent record			
BS EN 50131-1/17: 8.10	K04	Facility to make a permanent record of the events recorded is not provided in Grades 3 and 4 (does not need to include the means of producing the permanent record – e.g. the printer).	1

Clause	Code	Deviation	Points
Number of events recorded			
BS EN 50131-1/17: 8.10	K05	Number of events recorded from a single source is not limited to at least 3 and a maximum of 10 during any set/unset period.	1
L. PROCESSING AND INDICATION			
Processing			
BS EN 50131-1/17: 8.9.1	L01	a) Fault signals present for more than 10 seconds are not processed.	2
BS EN 50131-1/17: 8.9.2		b) Intruder, hold-up and tamper signals (with an active period exceeding 400 ms) are not processed and notified within 10 seconds.	2
BS EN 50131-1/17: 8.4	L02	a) Processing of hold-up, intruder, tamper and/or fault signals is not in accordance with Table 7 of BS EN 50131-1/17.	2
BS EN 50131-1/17: 8.4.2		b) Further signals from hold-up devices are not processed in accordance with Table 7 of BS EN 50131-1/17 (except multiple signals from same hold-up device within 180 s).	1
BS EN 50131-1/17: 8.4.5		c) Masking signals are not processed as either intruder or fault signals in accordance with Table 7 of BS EN 50131-1/17.	1
BS EN 50131-1/17: 8.4.6		d) Reduction of range signals are not processed as either intruder or fault signals in accordance with Table 7 of BS EN 50131-1/17.	2
Indication			
BS EN 50131-1/17: 8.5.1	L03	a) Indications specified in Table 8 of BS EN 50131-1/17 are not provided for the mandatory functions relevant to the Grade of I&HAS.	1
		b) When it is not possible to display all mandatory indications simultaneously, an "information pending" indicator, or equivalent, is not provided to indicate when further information is waiting to be displayed.	1

Clause	Code	Deviation	Points
		c) An alert indication is not provided, when I&HAS is unset, to show that conditions are awaiting indication to a user.	1
		d) All mandatory indications required by Table 8 of BS EN 50131-1/17 are not located together in at least one CIE or ACE.	1
BS EN 50131-1/17: 8.5.2	L04	a) Indications available to users at access level 1 are not in accordance with Table 9 of BS EN 50131-1/17.	1
		b) Indications specified in Table 8 of BS EN 50131-1/17 are accessible to users at access level 1.	1
BS EN 50131-1/17: 8.5.3	L05	a) Indications, except time limited indications, specified in Table 8 of BS EN 50131-1/17 do not remain available until cancelled by a user.	1
		b) Possible to cancel an indication when the condition causing the indication is still present.	1
BS EN 50131-1/17: 8.5.4	L06	a) Intrusion detectors with processing capability: do not provide individual means of indicating alarm conditions (individual indication at CIE/ACE is permissible).	1
		b) Intrusion detectors without processing capability: more than 10 detectors sharing a common means of indication.	1
M. POWER SUPPLIES			
BS EN 50131-1/17: 9.2	M01	a) Power supply not capable of supporting I&HAS under all conditions including when recharging batteries.	1
		b) Changeover from mains to battery power and vice-versa creates an alarm condition.	1
BS EN 50131-1/17: 9.2	M02	Power supply not housed in one or more I&HAS components (e.g. CIE) or in a separate housing.	2
TS 50131-7/10: H.21	M03	Inadequate ventilation for the power supply; power supply liable to overheat.	1

