



**Guide to PD6662:2004
and prEN50131-1:2004**

Contents

- 3 What is EN50131 ?
What is PD6662:2004 ?
When do the changes take effect ?
Why is this happening now ?
- 4 How does EN50131 differ from British Standards ?
What is 'Risk Assessment' ?
What are the 'EN Grades' within EN50131 ?
- 5 How do the EN Grades differ ?
- 6 Do Guardall Products comply with the requirements ?
What are EN Classes ?
How can I find the EN Grade or Class of a Product ?
- 7 How does Terminology differ between BS and EN50131 ?
Example IAS (Intruder Alarm System)
- 8 Example of a Grade 2 System
- 9 Example of a Grade 3 System
- 10 Further Information on requirements
Detection Devices - Magnetic Contacts
Detection Devices - Movement Detectors
Anti-Masking (Grades 3&4)
Range Reduction (Grade 4)
Substitution (Grade 4)
- 11 Wire-Free Systems
Tamper Protection
Power Supplies
Notification (Sounders and/or Signalling)
- 12 Further detailed Information on Notification (Sounders and/or Signalling)
- 13 Sub-Systems
Example of a Sub-System
- 14 Siting of Control and Indicating Equipment (Control Units / Keypads)
Access Levels
Resetting
- 15 Entry & Exit Routes (DD243:2004 Compliance)
Setting
Unsetting
- 16 Event Logs
Maintenance Inspections
User Documentation
- 17 Appendix A – Standards Documentation
Guide To Terminology
EN50131 Alarm Systems - Intrusion Systems
- 18 PD6662:2004
DD243:2004
BSIA Forms
British Standards
- 19 Appendix B - Grading Summary for Guardall Products
- 22 Contact Details

What is EN50131?

British Standards (BS4737, BS7042 and BS6799) which govern the specification, installation and maintenance of Intruder and Hold-up Alarm systems are being phased out in favour of European Norms, known as EN50131.

EN50131 replaces current British Standards (BS4737, BS7042 & BS6799), which will be withdrawn on 1st October 2005.

The most recent Version of EN50131 is a draft version, known as 'prEN50131-1:2004', which replaces an earlier 1997 version. It is known as a 'mature draft', although it will soon be replaced by a further Version, which is due for release in late 2005/early 2006.

prEN50131-1:2004 specifies general requirements for Intruder and Hold-up Alarm Systems

What is PD6662:2004 ?

Adopting EN50131 in the UK is only possible by complying with PD6662:2004.

PD is short for 'Published Document' which means that it is not a British Standard, but is an 'enabling document'.

It contains specific UK requirements, which permits the UK to comply with the European Standards, in circumstances where UK accepted practices differ from the EN Standards.

When do the changes take effect ?

From 1st October 2005, all new and significantly modified Security System Installations must be installed in accordance with the requirements of PD6662:2004 and prEN50131-1:2004, supplemented by DD243:2004.

Police response will only be possible if the system complies with the above requirements.

Certain requirements also apply to have Police response re-instated, if it has been removed. The BSIA have just published guidelines for this.

Why is this happening now?

There are a number of reasons for this ;

- To improve quality, system integrity and professionalism within the security industry.
- To ensure that the inherent risk of the premises influences the System design.
- To update British Standards, which have not changed for 20 years.
- To harmonise standards across the EU, thus removing barriers to free trade.

How does EN50131 differ from British Standards ?

EN50131 differs to current British Standards, in that:

- It applies to both hard-wired and wire-free systems.
- It requires a comprehensive '**Risk Assessment**' to determine system design criteria.
- It determines not only System (EN50131-1) requirements, but also individual Detector (EN50131-2) requirements for Intruder and Hold-up Alarm Systems.

Detector requirements (EN50131-2) are not yet all published however, so BS4737 Part 3 still applies for the moment. Further Information is shown in Appendix A.

What is 'Risk Assessment' ?

Systems are required to be 'Graded' to reflect the risk.

A comprehensive Risk Assessment must be carried out by an approved security system installer, and then stored securely for future reference.

This is needed to demonstrate that the system has been designed in accordance with the level of risk determined, as specified under the new EN standards.

What are the 'EN Grades' within EN50131 ?

Where a System could previously be defined simply as a 'BS4737 Intruder Alarm System' it must now be defined as an EN50131 System - Grade 1, 2, 3 or 4.

- Grade 1 is Low Risk
- Grade 2X is Low to Medium Risk (without Signalling)
- Grade 2 is Low to Medium Risk (with Signalling)
- Grade 3 is Medium to High Risk
- Grade 4 is High Risk

Security Systems must therefore be specified and graded according to the risk, as part of the 'Risk Assessment'.

This must take account not only of what may be stolen or the location and construction of the building, but also must reflect the ability of potential intruders to bypass the technology installed.

How do the EN Grades differ ?

Grade 1

Systems classified as Grade 1 would be most at risk from “Opportunist” thieves.

Intruders would have little knowledge of Intruder Alarm Systems, and would be restricted to a limited range of easily available hand tools, such as hammers, chisels, screwdrivers, pliers etc.

This Grade would typically be used for most domestic ‘Bells Only’ Systems.
This grade is a lower standard than BS 4737.

Grade 2

Systems classified as Grade 2 are likely to be targeted by criminals who will have prepared themselves prior to a crime and will know something about the contents of a building.

Intruders would have limited knowledge of Intruder Alarm Systems, and would have the use of a general range of tools and portable instruments such as multimeters, bolt cutters, battery drills etc.

This grade would normally account for large residential and small commercial Systems such as Florists, Bakers, Salons and Carpet Retailers. Grade 2 is the closest to BS 4737.

An option has also been created for lower risk Grade 2 systems, which are not monitored.
These are classified as Grade 2X.

Grade 3

Systems classified as Grade 3 are likely to be required where a buildings contents are perceived to be high value, and criminals are likely to spend time planning an intrusion.

Intruders would be conversant with Intruder Alarm Systems and have a comprehensive range of tools and portable electronic equipment, such as oscilloscopes, laptops, security screwdrivers etc.

Typically this grade would account for most commercial systems such as bonded warehouses, motor garages, computer distributors, mobile phone shops, sports shops etc.

