

Fire Detection and Alarm Systems

A review of the I.S. 3218:2013 standard and certification

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comsec
protection systems

About this Presentation

- Review of significant changes to the standard.
- Highlight some of often missed parts of old standard.
- Certification system: a brief overview.

- Published 17th December.
- Old standard revoked on that date.
 - All new systems to be designed/installed to IS3218:2013
 - Works “in progress” with fire certificate already granted may continue with old standard but new certificates must be used stating the 2009 revision of the standard used for the design and installation.
 - Where reasonably practicable new standard should be used.

Transitional Arrangements:

- All existing systems should be Serviced/Maintained in accordance with IS3218:2013 standard.
- No Requirement to upgrade old systems to new standard unless, a) the owner agrees to a fully up-to-date installation, or
 - *b) the existing installation cannot be incorporated in a new system and would detrimentally affect either its operation or the effective operation of the new upgrade, or*
 - *c) an upgrade is required by a Fire Safety Certificate under the Building Control Regulations for material alterations, extensions or change of use of the premises. (IS3218 Clause 4)*

Sound Levels

Sound Levels

- Irish standard 3218 is specific about the sound level requirement:
 - 65 dB(A) or 5 dB(A) above background noise (whichever is higher).
 - To wake a sleeping person 75 dB(A) at the bed head.
 - In all accessible areas of the building.
 - Tone ideally between 500 and 1000 Hz
- Exceptions:
 - “Allowable Variations” to minimum level added to standard in 2013 to 60dB(A) for non residential areas i.e. in stairwells, corridors <3m, and Enclosures < 25m²
 - Use of other codes e.g. Should be noted on design cert where they deviate from IS3218 e.g. HTM05-03 Part B areas where patients require assistance to evacuate 45 –55 dB(A), (should be listed as variation on design cert).

Sound Levels Exceptions:

- “Allowable Variations” to minimum level added to standard in 2013 for non residential areas:
 - in stairwells, corridors <3m, and Enclosures < 25m² sound level reduced to 60dB(A)
 - in enclosures between 25 m² and 60 m² sound levels as per figure 2
- Use of other codes e.g. Should be noted on design cert where they deviate from IS3218
 - e.g. HTM05-03 Part B areas where patients require assistance to evacuate 45 –55 dB(A), (should be listed as variation on design cert).

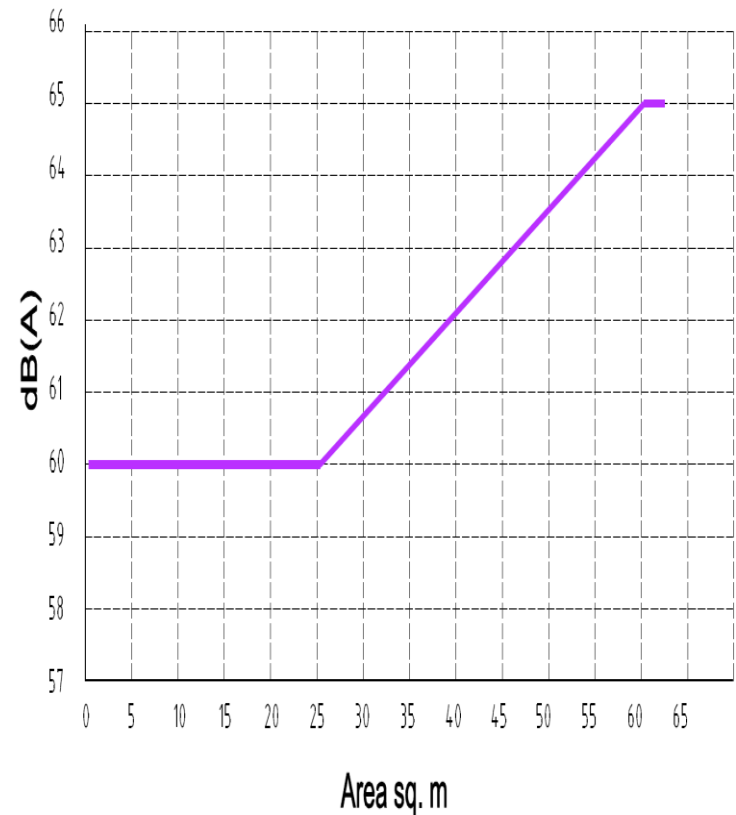
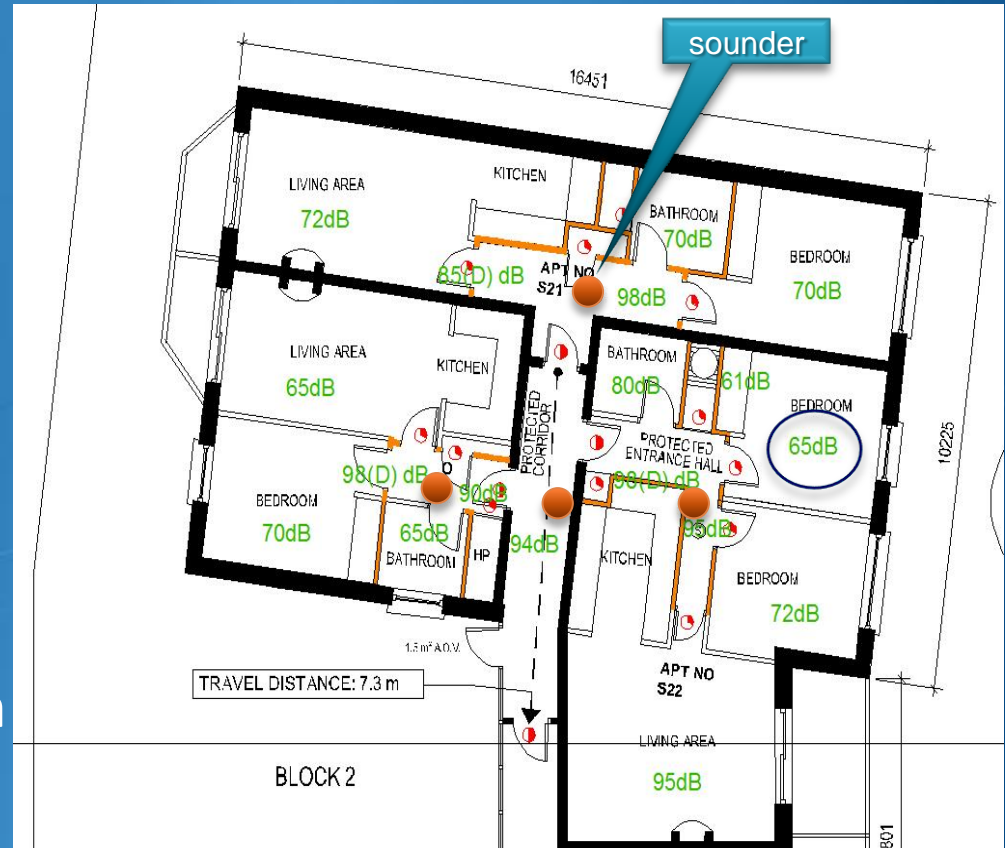