Clause	Code	Deviation	Points
PD 6662/17: Annex B.2	M04	Alternative power source (battery) not capable of powering I&HAS for the durations specified in Table B.1 of PD 6662/17. ***Note:*** *Alternative power source durations may be halved from 24 hours to 12 hours in Grades 3 and 4 if mains power faults are notified to the ARC.*	2
TS 50131-7/10: H.21	M05	a) Mains supply not as required by TS 50131-7/10: H.21 xii); fuse not suitably rated; spur not solely for I&HAS and not co-located with CIE.	1
		b) Mains supply (Grade 2 only) not as required by TS 50131-7/10: H.21 xii); inadvertent removal of plug not prevented; no means to disconnect power in an emergency, insufficient sockets available for other applications.	1
		c) Mains supply (Grade 1 only) not as required by TS 50131-7/10: H.21 xiii); not dedicated to CIE; insufficient sockets available for other applications. ***Note:*** *CIE designed to be portable can be moved from socket to socket – Grades 1 and 2 only.*	1
TS 50131-7/10: H.21	M06	Mains supply (customer supplied fused spur) not as required by TS 50131-7/10: H.21 xii); fuse not suitably rated; spur not solely for I&HAS and not co-located with CIE.	0
BS EN 50136-2: 5.9	M07	SPT is not powered such that the most demanding requirements are met (for example, the requirements of the highest graded sub-system).	1
N. WARNING DEVICES			
Installation of external warning devices			
TS 50131-7/10: H.25	N01	a) External WD not sited: in a prominent position; so as to minimize risk of accidental or intentional damage; to provide reasonable access for servicing.	1

Clause	Code	Deviation	Points
		b) External WD not securely mounted to the building structure.	1
Installation of internal warning devices			
TS 50131-7/10: H.26	N02	a) Internal WD sited immediately adjacent to CIE or ACE in Grade 3 or 4 I&HASs. b) Internal WD not sited: in a position that is accessible for servicing; to avoid compromising the security and the audibility of the device.	1 1
External and internal warning devices			
BS EN 50131-4: 5.1.3	N03	a) Warning device does not sound satisfactorily in response to an alarm condition (trigger command) – Table 3 of BS EN 50131-4 gives acoustic output levels. b) Warning device sounds continuously for more than 15 min. c) Warning device does not generate a tamper signal when a tamper condition occurs. d) Warning device does not respond to loss of remote power source and/or loss of trigger command and/or local test fail.	2 2 2 2
BS EN 50131-4: 5.2.1	N04	a) Cover of warning device enclosure is not secured with one or more screws or bolts, or alternatively by a mechanical lock. b) Cover of warning device enclosure can be opened without using keys and/or tools.	2 2
BS EN 50131-4: 5.2.2	N05	c) Possible, without causing visible damage, to gain access to electrical connections, or elements providing adjustment, without generating a tamper signal/message. d) Possible, without causing visible damage, to insert a tool such that the operation of the warning device could be adversely affected (see Table 5 of BS EN 50131-4). a) Tamper detection of opening by normal means is not included (all Grades).	2 2 2

Clause	Code	Deviation	Points
		b) Tamper detection of removal from mounting is not included (Grades 3 and 4 only, but also Grade 2 if warning device is wire-free).	2
		c) Tamper detection of penetration of enclosure is not included (Grade 4 only).	2
BS EN 50131-4: 5.6.1	N06	a) Methods used to terminate connections cause unacceptable damage to conductors.	1
		b) Where specified in the documentation, terminal blocks and other components used for connections are not identifiable (e.g. with numbers or other marks).	1
Self-powered warning devices			
BS EN 50131-4: 5.6.3.1	N07	Storage device does not have the capacity for at least 10 consecutive maximum sound duration periods, or at least 30 min, whichever is the shorter.	1
BS EN 50131-4: 5.6.3.2	N08	Storage device in type W, X, Y or Z warning devices; not enough capacity to maintain warning device in standby condition for the periods specified in Table 8 of BS EN 50131-4. (Except for type X and Z warning devices if, and only if, loss of remote power causes the warning device to activate).	1
BS EN 50131-4: 5.6.3.3	N09	Storage devices in type Y and Z warning devices; incorrect voltage to recharge; storage device not recharging.	1
BS EN 50131-4: 5.6.3.4	N10	a) When remote power is lost in Grade 1 and 2; warning device does not sound or give a tamper signal/message or give a fault signal/message.	2
		b) When remote power is lost in Grade 3 and 4; warning device does not generate a fault signal/message (where shown to be a fault) or otherwise a tamper signal/message.	2