Grade 4

Systems classified as Grade 4 will apply where security takes precedence over all other factors.

Intruders are expected to have the ability or resource to plan an intrusion in detail and have access to a full range of tools and equipment.

This would include the means to substitute vital components in the Intruder Alarm System.

Typically this grade accounts for security systems that could be applied to military installations, bullion and cash centres, government research establishments etc.

In these circumstances there is a high risk of organised crime or terrorism.

Do Guardall Products comply with the requirements?

The Grades and Classes of all main products complying with prEN50131-1:2004, PD6662:2004 and DD243:2004 are shown in Appendix B.

What are 'EN Classes' ?

There are 4 'Environmental Classifications' for Components to determine where they can be installed. Each Security System component is given an individual 'Environmental Classification' by the Manufacturer.

Classes are ;

- Class I Indoor (Temperature well maintained)
- Class II Indoor - General (Temperature not well maintained)
- Class III Outdoor - Sheltered (Not fully exposed to weather)
- Class IV Outdoor - General (Fully exposed to weather)

Class 1 applies to components installed indoors.

This is restricted to residential or office environments, where the temperature is well maintained.

Class 2 also applies to components installed indoors.

This includes harsher environments such as shops, restaurants, storage areas etc. where the temperature is not well maintained

Class 3 applies to components installed outdoors.

This would be where there is some degree of shelter from weather.

Class 4 also applies to components installed outdoors

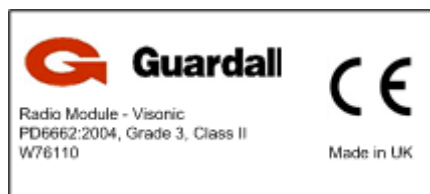
This includes harsher unsheltered environments, with full exposure to weather.

How can I find the EN Grade or Class of a product ?

Under the new EN standards, All Security Components (such as Detectors, Door Contacts, Control Panels etc) are given an individual performance Grade and Environmental Classification by the Manufacturer.

Each System Component must be labelled to show the EN Grade and Class.

This information is clearly shown on a label on each Guardall product, both within the Product, and on the outside packaging, similar to the example shown below ;



The Grades and Classes of all main Guardall Products are shown in Appendix B.

The Grade of a Component must be equivalent to, or greater than the Grade of the Security System in which it is installed.

Example: Using a 'Grade 2' detector in a 'Grade 3' System would downgrade the whole system to Grade 2, which could jeopardise insurance.

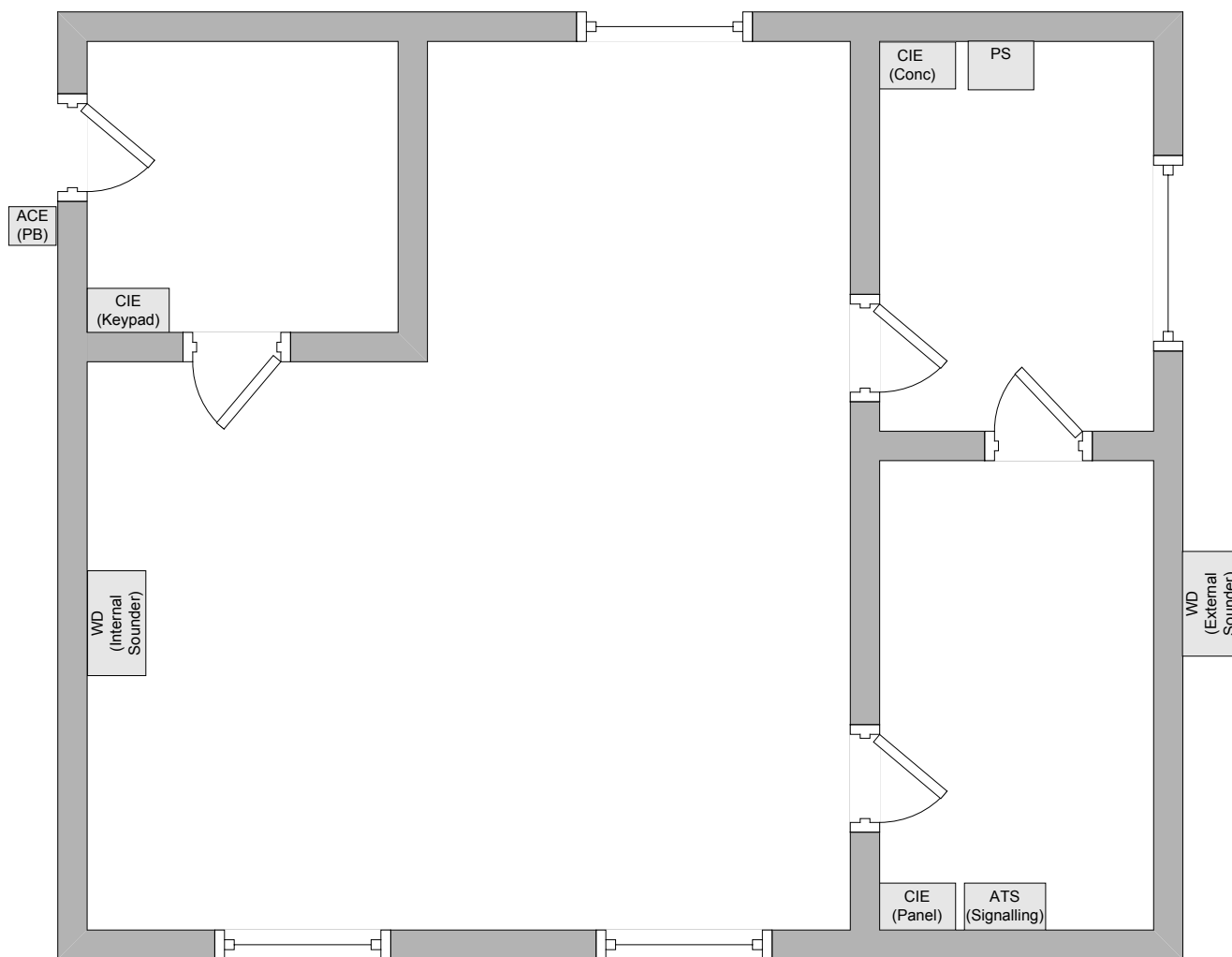
How does Terminology differ between BS and EN50131 ?