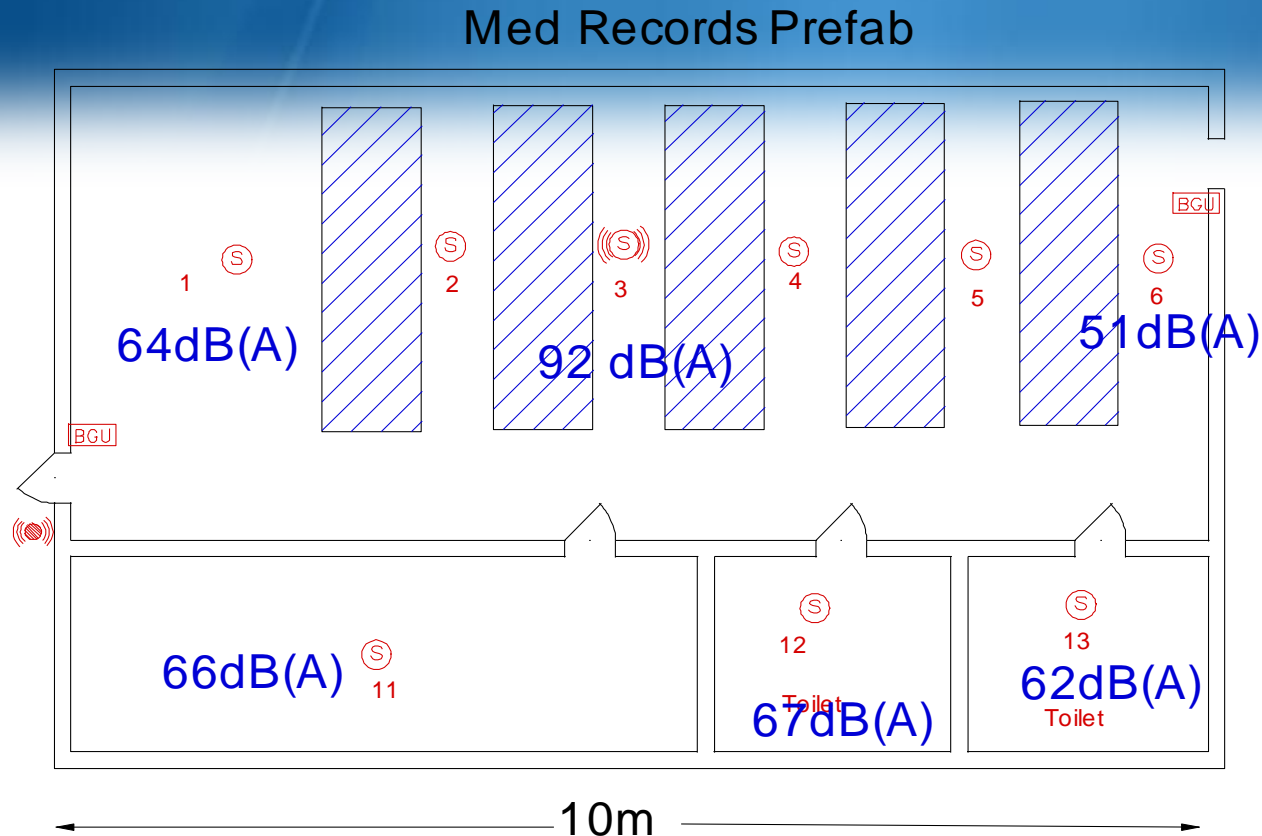
Figure 2 — Marginal sound levels

Example 1: Sound Levels in Apartment Blocks

- The installation of the fire alarm system to IS3218 L3X, escape routes and rooms leading onto escape routes.
- Detectors in Stairwells, corridors and Apartment lobbies.
- Internal layout, may contain numerous partitions and doors. Sounders in lobbies alone often not sufficient to reach required sound level in bedroom.
- *Note: Different requirement for individual apartments' (or houses') stand alone "Domestic Systems" Lower limit of 85dB(A) in open bedroom door applies*



Example 2:



Prefabricated Medical Records building.

Actual measurements, majority of sound absorbed by shelves densely packed with paper.

Sound Levels

- Design considerations:
 - Sound strength is greatly influenced by structure, finishes and contents.
 - Systems are more likely to pass a sound level test in an empty building, than in a fully furnished one.
 - Note sound level tests required annually (IS3218:2013)
 - Usually a large number of quieter sounders gives a better overall sound level.



Sound Levels / Sounders

- *(Clause 6.6.3) In buildings which are not permanently manned, the external sounder shall automatically silence after a period of 15 min*, but any visual indicator associated with the entrance or acting as guidance to the location of the control panel (see 6.12.3.2) shall continue to operate.*



*Reduced from 30min since IS3218:2009

Sound Levels / Sounders

- Each system shall comprise a minimum of two sounder circuits within the building (excluding the panel
- ensure that no excessive sound level greater than 118 dB(A) are exceeded at any accessible levels.



*Reduced from 120dB(A) since 2009

Sound Levels / Sounders

- Where it has been determined (on the basis of consideration of hearing impairment) that a visual alarm device (VAD) is to be employed then the VAD equipment shall comply with the requirements of I.S. EN 54-23.