Clause	Code	Deviation	Points
BS EN 50131-4: 5.6.3.5	N11	Applying a short circuit to the remote power source connections causes the storage device to be discharged.	2
P. NOTIFICATION			
BS EN 50131-1/17: 8.6	P01	Mandatory means of notification (ATS and/or audible WD) do not comply, as a minimum, with the requirements specified in Table 10 of BS EN 50131-1/17.	2
BS EN 50131-1/17: 8.6.4		Non-mandatory (i.e. supplementary) means of notification impair correct functioning of mandatory devices.	2
BS EN 50131-1/17: 8.6.2	P02	No documented evidence from suppliers that ATS(s) comply with the performance requirements specified in Table 10 of BS EN 50131-1/17 (see BS EN 50136 series).	1
BS EN 50131-1/17: 8.6.3	P03	Audible WD(s) do not operate for a minimum of 90 seconds and a maximum of 15 minutes (or shorter period if demanded by local or national regulations).	1
BS EN 50131-1/17: 8.6.3	P04	a) Audible WD(s) delayed when there is no ATS (except WD can be suppressed (e.g.) in the event of a hold-up alarm).	1
		b) Audible WD(s) delayed for more than 10 minutes when there is ATS (except WD can be suppressed if ARC confirms receipt of notification during delay period).	1
BS EN 50131-1/17: 8.6.3	P05	Audible WD delay (if any) is not automatically cancelled when fault(s) are detected in all available ATS transmission paths.	2
BS EN 50131-1/17: 8.6.2	P06	Notification of prime power faults is delayed for more than 1 hour.	1
TS 50131-7/10: 8.1.1	P07	Communicator/SPT is not earthed as required by manufacturer's recommendations.	1
R. DETECTION DEVICES - GENERAL			
General			
BS EN/TS 50131-2-X	R01	Detectors do not generate an intrusion signal/message when intrusion is detected.	2

Clause	Code	Deviation	Points
General - Power			
BS EN/TS 50131-2-X	R02	a) At Grades 2, 3 and 4, a total loss of power to the detectors does not generate an intrusion signal/message (alternatively total loss of power can be determined by loss of communication with the detector). ***Note:*** *See magnetic contacts, glass break (active & passive).*	2
BS EN/TS 50131-2-X		b) At Grades 3 and 4 detectors do not generate a fault signal/message if the supply voltage is reduced below the manufacturer's specified range. ***Note:*** *See magnetic contacts, glass break (active & passive).*	2
General – Range reduction & masking			
BS EN/TS 50131-2-X	R03	a) Grade 4 detectors do not generate an intrusion signal/ message and a fault signal/message when significant reduction of range is detected (alternatively an independent signal/message may be provided).	2
		b) Grade 3 and 4 detectors do not generate an intrusion signal/message and a fault signal/message within 180 s when masking is detected (alternatively an independent signal/message may be provided).	2
		c) Where detection of masking may be remotely disabled the detection of masking does not operate when the I&HAS is unset;	2
General – Response times			
BS EN/TS 50131-2-X	R04	a) For wired detectors, an intrusion signal/message is more than 15 s after any preceding intrusion signal/message.	2
		b) For wire-free detectors, an intrusion signal/message is more than 15 s after any preceding intrusion signal/message for Grade 4 (30 s for Grade 3, 180 s for Grade 2, 300 s for Grade 1).	2

Clause	Code	Deviation	Points
General - Tamper			
BS EN/TS 50131-2-X	R05	a) Items that can adversely affect the operation of the detector (such as components, means of adjustment and/or access to mounting screws) are not located within the detector housing or if located externally do not resist or detect and indicate tamper.	1
		b) Access to the inside of the detector is possible without the use of a tool and no visible damage is caused to the detector housing when attempting to gain access ***Note:*** *Optional in Grade 1 magnetic contacts.*	2
		c) Gaining access to the inside of the detector by normal means does not generate a tamper signal/message at Grades 2, 3 and 4. ***Note:*** *Not applicable to sealed devices.*	2
		d) Removal of a detector from its mounting surface does not generate a tamper signal/message at Grades 3 and 4 (and at Grade 2 if the detector is wire-free). ***Note:*** *See glass break (active & passive), shock detectors.*	2
		e) Adjustment of the orientation of a detector is not resisted and/or detected at Grades 2, 3 and 4 (only applies to detectors mounted on brackets, which are outside of the tamper protection area and where orientation affects the operation of the detector).	2