Some Terminology has changed, and some of the more common Terms and abbreviations used in the Standards is detailed below.

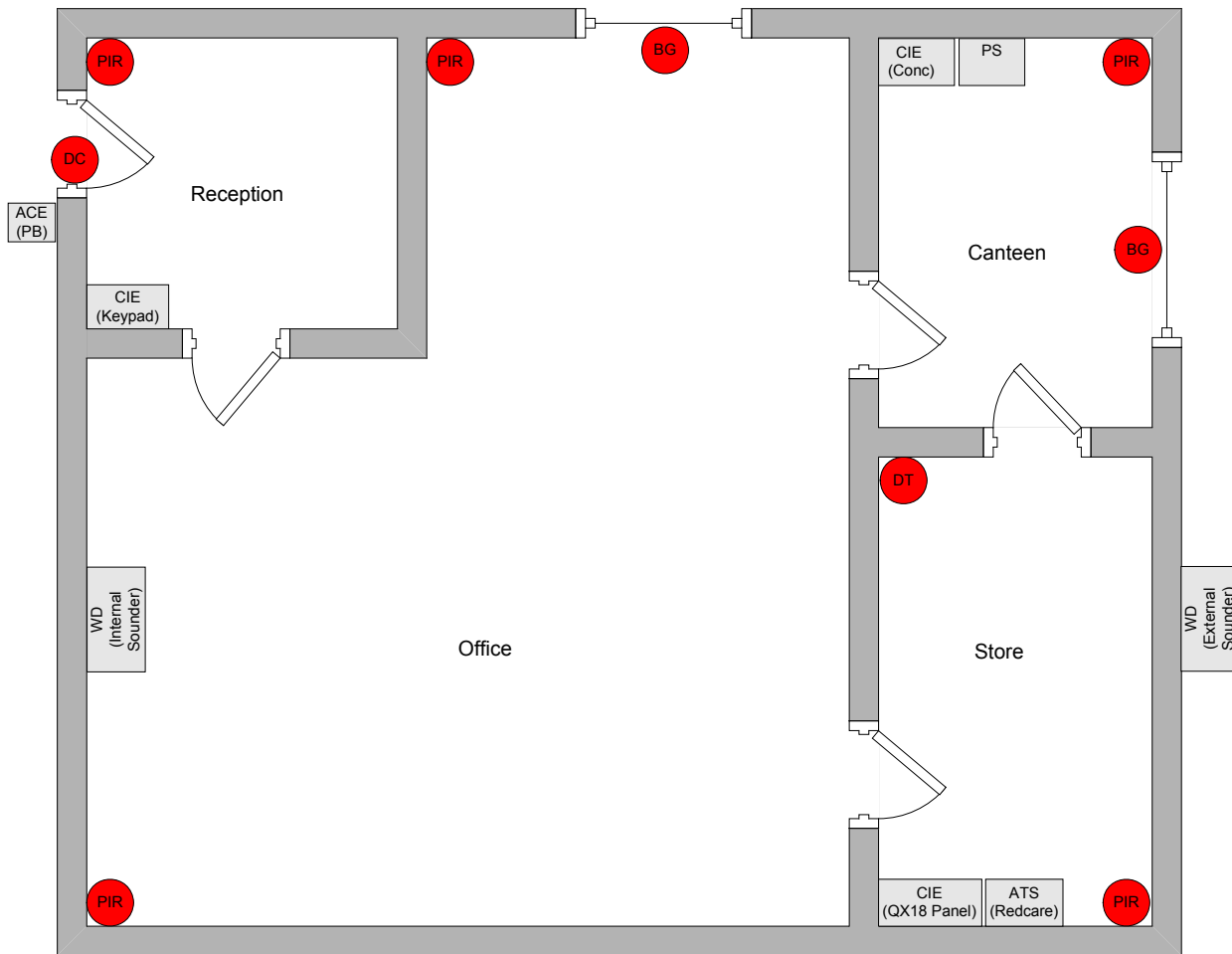
IAS	Intruder Alarm System	(Type of System)
HAS	Hold-up Alarm System	(Type of System)
I&HAS	Intruder and Hold-up Alarm System	(Type of System)
ACE	Ancillary Control Equipment	(eg External Pushbutton)
PACE	Portable Ancillary Control Equipment	(eg Prox Fob)
CIE	Control and Indicating Equipment	(eg Panel, Keypads, Concs)
WD	Warning Device	(eg Sounders, Strobes)
ATS	Alarm Transmission System	(Signalling System)
ARC	Alarm Receiving Centre	(Monitoring Station)
PS	Power Supply	(Power Supply for I&HAS)

Example IAS (Intruder Alarm System)

The diagram below shows terminology for the main components of a System. Detectors are not shown in this example.



Example of a Grade 2 System



Detection

- | | |
|-----|---|
| DC | Door Contact (Grade 2) |
| PIR | Passive Infra Red Movement Detector (Grade 2) |
| DT | Dual Technology Movement Detector (Grade 2) |
| BG | BreakGlass Detector |

For a Grade 2 System, Anti-Mask detectors are not a requirement.

Detectors such as M-2 (Grade 2 PIR) or V12 (Grade 2 PIR) could be used.

DD243 still applies regarding overlapping coverage, so PIR coverage must not overlap.

It is acceptable for DT Coverage to overlap with PIR or other DT's.

DT Detectors such as DTSx (Grade 2) could be used where overlapping with other Detectors.

Entry

A 45 Second maximum entry timer is permitted, with a further fixed 30 second warning period, before an Entry (unconfirmed) Alarm is notified to the ARC.