Callpoints

Callpoints

- *Configuration of manual call points for coincidence (double knock) operation shall be prohibited. (Clause 6.7.1).*
- *Where manual call points with covers are used in a system then this shall be noted as a variation on the Certificate of Commissioning. (Clause 6.7.2).*



Callpoint Siting

- Manual call points shall be located at all exits ~~to open air~~ (except as permitted in 6.7.3), on defined escape routes (to comply with travel distances), at all final exits, storey exits, accommodation stairways and within refuge areas.
- Manual call points shall also be located in the stairwell enclosure unless:
 - a manual call point is located inside each storey exit, and
 - additional call points are located on selected stairwell landings as per Table 1. (Clause 6.7.2)

Table 1 — Manual call point siting in staircases

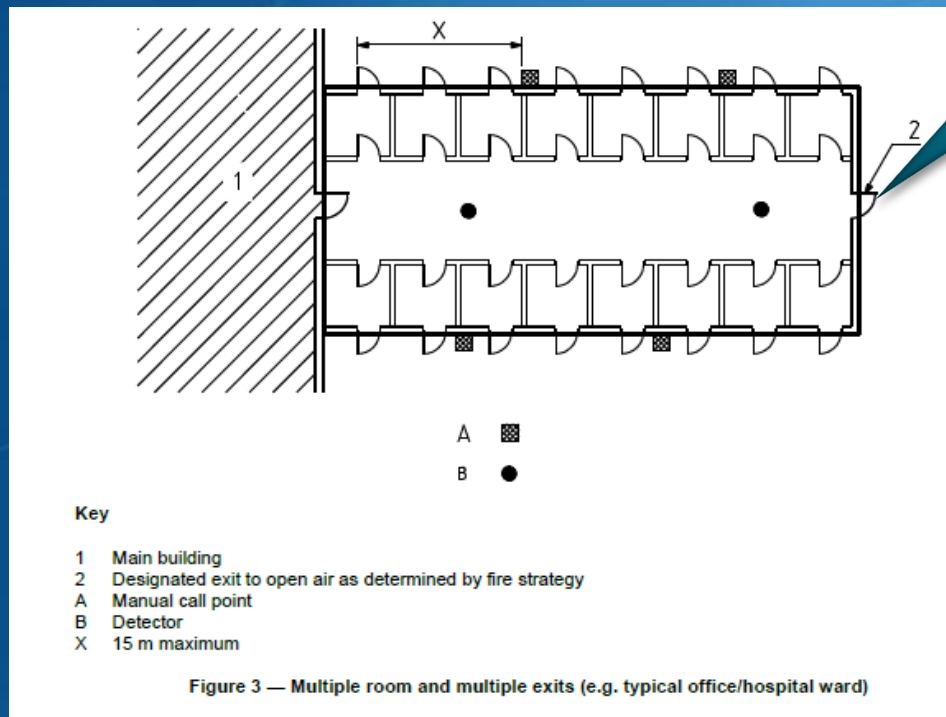
Floor		Zone
40	Floors 30 to 40 - Repeat as for floors 10 to 19	D
30	Floors 20 to 30 - Repeat as for floors 10 to 19	C
20		B
19		B
18		B
17	Example B	B
16		B
15		B
14		B
13		B
12	Example A	B
11		B
10		B
9		A
8		A
7		A
6		A
5		A
4		A
3		A
2		A
1		A
Ground		A
Basement 1		A
Basement 2		A
Basement 'n'		A

Notes:

- The maximum travel distance to inspect a zone is 30 metres. High rise stairwells should therefore be broken into separate zones so that the travel distance is not exceeded. Suggested that a maximum of 10 floors per zone be used.
- Example A: Call points are located on Ground floor, 3rd floor, 6th floor + 9th floor.
- Example B: Call points are located on Ground floor, 4th floor, 8th floor, 11th floor + 14th floor.

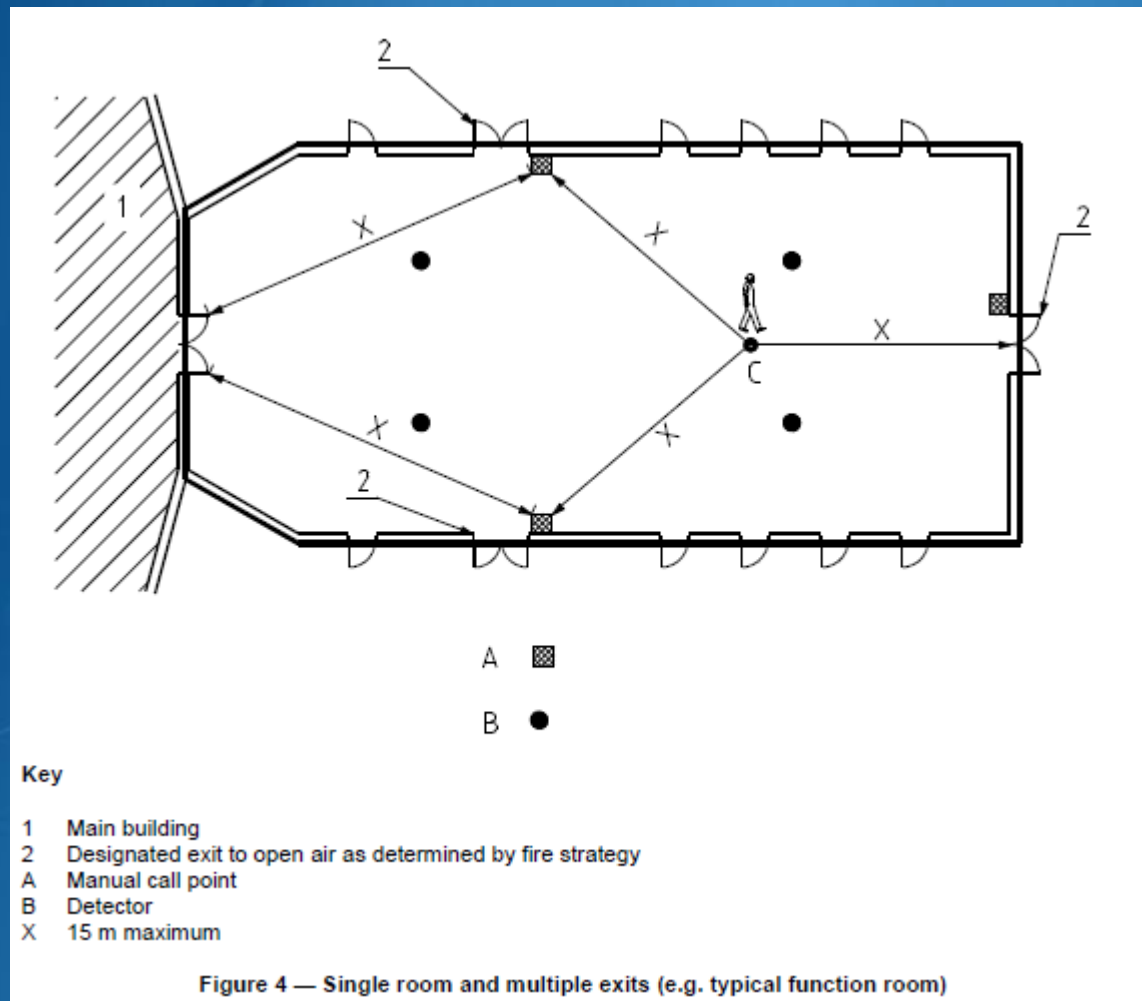
Callpoint Siting : Multiple Exits to open air (Clause 6.7.3)