Clause	Code	Deviation	Points
Detectors with on-board processing			
EN/TS 50131-2-X	R06	a) At Grades 1 and 2 the indicator provided does not activate when an intrusion signal/message is generated and/or is not capable of being enabled and disabled either locally (can only be adjusted when opened by normal means and must generate a tamper) or remotely at access level 2. ***Note:*** *See ALDDR.* b) At Grades 3 and 4 the indicator, provided does not activate when an intrusion signal/message is generated and/or is not capable of being enabled and disabled remotely at access level 2. ***Note:*** *See ALDDR & passive glass break.*	2 2
System documentation			
TS 50131-7/10: G.5	R07	Area or volume of coverage of movement detectors is not identified in the system design proposal.	1
S. DETECTION DEVICES – COMMON			
Magnetic contacts			
BS EN 50131-2-6: 4.6.6	S01	At all Grades, where an external power supply is used a total loss of power to the detectors does not generate an intrusion signal/message (alternatively total loss of power can be determined by loss of communication with the detector).	2
BS EN 50131-2-6: 4.6.7	S02	At Grades 3 and 4, where an external power supply is used detectors do not generate a fault signal/message if the supply voltage is reduced below the manufacturer's specified range.	2
BS EN 50131-2-6: 4.3.1.2	S03	No alarm signal/message is generated by magnetic contact when manufacturer's specified removal distance (break distance) is exceeded.	2

Clause	Code	Deviation	Points
BS EN 50131-2-6: 4.3.1.3	S04	No reversal of alarm signal/message generated by magnetic contact when manufacturer's specified approach distance (inside make distance) is met.	1
TS 50131-7/10: H.16	S05	Devices are not within the supervised premises.	1
BS EN 50131-2-6: 4.5.5	S06	a) In Grade 4, magnetic contacts do not consist of matched coded pairs of switch components and corresponding magnets and/or means of matching does not have a minimum of 8 differs.	2
		b) It is possible to determine the specific pair identity by visual inspection of the magnetic contact.	1
Passive infrared (PIR) detectors			
TS 50131-7/10: H.6	S07	a) Detectors sited such that they may be affected by heat sources (heaters, radiators under-floor heating), draughts, heating/cooling equipment, sunlight and/or other direct light sources (car headlights, flashlights).	1
		b) Consideration not given to the ingress of insects into PIR detectors (inadequate sealing).	1
Combined PIR and microwave detectors			
TS 50131-7/10: H.7	S08	Detectors sited such that they may be affected by environmental factors particular to either technology which could affect performance (see TS 50131-7/10: H.5 and H.6).	1
Glass break detectors (acoustic)			
BS EN 50131-2-7-1: 4.3.2	S09	No indicator for powered detectors at Grades 3 and 4 to indicate when an intrusion signal/message has been generated and/or indicator is not capable of being enabled and disabled remotely.	1

Clause	Code	Deviation	Points
BS EN 50131-2-7-1: 4.5.6	S10	At grades 2, 3 and 4 detectors mounted on accessible brackets outside of the tamper supervised housing do not provide resistance to or detect reorientation (where reorientation affects the performance of the detector).	1
TS 50131-7/10: H.10	S11	Detectors are installed such that range and/or sensitivity is poor; unwanted alarms due to noises similar to breaking glass.	1
Shock detectors			
BS EN 50131-2-8: 4.6.1	S12	Removal of a detector from its mounting surface does not generate a tamper signal/message at Grades 3 and 4 (and at Grade 2 if the detector is wire-free). ***Note:*** *Not required at Grade 3 for wired detectors that are sealed and flush mounted.*	2
TS 50131-7/10: H.8	S13	a) Detectors fitted in locations where there is a strong possibility of high ambient vibration; expansion or contraction caused by temperature changes; ingress of water.	1
		b) Detectors not securely attached to a smooth solid surface; mounted in the vicinity of cracks which might affect characteristics of the detector.	1
Active Infrared Beam Detectors (AIBD)			
TS 50131-2-9: 4.3.5	S14	An intrusion signal/message is not generated when in grades 3 & 4 and additionally in grade 2 for two way single and multiple beam AIBD, components are added to the detection system.	2
TS 50131-7/10: H.11	S15	Detector not protected against physical damage	1
		Detector receive unit not protected from direct sunlight or lights from passing vehicles	1
		Consideration not given to the placement of detectors adjacent to heaters	1