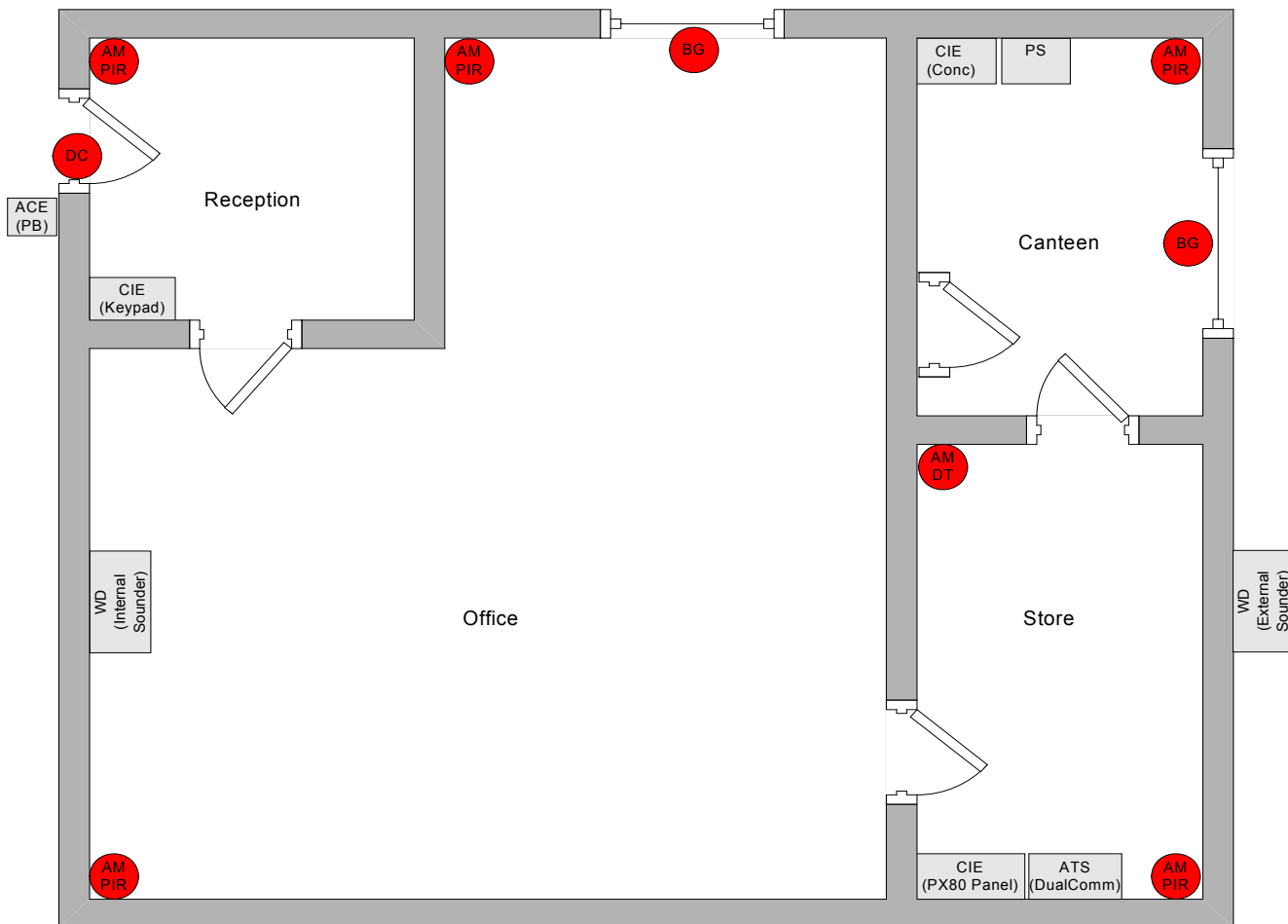
Notification (Sounders and Signalling)

Grade 2 Systems would normally provide an ATS with at least 1 Self Powered audible WD (SAB/SCB), or 2 Remotely Powered WD's.

Power Supplies

Grade 2 Systems require 12 Hours standby when using a 'Type A' PS.

Example of a Grade 3 System



Detection

DC	Door Contact (Grade 3)
AM PIR	Passive Infra Red Movement Detector, with Anti-Mask Capability (Grade 3)
AM DT	Dual Technology Movement Detector, with Anti-Mask Capability (Grade 3)
BG	BreakGlass Detector

For a Grade 3 System, Grade 3 type Anti-Mask detectors are a requirement.

Detectors such as V12AM (Grade 3 PIR) could be used.

DD243 still applies regarding overlapping coverage, so PIR coverage must not overlap.

It is acceptable for DT Coverage to overlap with PIR or other DT's.

DT Detectors such as Astra Elite AM (Grade 3) could be used where overlapping with other Detectors.

Entry

A 45 Second maximum entry timer is permitted, with a further fixed 30 second warning period, before an Entry (unconfirmed) Alarm is notified to the ARC.

Notification (Sounders and Signalling)

Grade 3 Systems would normally provide an ATS (preferably Dual Path) with at least 1 Self Powered audible WD (SAB/SCB), or 2 Remotely Powered WD's.

Power Supplies

Grade 3 Systems require 24 Hours standby when using a 'Type A' PS.

This can be reduced to 12 Hours, providing 'Mains Failure' is individually notified to the ARC.

Further Information on Requirements

This document is not intended as a complete guide to all aspects of the standards. The following pages (10-14) cover some of the main points, and should be read in conjunction with the relevant Standards.

The essential documents are prEN50131-1:2004, PD6662:2004, DD243:2004 and BSIA Form 171 (see Appendix A).

Detection Devices - Magnetic Contacts

Grades 3 & 4 require Magnetic Contacts to be unaffected by the influence of magnetic interference.

Detection Devices - Movement Detectors

Movement Detectors need to include varying features to comply with Grade 3 and Grade 4 requirements ;

- Grade 3 requires movement detectors to include a means of detecting Masking, and Orientation Tampering where applicable.
- Grade 4 requires movement detectors to include a means of detecting Masking and Range Reduction - where the range of the detector is reduced by 50% or more

Anti-Masking (Grades 3&4)

If a movement detector includes 'Anti-Masking', this means it can detect if it has been deliberately or accidentally obscured.

If an Anti-Mask detector has been deliberately or accidentally obscured, this will effectively disable part of the detection capability, and will prohibit the system from setting.

PD6662:2004 defines masking as 'Interference with the detector input capability by the introduction of a physical barrier such as metal, plastics, paper or sprayed paints or lacquers in close proximity to the detector'

In the Unset condition, an Anti-Mask condition will give a fault at the control panel, which should be notified to the ARC. This is optional on Grade 1&2 but mandatory on Grades 3&4.