- Some call point may be omitted if Less than 500m² and protected by detection and subject to risk assessment.



Callpoint removed from diagram in this revision must be an error as it contradicts text.

Callpoint Siting : Multiple Exits to open air (Clause 6.7.3)



Detectors

Carbon monoxide (CO) fire detectors

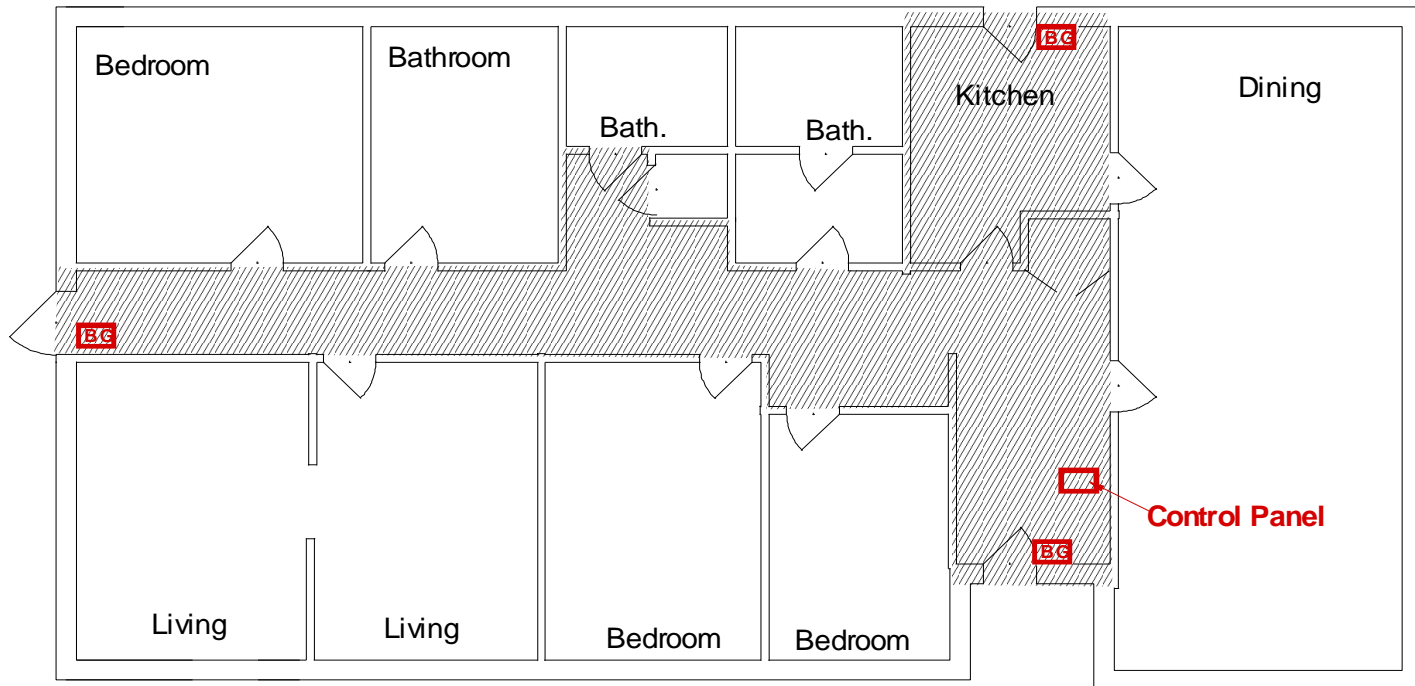
- CO detectors suitable for supplementing smoke detectors only.
- *Carbon monoxide fire detectors shall not be used as the primary detector for the purpose of detecting carbon monoxide as a toxic gas where generated by defective heating or other appliances (boilers etc). (Clause 6.9.5).*