Clause	Code	Deviation	Points
		Detector beams pass though glass or similar material	1

T. DETECTION DEVICES – UNCOMMON			
Microwave detectors			
TS 50131-7/10: H.5	T01	a) Detectors sited such that they may be affected by environmental influences outside the supervised premises.	1
		b) Detectors sited close to liquid moving in plastic pipes and/or other interacting detectors and/or fluorescent lamps and/or metal or other reflective surfaces.	1
		c) Detectors sited such that they may be affected by movement or vibration of metal objects (pipes) and/or large metal objects outside the boundary of coverage.	1
Ultrasonic detectors			
BS 4737-3.5/78: 8	T02	Detector does not generate an alarm condition if power is lost or reduced below operational level. Does not generate an alarm when the system is set.	2
BS 4737-3.5/78: 11	T03	Removal of case not detected; adjustment means not contained within the detector container; interconnections not electrically protected.	2
TS 50131-7/10: H.4	T04	a) Detectors sited close to sources of ultrasonic noise such as telephone bells, compressors, refrigerators, steam pipes, rotating machinery and/or other ultrasonic detectors which may interact.	1
		b) Detectors sited close to excessive air movements (e.g. heating and ventilating equipment) and/or sited in an environment subject to changes in relative humidity.	1

Clause	Code	Deviation	Points
Combined PIR and ultrasonic devices			
TS 50131-7/10: H.7	T05	Detectors sited such that they may be affected by environmental factors particular to either technology which could affect performance (see TS 50131-7/10: H.4 and H.6).	1
Glass break detectors (passive and active)			
BS EN 50131-2-7-2 & 3: 4.1	T06	At Grades 2, 3 and 4, where an external power supply is used a total loss of power to the detectors does not generate an intrusion signal/message (alternatively total loss of power can be determined by loss of communication with the detector). ***Note:*** *Additionally applies to wire free devices on Grade 1 systems.*	2
BS EN 50131-2-7-2 & 3: 4.1	T07	At all Grades where an external power supply is used for wire free detectors a fault signal/message is not generated if the supply voltage is reduced below the manufacturer's specified range. ***Note:*** *Only applies to Grade 4 wired detectors.*	2
BS EN 50131-2-7-2 & 3: 4.3.2	T08	No indicator for powered detectors at Grades 3 and 4 to indicate when an intrusion signal/message has been generated (self-powered detectors which rely on energy from glass breakage do not require an indicator) and/or indicator is not capable of being enabled and disabled remotely.	1
BS EN 50131-2-7-2/3: 4.5.2	T09	Removal of the detector from its mounting surface does not generate a tamper signal/message at Grades 3 and 4 (and at Grade 2 if the detector is wire-free and epoxy glue is not used for fixing). ***Note:*** *No removal from mounting detection required in Grade 2 and 3 if epoxy resin is used to secure devices.*	2

Clause	Code	Deviation	Points
TS 50131-7/10: H.9	T10	Detectors are installed on polycarbonate sheeting, laminated glass, glass fitted with plastic film, cracked glass, or glass that is not securely fitted to frame; possibility of removing glass from frame without activating the detector.	1
Active Laser Detector Responsive to Diffuse Reflection (ALDDR)			
TS 50131-2-11:4.2.3	T11	The ALDDR does not generate an intrusion signal or message if a mirror is placed within the detection plane	2
TS 50131-2-11:4.2.4	T12	At Grades 2, 3 and 4, where fitted, the indicator on the detector activated when an intrusion signal/message is generated is not capable of being enabled and disabled remotely at access level 2.	2
Continuous wiring			
BS 4737-3.1/77: 6.1	T13	Space between adjacent wires is in excess of 100 mm; continuous wiring is not securely fixed at 600 mm maximum intervals with corrosion resistant staples (or other method of fixing with equivalent mechanical strength).	1
BS 4737-3.1/77: 6.2	T14	a) Tube length is in excess of 1 metre; tube spacing is in excess of 100 mm; wire is not fixed within 50 mm of entry/exit to each tube, anchor points are not extended into building fabric.	1
		b) Wiring supports may be moved in excess of 50 mm without causing an alarm condition.	1
BS 4737-3.1/77: 6.1	T15	Wiring is not provided with physical protection.	1
BS 4737-3.1/77: 4	T16	Wiring is not continuously monitored; alarm condition is not generated when any wire is open-circuit.	1
Foil on glass			
BS 4737-3.2/77: 5	T17	Foil width is greater than 12.5 mm.	1