In the Set condition, the anti-mask facility may be disabled if required, in order to avoid false alarms caused by the build-up of dust or an insect obscuring the detector. This is optional for all Grades.

Range Reduction (Grade 4)

Where Grade 4 components are not currently available, Grade 3 components can be used without affecting the Grade of the system. This is permissible in accordance with PD6662:2004.

Substitution (Grade 4)

Grade 4 Systems must be able to detect and notify of any substitution of I&HAS Components.

Wire-free Systems

BS 6799 for Wire-free systems will also be withdrawn on 1st October 2005, along with the other British Standards BS 4737 and BS 7042. Wire Free systems must then conform to the same requirements as those for 'Hardwired Systems' within EN50131

Currently wire-free Detection devices do not have 'Anti-Masking' properties which means that wire-free systems with a Radio PIR fitted would only comply with Grade 2 under EN 50131.

Tamper Protection

- Tamper Protection is required on CIE, ACE, ATS, WD and PS for all Grades
- Tamper on Intrusion Detectors, Hold-up devices and Junction Boxes is optional on Grade 1, but is a requirement for all other Grades.

Power Supplies

Under the new EN Standards there are 3 'Types' of Power supply that can be specified as Type A', 'B' or 'C'.

Type 'A' would be used for the most Installations, and specifies a Prime Source (Mains Power Supply) with an alternative battery power supply, which is automatically recharged by the system.

Where type 'A' has been specified, this will apply differently according to the System Grade ;

- Grade 1 and 2 require 12 hours 'Standby' capacity
- Grade 3 and 4 require 24 hours 'Standby' capacity, or 12 hours if the system can notify 'Mains Failure' to an Alarm Receiving Centre.

The System Power Supply Units must be capable of providing power for the whole system including Panel, Communicator, Sounders as well as Detection devices.

Notification (Sounders and/or Signalling)

Under EN 50131 Sounders and Signalling are defined as 'Notification'. Communicators are rated in categories between ATS1 to ATS6.

There are a number of Options for meeting the Notification requirements. Full details are shown on the following page, but the most commonly used would be ;

- Grade 1 and 2X Systems would normally include at least 1 Self Powered Warning Device (SAB/SCB).
- Grade 2 systems would normally include 1 Signalling System (ATS2), and at least 1 Self Powered Warning Device (SAB/SCB).
- Grade 3 Systems would normally include either ;
1 Signalling System (ATS4) with at least 1 Self Powered Warning Device (SAB/SCB), **or**
1 Dual Signalling System (Primary - ATS4, Secondary - ATS3) with no requirement for a Warning Device

Further detailed information on Notification (Sounders and/or Signalling)

The following table shows the minimum requirements for Notification Equipment. There are a number of alternative requirements (Options) for each Grade, one of which must be chosen.

Each option specifies a minimum 'ATS' rating for Signalling. This is between ATS1 and ATS6, with ATS6 being the most secure.

The ATS rating takes account of the Signalling performance, for things such as Reporting Speed and Substitution of Signalling.

Notification Equipment	Grade 1 Options			Grade 2 Options					Grade 3 Options				Grade 4 Options				
	A	B	C	A	B	C	D	X	A	B	C	D	A	B	C	D	
Remote Powered WD (Sounders)	2			2						2				2			
SAB/SCB (Sounders)		1			1			1			1			1			
Main ATS (Comms)			ATS 1	ATS 2	ATS 2	ATS 2	ATS 3			ATS 4	ATS 4	ATS 4	ATS 5	ATS 5	ATS 5	ATS 5	ATS 6
Additional ATS (Comms)						ATS 1						ATS 3				ATS 4	

Optional :

Notes

The ATS rating for each Option is the minimum required, and you can use Signalling with a higher ATS Rating.

BT RedCare Std has an ATS rating of **ATS 5** and is suitable for **Option A,B or D on Grades 2&3, and Option A or B on Grade 4.**

BT RedCare GSM has an ATS rating of **ATS 5** and is suitable for **Option C on Grades 2,3 &4.**

Standard Digital Communicators would normally have an ATS rating of **ATS 2 on Grade 2**, and must send a test signal or communicate with the ARC at least every 25 hours.

On Grade 2 Option C, you could use a standard Digital Communicator and a GSM module as an alternative.