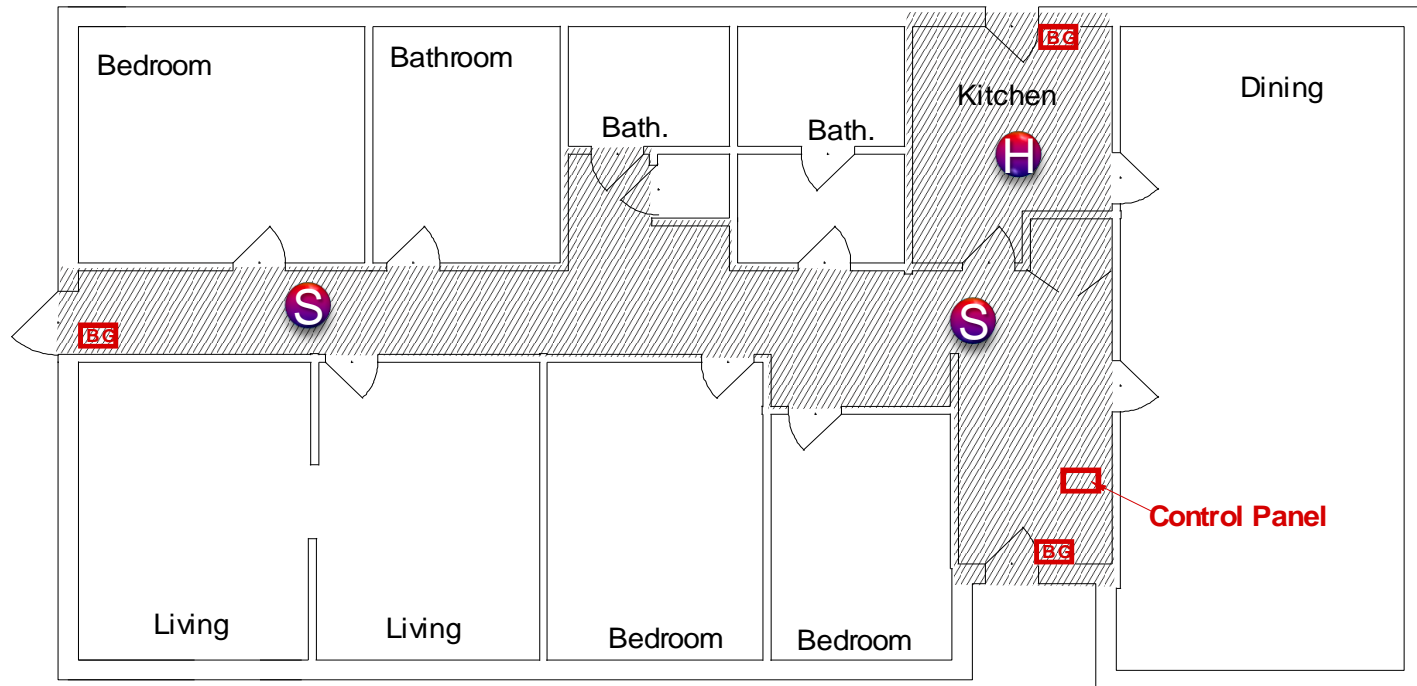
System Categories:

- levels remain unchanged:
 - Manual call points only (Category M)
 - protection of escape routes only (Category L4 system),
 - protection of escape routes and adjoining rooms (Category L3 system),
 - protection of vulnerable areas with significantly high life hazard (Category L2/L3 or L2/L4 system),
 - and total coverage (Category L1 system).