Clause	Code	Deviation	Points
BS 4737-3.2/77: 6	T18	Foil is not applied evenly and bonded to the glass so as to prevent blistering or loosening under normal conditions; foil is carried across cracks or the butt joints of unframed and cemented glass.	1
BS 4737-3.2/77: 7	T19	Purpose made take-off connectors are not used at the junction of the glass and frame; on unframed glass doors, take-off connectors are more than 100 mm from the edge of the glass.	1
TS50131-7/10: H.14	T20	Foil is not continuously monitored; configuration does not detect break or short circuit.	1
TS50131-7/10: H.14	T21	Foil configuration does not detect (assure detection of) anticipated method of attack (e.g. total access or hand access); foil is installed outside the supervised premises;	1
TS 50131-7/10: H.15	T22	a) Removal of glass from frame does not create an alarm condition; foil is applied to glass that will not break cleanly (e.g. laminated glazing or polycarbonate sheeting	1
		b) Foil on glass is not installed to manufacturer's recommendations; foil is installed on damaged or defective glazing (e.g. cracked glass).	1
		c) Positioning of take-off points does not avoid condensation; interconnections between window frame and glazing (or between panes of glass) is not properly designed.	1
Protective switches (non-magnetic)			
BS 4737-3.3/77: 5	T23	An alarm condition is not generated when the moveable part of a non-magnetic protective switch is opened in the normal manner prior to the appearance of a clear opening 100 mm wide.	2

Clause	Code	Deviation	Points
BS 4737-3.3/77: 4	T24	Switches are not within the supervised premises; all connections are not made off within their enclosure; connections are not obscured from view.	1
BS 4737-3.3/77: 4	T25	The contacts in open-circuit non-magnetic protective switches are not hermetically sealed.	1
Acoustic detectors			
BS 4737-3.6/78: 6	T26	Detectors will not create an alarm condition when a sound equalling or exceeding trigger levels lasts for longer than 5 seconds in any 30 second period.	2
BS 4737-3.6/78: 7	T27	Alarm condition not generated if power is lost or reduced below operational level. Do not generate an alarm when the alarm system is set.	2
BS 4737-3.6/78: 10	T28	Removal of case not detected; adjustment can only be achieved by movement of the device on its mounting.	2
TS 50131-7/10: H.13	T29	Detectors are located in an environment which is noisy and/or is subject to intermittent noise (e.g. telephone bells).	1
Pressure mats			
BS 4737-3.9/78: 6	T30	a) Closed circuit device is not connected into a monitored "double pole" circuit.	1
		b) Open circuit device is not connected into a monitored "double pole" circuit within the mat.	1

Clause	Code	Deviation	Points
TS 50131-7/10: H.18	T31	Installed in high traffic area and/or not concealed and/or subject to adverse environment (e.g. moisture) and/or interconnections not discreet and robust.	1
Beam interruption devices			
BS 4737-3.12/78: 7	T32	Devices do not generate an alarm condition if power is lost or reduced below operational level. Do not generate an alarm when the system is set.	2
BS 4737-3.12/78: 10	T33	Removal of lid is not detected; adjustments are not contained within container; connections are not within container.	2
BS 4737-4.1/87: 4.2.8	T34	Where two sets of beam interruption devices are connected in parallel system will set with one of the beams obstructed; individual units are not able to reset automatically.	0
BS 4737-4.1/87: 4.2.8	T35	a) Transmitters and receivers are not rigidly secured to a firm supportive structure; direct path only.	0
		b) Equipment is not provided with protection against misalignment or physical damage.	0
TS 50131-7/10: H.11	T36	Receivers located such that they may be affected by sunlight/vehicle lights, attenuation due to passage through glass.	0