Sub-Systems

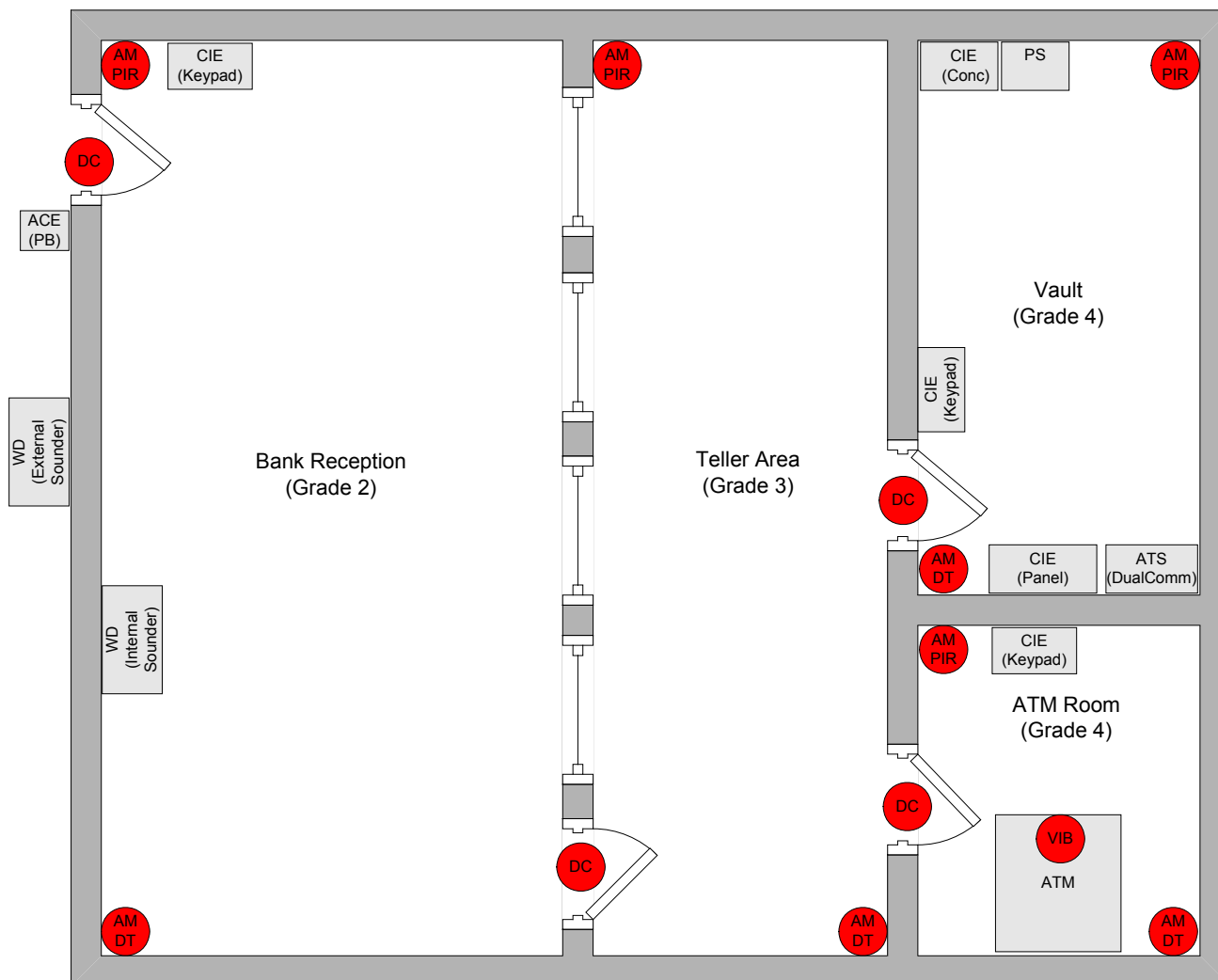
Systems can be split into Sub-Systems with different Grades of equipment in Areas where the risk may be higher.

An example of this shown below would be a Bank System, where the Vault and ATM may be Grade 4, but the Bank Reception Area and Teller Area could be lower Grades.

If a System is divided into Sub-Systems of different grades, then the CIE should be sited within the supervised area with the highest grade.

In Grade 3 and 4 systems the CIE should remain protected at all times when setting any Sub-System.

Example of a Sub-System



Detection

DC	Door Contact
AM PIR	Passive Infra Red Movement Detector, with Anti-Mask Capability
AM DT	Dual Technology Movement Detector, with Anti-Mask Capability
VIB	Vibration Detector

All Equipment located in the Bank Reception Area would need to be Grade 2 compliant.

All Equipment located in the Teller Area would need to be Grade 3 compliant.

All Equipment located in the Vault and ATM Room would need to be Grade 4 compliant.

Siting of Control and Indicating Equipment (Control Units / Keypads)

Control and Indicating Equipment (CIE) should be sited within the protected Area, near to the Final Exit Door. Setting/Unsetting can also be performed outside the protected Area using PACE

Access Levels

EN 50131 introduces the new concept of 'Access levels' for Intruder Alarm Systems.

This should not be confused with 'User Authorities'.

There are 4 Access Levels which determine who can operate the system. Level 4 is optional.

- Access Level 1 - The General Public (limited to viewing status)
- Access Level 2 - Customers (System Users)
- Access Level 3 - Engineer (Alarm Company), but only with Access Level 2 (Customer) permission. This also applies to Remote connections.
- Access Level 4 - Manufacturers, but only with with Access Level 2 (Customer) and Access Level 3 (Alarm Company) permission. Access Level 4 is optional.

Customers may still have conventional 'User Authorities' such as Cleaner, Operator, Manager and Master.

The 'Authority' which users have, becomes more restricted the higher the Grade of the system especially for Restoring Options following an activation, and changing PIN Codes.

Resetting

- Intruder and Hold-up Alarms - can be Reset by Level 2 or 3 User on all Grades.
- Tamper - can be Reset by Level 2 or 3 on Grades 1&2, but Level 3 (Engineer) Reset only on Grades 3&4.
- Mains Failure - can be Reset by an Access Level 2 User, on all Grades.
- Fault (other than Mains Failure) - can be Reset by Access Level 2 or 3 on all grades Except Grade 4 which requires a Level 3 (Engineer) Reset.

An Engineer Reset can still be performed via a 'Managed Reset'.

Entry & Exit Routes (DD243:2004 Compliance)

The arrangement of Entry and Exit routes should be in accordance with DD243:2004.

When Setting or Unsetting is carried out in two stages, the distance between the two points should be as short as possible e.g. Initiation on Control unit or keypad, and completion at final door.

Detectors on the Entry / Exit route(s) which are activated during Setting and Unsetting should not create an alarm.

Setting

- Setting may be initiated within the supervised premises and completed outside.
- The entire Setting procedure may be completed outside using suitable PACE.
- Although Timed Setting is permitted under EN50131, it is not permitted by DD243:2004. Timed Setting should therefore not be used if conformance to both prEN50131-1:2004 and DD243:2004 is required.
- Audible or Visible Indication of initiation and completion should be given.

Unsetting

- Unsetting may be initiated outside the supervised premises, and completed inside.
- The entire Unsetting procedure may be completed outside the protected area using suitable PACE.
- If Unsetting is completed inside the supervised area, then the CIE should be sited adjacent to the final exit point, and out of view of unauthorised persons.
- Completion of Unsetting should require a 'single deliberate action' by the User to Unset. This allows confirmation to be notified, if 2 Circuits (non ER) activate following an Entry Alarm.
- The Unsetting procedure must be completed within a maximum time of 45 seconds. Consideration should therefore be given to the location of equipment, to enable the user to Unset the system.
- The Entry Warning period (upon Entry Timer expiry) is now fixed at 30 Seconds.
- Audible or Visible Indication of initiation and completion should be given.