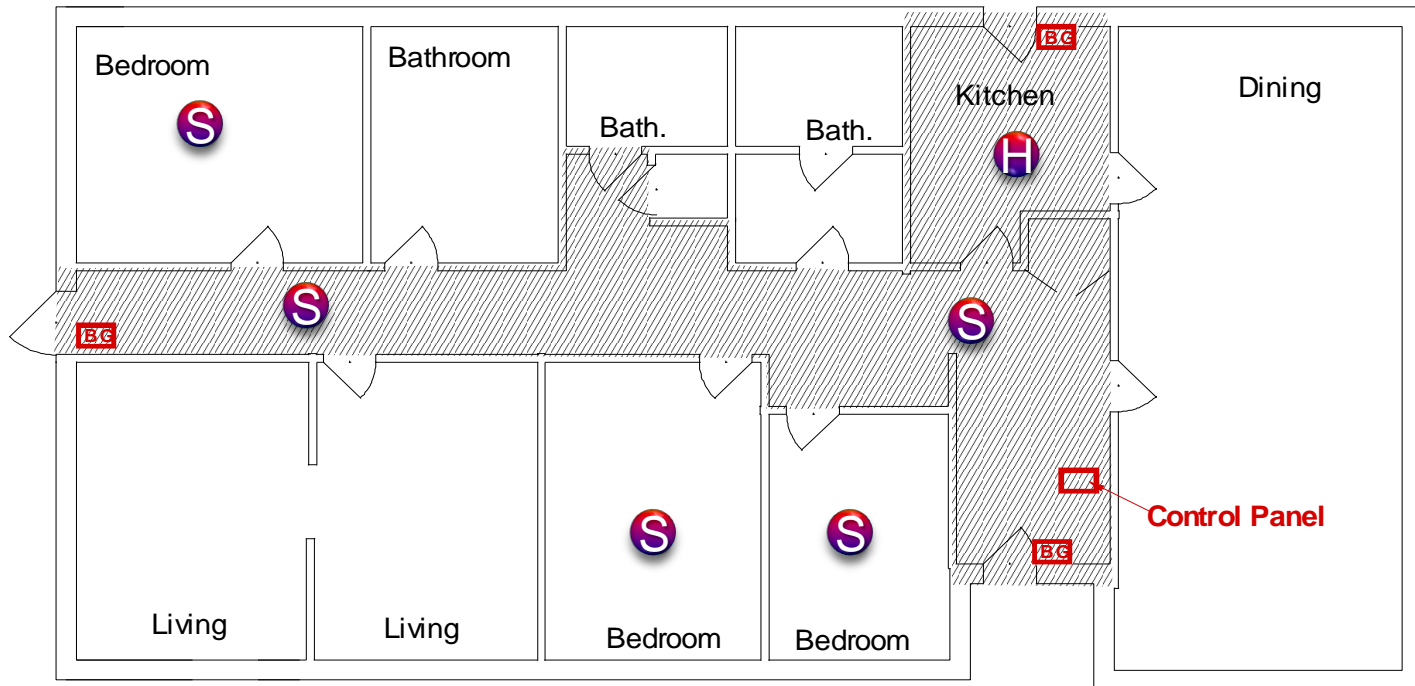
System Category: Type M



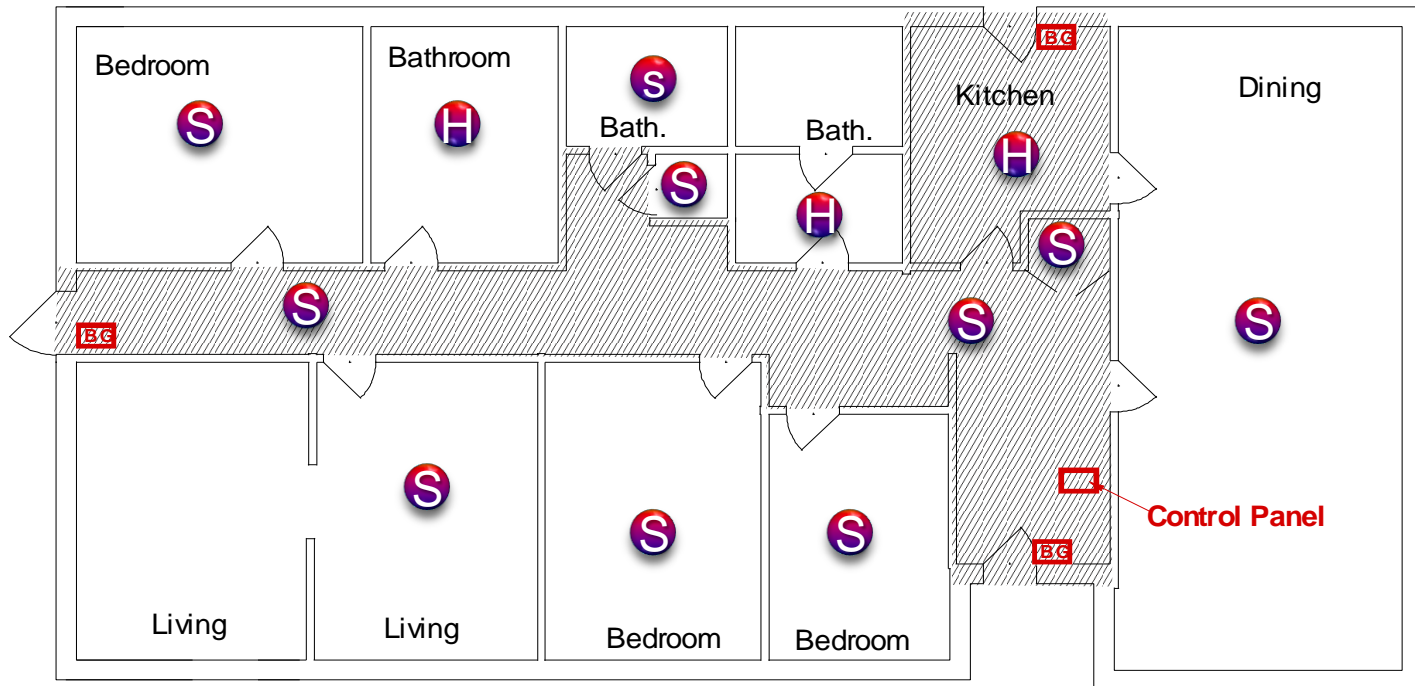
System Category: Type L4



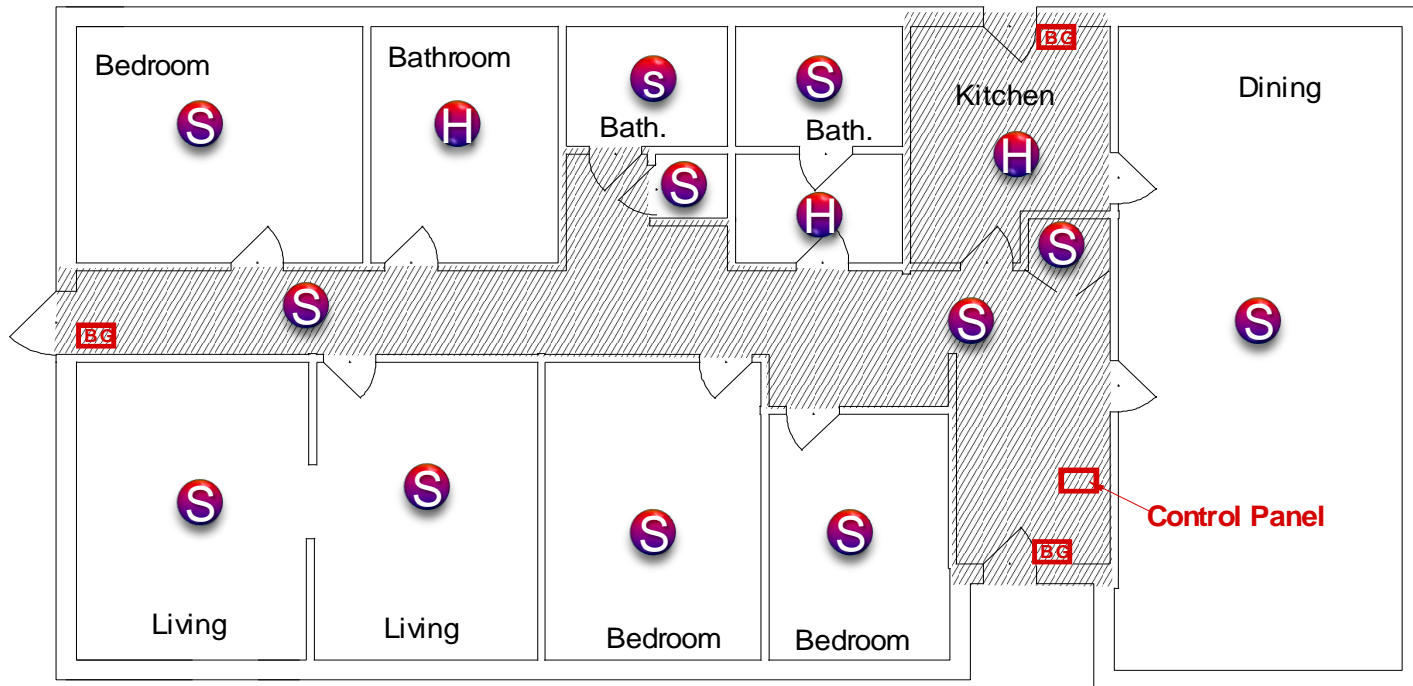
System Category: Type L2/L4



System Category: Type L3



System Category: Type L1



Horizontal Voids – Clause 6.10.5.9

- Void ≥ 800 mm
- Treated as Normal Spaces:
- Can be omitted on these conditions:
 - If “Low” fire risk found following a Risk Assessment.
 - with the agreement of the interested parties (see 6.2.8.4), is granted.
 - Must be recorded as a variation on the relevant system certificate.
- voids ≤ 800 mm
- Detection can be obmitted if *“extensive spread of fire or fire products, particularly between areas, rooms or compartments, cannot take place within it before detection”*.