U. HOLD-UP DEVICES			
BS EN 50131-1/17: 8.1.2	U01	Hold up signal/message is not generated when the hold-up device is operated within the stated operating force for the required duration.	2
BS EN 50131-1/17: 8.1.2	U02	Hold-up device does not include means to minimize accidental triggering (not double action).	1
BS 4737-3.14/86: 3.3	U03	Latching type hold-up device does not remain in operated position until manually reset.	1

Clause	Code	Deviation	Points
TS 50131-7/10: H.20	U04	a) Hold-up device sited such that operation is visible to attacker (obvious body movement is required to operate device); device may be confused with other switching devices.	1
		b) Where there is indication of the triggering of a hold-up device, indication is given in an area not separated from the device.	1
V. EXTERNAL KEY BOX FOR RETAINING KEYS			
TS 50131-7/10: H.27	V01	External key box is not provided with tamper detection in relation to opening by normal means and/or removal from mounting.	2
TS 50131-7/10: H.27	V02	External wiring for the external key box is not concealed and/or there is no tamper protection for the wiring.	2
TS 50131-7/10: H.27	V03	The security of the lock for the external key box is less than adequate in relation to the risk assessment.	2

W, SECURITY FOG DEVICES			
Safety and environmental compliance			
BS EN 50131-8: 4.1	W01	The security fog device does not meet Environmental Class II of EN 50131-1, as a minimum, and/or component(s) installed in environmental conditions unsuitable for Environmental Class.	1
BS EN 50131-8: 4.2	W02	Operation of security fog device adversely influenced by environmental and/or EMC conditions on site.	1
BS EN 50131-8: 6.2	W03	Manufacturer's literature does not confirm that electrical safety construction meets BS EN 62368-1	1
BS EN 50131-8: 4.4	W04	All component parts are not housed in enclosure(s) meeting IP rating IP20 and IK rating IK08.	1

Clause	Code	Deviation	Points
BS EN 50131-8: 6.4	W05	No evidence available from the manufacturer that consumables and the emitted fog do not present a health and safety hazard to persons in normal use within the manufacturer's specified consumable life-time.	1
BS EN 50131-8: 9	W06	The security fog device is not marked in accordance with BS EN 50131-1.	1
BS EN 50131-8: 7.7.1	W07	a) The ejection nozzle is not protected to avoid any risk of injury with the system in idle mode.	2
BS EN 50131-8: 7.11		b) A thermal cut-off device is not fitted to prevent overheating.	2
BS EN 50131-8: 7.11		c) The thermal cut off device does not require reset by an authorised technician following activation	2
Consumables			
BS EN 50131-8: 6.6	W08	a) Transport, storage and handling of consumables does not comply with the requirements stated on the safety data sheets.	1
		b) *Code not in use*	
BS EN 50131-8: 8.3		c) Consumables are not identifiable / traceable back to the security fog device manufacturer.	1
BS EN 50131-8: 10		d) A safety data sheet is not available on all consumables.	1
Warning signs			
BS EN 50131-8: 6.8	W09	a) Warning signs have not been positioned on normal entry point(s) to the building.	1
BS EN 50131-8: Annex B		b) Warning sign symbol / character size are too small for the maximum viewing distance.	1

Clause	Code	Deviation	Points
System performance			
BS EN 50131-8: 7.2	W10	a) Backup battery capacity is insufficient to allow a single fog ejection within one hour of a power failure.	1
BS EN 50131-8: 7.17		b) The security fog device triggers on power failure.	1
BS EN 50131-8: 7.1	W27	No evidence the security fog device meets the minimum performance requirements of BS EN 50131-8: 7.1	1
BS EN 50131-8: 7.9	W28	The flow of fog liquid to the heater block IS NOT stopped within 3 seconds after receipt of an I&HAS alarm cancellation signal (e.g. unsetting of the I&HAS).	1
Tamper requirements			
BS EN 50131-8: 7.5	W11	a) All material parts of the system are not inside one or more secure, tamper-resistant outer cases.	2
		b) Opening the outer case by normal means does not generate a tamper message or signal.	2
		c) Fog is ejected, when an individual tamper message or signal is generated, when the I&HAS is in the unset condition.	2
BS EN 50131-8: 7.13		d) The security fog device is not adequately fixed to prevent unauthorised removal or tamper.	2
Communication with the host I&HAS			
BS EN 50131-8:5	W12	Access to functions of the security fog device is not restricted in accordance with Table 2 of BS EN 50131-1/17.	2
BS EN 50131-8: 7.4	W13	Wire free interconnections, where used, do not meet EN 50131-5-3.	1
	W14	*Code not in use*	1