Event Logs

Event Log requirements are as follows ;

- Grade 1 – Optional
- Grade 2 - 250 events, with 30 day retention on Power Failure
- Grade 3 - 500 Events, with 30 day retention on Power Failure
- Grade 4 - 1000 Events, with 30 day retention on Power Failure

Maintenance Inspections

- Grade 1 Systems require - 1 Site Visit per year.
- Grade 2X Systems require - 1 Site Visit per year.
- Grade 2 Systems require - 2 Site Visits per year, or
1 Site Visit plus 1 Remote System check per year.
- Grade 3 Systems require - 2 Site Visits per year, or
1 Site Visit plus 1 Remote System check per year.
- Grade 4 Systems require - 2 Site Visits per year.

For Grade 2 or Grade 3 EN compliant systems only, under the new standards Alarm Companies may substitute one of the two physical Site Maintenance Visits required each year, with a 'Remote System Check'.

This option only applies to new EN Systems and is not retrospective. It was not permissible under British Standards. It should create a more flexible arrangement for Users and Alarm Companies alike.

User Documentation

Instructions relating to the operation of an I&HAS shall be designed to minimise the possibility of incorrect operation, and be structured to reflect the access level of the User.

Appendix A – Standards Documentation

Guide to Terminology

BS	British Standard
BS EN	British Standard European Norm: UK Version of an EN, published by BSI
DD	Draft for Development
DD/CLC/TS	Draft for Development Technical Specification, produced by CENELEC
EN	European Norm: A Published European Standard
PD	Published Document: A Document published by BSI which is not a British Standard
PrEN	Provisional European Norm: A draft European Standard which is publicly available
PrTS	Provisional European Technical Specification
TS	European Technical Specification

EN50131 Alarm Systems – Intrusion Systems

The following parts of EN50131 are available, unless stated otherwise (September 2005) ;

prEN50131-1	System Requirements	(Update due)
50131-2-1	Intrusion Detectors – Common Requirements	(Not yet available)
DD CLC/TS 50131-2-2:2004	Intrusion Detectors – Passive Infrared Detectors	(Current)
DD CLC/TS 50131-2-3:2004	Intrusion Detectors – Microwave Detectors	(Current)
DD CLC/TS 50131-2-4:2004	Intrusion Detectors – Combined PIR/Microwave Detectors	(Current)
DD CLC/TS 50131-2-5:2004	Intrusion Detectors – Combined PIR/Ultrasonic Detectors	(Current)
DD CLC/TS 50131-2-6:2004	Intrusion Detectors – Opening Contacts (Magnetic)	(Current)
50131-2-7	Intrusion Detectors – Glass Break Detectors	(Not yet available)
50131-2-8	Intrusion Detectors – Vibration Detectors	(Not yet available)
50131-2-9	Intrusion Detectors – Active Infrared Detectors	(Not yet available)
50131-2-10	Intrusion Detectors – Proximity Detectors	(Not yet available)
DD CLC/TS 50131-3:2003	Control and Indicating Equipment	(Current)
50131-4	Warning Devices	(Not yet available)
50131-5-1	Requirements for Interconnections equipment using dedicated wired links	(Not yet available)
50131-5-2	Requirements for Interconnections equipment using non-dedicated wired links	(Not yet available)
BS EN50131-5-3:2005	Requirements for Interconnections equipment using radio frequency techniques	(Current)
BS EN50131-6:1998	Power Supplies	(Current)
DD CLC/TS 50131-7:2003	Application Guidelines	(Current)
BS EN 50136-1-1:1998	Alarm transmission systems – General Requirements	(Current)
BS EN 50136-1-2:1998	Alarm transmission systems - Requirements for Systems using Dedicated Alarm Paths	(Current)
BS EN 50136-1-3:1998	Alarm transmission systems - Requirements for Systems with Digital Communicators using the Public Switched Telephone Network	(Current)
BS EN 50136-1-4 :1998	Alarm transmission systems - Requirements for Systems with Voice Communications using the Public Switched Telephone Network	(Current)

PD6662:2004

PD6662 is an 'enabling document', which for the moment bridges the gap between EN50131 and Part 3 of BS4737. The Annexes included in PD6662:2004 are specific UK requirements ;

PD6662:2004	Scheme for the application of European Standards for Intruder and Hold-up Alarm Systems
PD6662:2004 annex A	Provisions additional to EN50131-1 for Intruder and Hold-up alarm systems installed in accordance with the scheme given in PD6662: Construction and performance of hold-up devices
PD6662:2004 annex B	Provisions additional to EN50131-1 for Intruder and Hold-up alarm systems installed in Accordance with the scheme given in PD6662: Control and Indicating Equipment
PD6662:2004 annex C	Provisions additional to EN50131-1 for Intruder and Hold-up alarm systems installed in Accordance with the scheme given in PD6662: Warning Devices
PD6662:2004 annex D	Provisions additional to EN50131-1 for Intruder and Hold-up alarm systems installed in Accordance with the scheme given in PD6662: Maintenance
PD6662:2004 annex E	Guidance on grades 3 and 4 systems – Masking and significant reduction of specified range

DD243:2004

DD243:2004	Installation and Configuration of Intruder Alarm Systems designed to generate confirmed alarm conditions – code of practice.	(Current)
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BSIA Forms

Form 171 – Guideline for the use of the PD6662:2004 scheme for the implementation of prEN50131-1:2004

The BSIA have published a document (Form 171) , which can be freely downloaded in the 'downloads' section at www.bsia.co.uk. This contains helpful information on interpreting prEN50131:2004 and PD6662:2004.

British Standards

BS4747 - Part 1	Intruder Alarm Systems in buildings Installed Systems with local audible and/or remote signalling	(Withdrawn 1st October 2005)
BS4737 - Part 2	Intruder Alarm Systems in Buildings Installed Systems for deliberate operation	(Withdrawn 1st October 2005)
BS4737 - Part 3	Intruder Alarm Systems in Buildings Specifications for Components	(Current)
BS4737 - Part 4.1	Intruder Alarm Systems in Buildings Code of practice for Planning & Installation	(Withdrawn 1st October 2005)
BS4737 - Part 4.2	Intruder Alarm Systems in Buildings Code of practice for Maintenance & Records	(Withdrawn 1st October 2005)
BS6799	Code of Practice for Wire Free Intruder Alarm Systems	(Withdrawn 1st October 2005)
BS7042	Specification for High Security Intruder Alarm Systems In Buildings	(Withdrawn 1st October 2005)

Note – BS4737 Part 3 is not yet withdrawn, and is called up by PD6662:2004.. It covers specifications for Individual System Components, as these parts of EN50131 (Part 2) are not all in place yet, so BS4737 Part 3 continues to apply.