Voids over escape routes (Clause 6.10.3.1.2.3)

- Escape route voids less than 800mm must be covered unless the fire rating between the void and corridor is the same as the fire rating of the structure.
- All voids onto escape route over 800mm must be covered.

Ceiling Height Limits.

Table 3 — Limits of ceiling heights

Detector Type	Ceiling height – general limits	Permitted variations as per 6.10.4.5
	(m)	(m)
Heat Detectors conforming to I.S. EN 54-5 class A1	9	10,5
— Other classes	7,5	N/A
Point Smoke detectors (as 6.8.3)		
Normal sensitivity	10,5	12,5
Enhanced sensitivity (as set out for aspirating smoke detection systems below	12	14
Optical Beam Smoke Detectors as I.S. EN 54-12	25	28
Optical Beam Smoke Detectors with enhanced sensitivity (i.e. $\leq 35\%$ attenuation)	See Note	See Note
Aspirating Smoke Detection System as FIA CoP		
— Any ASD system approved to EN54-20	10,5	12,5
— ASD system with at least 5 Class C holes or at least 2 Class B holes	15	18
— ASD system with at least 15 Class C holes or at least 5 Class B holes	25	28
— ASD system with at least 15 Class B holes	40 See Note	43 See Note
Other Fire Detectors		
— Multi-sensor	See Note 2 to 6.10.4.5	
— Carbon monoxide	10,5	12,5
— Flame	As specified by the manufacturer	
— Video		
— Other		
NOTE For application of enhanced sensitivity optical beam smoke detectors or aspirating systems at heights greater than 25 metres the manufacturer's recommendations should be followed and the use of supplemental detection is highly recommended.		

10% of Ceiling may be up to this height

New Limit for Enhanced detectors

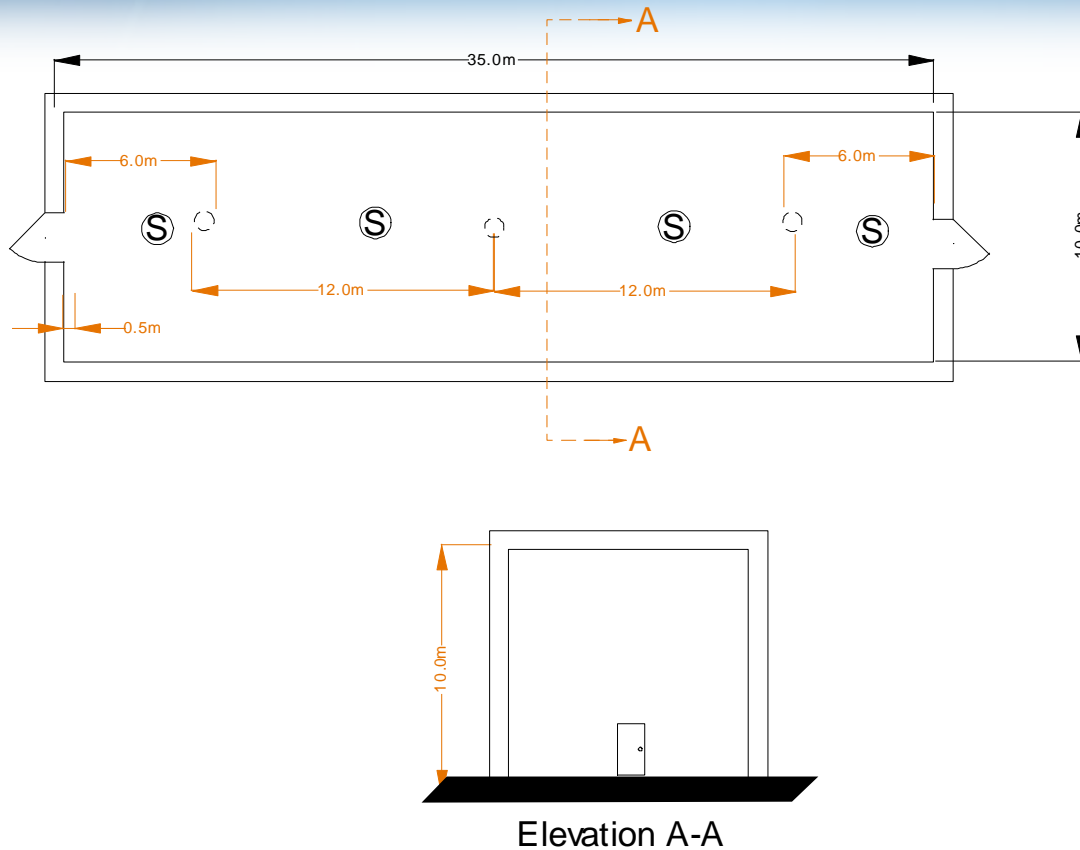
Detector Spacing

Table 2 — Limits for siting point detectors

Type of Detector	Maximum floor area to be covered by one detector (m ²)	Maximum horizontal distance between centres (m)	Maximum horizontal distance of detector from walls or partitions (m)
Heat Detector	50	10	5
Smoke/Carbon Monoxide Detector	100	12	6
IMPORTANT — These limits are subject to the minimum number of detectors as defined in 6.10.4.1.			