Clause	Code	Deviation	Points
BS EN 50131-8: 7.12	W15	No means of isolating the security fog device from the CIE has been provided, to prevent accidental triggering during routine maintenance.	1
BS EN 50131-8: 7.15.1	W16	a) The security fog device is not capable of communicating with the host I&HAS.	2
BS EN 50131-8: 7.15.2 a. i.		b) Incoming communicated information does not include set/unset as a separate signal.	2
BS EN 50131-8: 7.15.2 a. ii.		c) Incoming communicated information does not include trigger as a separate signal.	2
BS EN 50131-8: 7.15.2 a. iii.		d) Incoming communicated information does not include verification as a separate signal.	2
BS EN 50131-8: 7.15.2 b. i.		e) Outgoing communicated information does not include fog system active as a separate signal.	2
BS EN 50131-8: 7.15.2 b. ii.		f) Outgoing communicated information does not include tamper as a separate signal.	2
BS EN 50131-8: 7.15.2 b. iii. – vi.		g) Outgoing communicated information does not include: • low battery charge (if applicable) • mains fail • no consumables • incorrect temperature either as separate signals, or a common signal.	2
BS EN 50131-8: 7.16	W17	The security fog device is not monitored to transmit fault signals back to the host I&HAS.	2
BS EN 50131-8: 7.17	W18	a) Power failure is not communicated to the I&HAS within 2 minutes.	2
		b) Where an ATS exists, power failure is not immediately notified to the ARC on receipt of a signal at the I&HAS.	2
Design, installation, operation and maintenance of the SFD			
BS EN 50131-8: Annex D1	W19	No evidence that a risk assessment has been undertaken.	1

Clause	Code	Deviation	Points
BS EN 50131-8: Annex D4	W20	In multi-occupancy buildings or very large sites with internally protected areas the security fog device has not been installed so as to contain the fog within the protected area(s) as far as practicable so as not to infringe on to public areas or open areas except for security fog devices which are activated by the use of a hold-up system.	1
BS EN 50131-8: Annex D5	W21	System configured as a man-trap to prevent escape.	1
BS EN 50131-8: Annex D8	W22	No evidence the security fog device has been installed by individuals who have successfully undergone a formal training course on the equipment and have taken a written and practical test (and passed) to prove their competence.	1
BS EN 50131-8: 10	W23	Documentation listed in BS EN 50131-8, clause 10 not available.	1
BS EN 50131-8: Annex D2	W24	a) Notifications to Police, Fire authority and ARC not given prior to commissioning.	1
		b) Notifications not recorded.	1
BS EN 50131-8: Annex D7	W25	a) No evidence a full security fog device test has been carried out and/or results not recorded.	1
BS EN 50131-8: Annex D9		b) Preventative maintenance not in accordance with manufacturer's instructions.	1
Hold-up situation – building occupied			
BS EN 50131-8: Annex D6	W26	a) Police / Fire Authority not informed that a hold-up system has a security fog device installed.	1
		b) Full risk assessment not carried out on the location and use of a security fog device in the hold-up situation.	1
		c) Security fog device not placed so that the fog generated moves from the target area to the exit area.	1

Clause	Code	Deviation	Points
		d) Signage not provided (as per European safety signs Directive 92/58/EEC) in the premises informing all persons that there is a security fog device installed and the action to take if the security fog device is activated. (e.g. that the security fog device has operated and the Police are attending).	1
		e) Voice module not provided, which operates concurrently with the activation of the security fog device which contains the same message as the signage (e.g. that the security fog device has operated and the Police are attending).	1
		f) Staff have not been fully trained in the use of the security fog device with the hold-up alarm system.	1