Appendix B – Grading Summary for Guardall Products

EN50131/PD6662 security grade and environmental class of Detectors as supplied by Guardall Ltd



Product	W number	Security Grade	Environmental Class
M-2	W74065	2	II
V12	W73525	2	II
V12 AM	W73526	3	II
Vega DX1 50m LR	W72016	2	II
Vega DX1 40m Curtain	W72017	2	II
Vega DX1 18m Vol	W72015	2	II
Vega AM 18m Vol	W71815	2	II
Vega AM 50m long range	W71816	2	II
VEx volumetric	W74302	2	IV
VEx long range	W74303	2	IV
Micra S-8 4/8m	W73546	2	II
Micra S-15 10/15m	W74547	2	II
Micra 360	W73337	2	II
DTSx 6	W76213	2	II
DTSx 12	W76218	2	II
DTSx + 12	W76234	3	II
DTSx + 15	W76264	3	II
DTSk AM 15	W76265	3	II
Astra 15	W72722	2	II
Astra Elite	W72178	2	II
Astra Elite AM	W73667	3	II
DTX18	W76082	3	II
DTX15	W76084	2	II
DTX12	W76086	2	II
Jupiter 27 volumetric	W73415	3	II
Jupiter 61 long range	W72621	3	II
MX950	W73093	3	II
MX960	W73094	3	II

EN50131/PD6662 security grade and environmental class of control panels and accessories as supplied by Guardall Ltd



Product	W number	Security Grade	Environmental Class
QX18 RS Std LCD kit/100 V4	W76111	2	II
QX18 RS Std LCD kit/100 (large case) V4	W76112	2	II
QX18 RS/100 panel V4	W76117	2	II
QX18 RS/100 panel (large case) V4	W76118	2	II
QX18i RS Std LCD kit/100 V4	W76129	2	II
QX18i RS Std LCD kit/100 (large case) V4	W76130	2	II
QX18i RS Prox LCD kit/100 V4	W76131	2	II
QX18i RS Prox LCD kit/100 (large case) V4	W76133	2	II
QX18i RS/100 panel (large case) V4	W76142	2	II
QX34 RS/100 panel V4	W76145	3	II
QX34i RS/100 panel V4	W76157	3	II
QX34i AP/100 Grade 3 V4	W76209	3	II
PX18/100 V4	W76167	3	II
PX 18 kit 1 V4	W76172	3	II
PX 18 kit 3 V4	W76173	3	II
PX 18 kit 5 V4	W76174	3	II
PX 18 kit 6 V4	W76175	3	II
PX34/100 V4	W76178	3	II
PX 34 kit 1 V4	W76187	3	II
PX80/100 V4	W76190	3	II
PX500/100 V4	W76195	3	II
PX250 High Security/100 V4	W76203	3	II
LCD Keypad 2 line Std	W73807	3	II
LCD Keypad 2 line ccts	W73809	3	II
LCD Keypad 2 line prox	W73811	3	II
LCD Keypad 2 line prox/ccts	W73816	3	II
Keypad Std (Blue)	W76247	3	II
Keypad ccts (Blue)	W76248	3	II
Keypad prox (Blue)	W76249	3	II
Keypad prox/ccts (Blue)	W76250	3	II
Diagnostic Concentrator 8 I/P 2 O/P metal	W73735	3	II
Diagnostic Concentrator 8 I/P 2 O/P plastic	W73736	3	II
O/P Module 8 relay	W73737	3	II
O/P Module 8 transistor	W73738	3	II
O/P Module 4 R/8 T	W73739	3	II
Serial Module	W73740	3	II
Mimic Module	W73813	3	II
Smart Concentrator	W73818	3	II
Programming Kit (Kanda)	W73819	3	II
Prox (fob) 2	W73820	3	II
Proxpoint	W73821	3	II
Access module	W73822	3	II
Prox (card) 10	W73837	3	II
PX Smartkey kit	W73845	3	II
Smart Access module	W73847	3	II
Bus Isolator	W73869	3	II
Dallas Converter	W74334	3	II
Datacomms Module External	W74368	2/3 •	II
Datacomms Module Internal	W74369	2/3 •	II

EN50131/PD6662 security grade and environmental class of control panels and accessories as supplied by Guardall Ltd



Product	W number	Security Grade	Environmental Class
Miniprox	W74443	3	II
Diagnostic Concentrator 8 I/P 4 O/P plastic	W74480	3	II
Universal 4 Relay output board	W74481	3	II
Speech Module	W76050	3	II
Smart Concentrator (1071 PCB)	W76057	3	II
Radio Module Inovonics	W76067	3	II
Serial Module	W76068	2/3 •	II
DualComm Module	W76069	2/3 •	II
PSTN Module	W76070	2/3 •	II
GSM Module	W76071	2/3 •	II
Audio Bus Interface	W76073	3	II
Audio Bus Interface speech/record	W76074	3	II
Audio Talkback Module	W76075	3	II
Microphone	W76076	3	II
Microphone Module	W76078	3	II
Audio Bus Interface QX18i	W76079	3	II
Audio Bus Interface speech/record QX18i	W76080	3	II
UTX 2 input with OTW tamper	W76094	3	II
2 button pendant TX	W76095	3	II
2 button belt clip TX	W76096	3	II
Shatter PRO TX	W76097	3	II
Smoke Detector TX	W76098	3	II
UTX (generic) with OTW tamper	W76099	3	II
Door/Window TX with OTW tamper	W76100	3	II
1 button pendant TX	W76101	3	II
1 button belt clip TX	W76102	3	II
Inovonics PIR	W76103	2	II
Radio Module Visonic	W76110	3	II

- - These products comply to Grade 3 for Upload/Download purposes, but Grade 2 for Alarm Reporting purposes (ATS2).

Note that equipment can be used in any Grade of System below the Component Grading.
Eg although PX Control Panels are Grade 3, they could still be used in Grade 1 & 2 applications. This applies to any component.

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