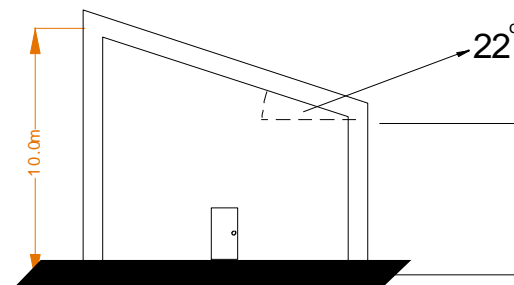
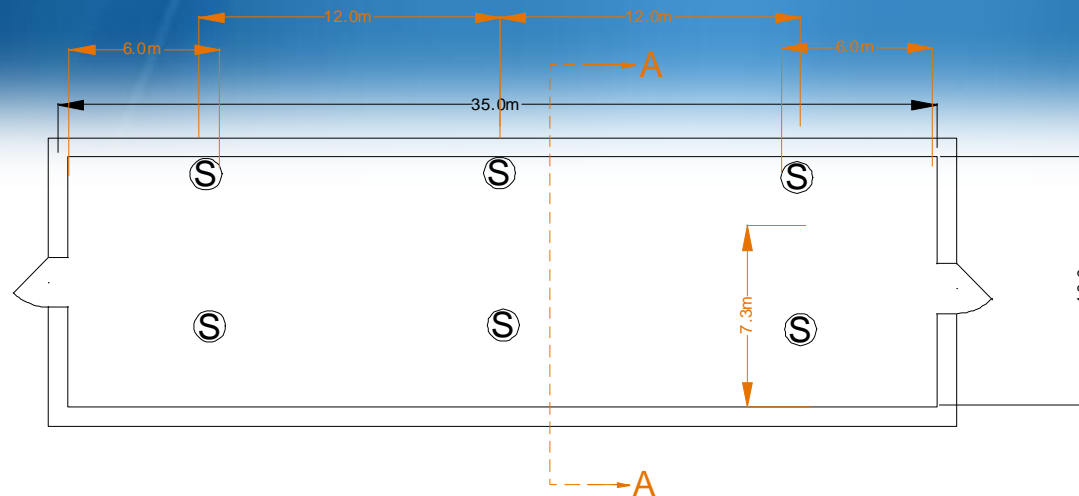
- Horizontal limits remain unchanged

Detector Spacing Example:



Room is 350 m² therefore a minimum 4 detectors required (1 per 100 m²)
i.e. one more than required by Table 2 Limits

Detector Spacing Example:



Elevation A-A

Room is still 350 m² but the roof is now pitched at 22°. Therefore a minimum 6 detectors is required. First 3 mounted at high point. Next 3 required so there are detectors no more than 7.3 meters from the wall. (table 2 limit increases by 1% per degree because of slope as per caluse 6.10.5.1)

Honeycomb / Coffers (Clause 6.10.5.7)

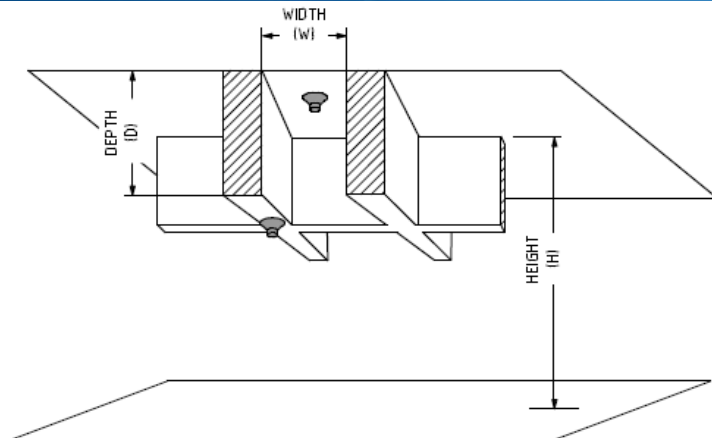


Figure 7 — Typical Honeycomb Detail

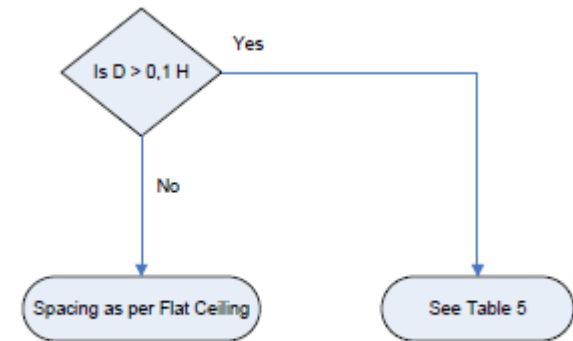


Figure 9 — Spacing of Detectors

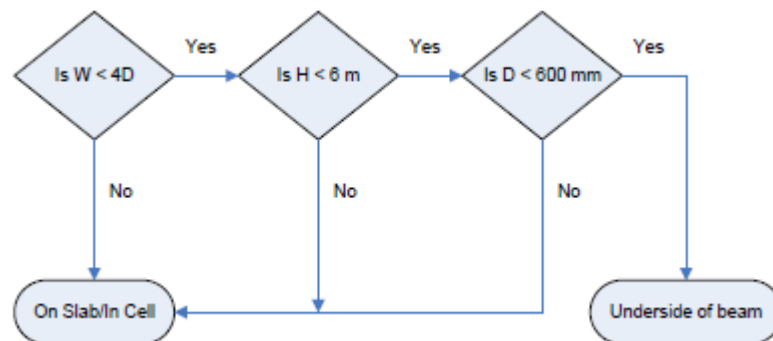
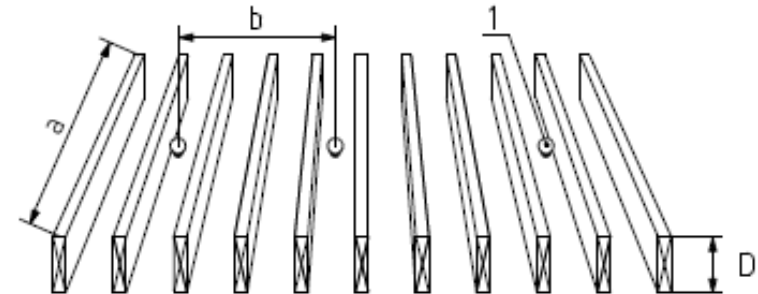


Figure 8 — Siting of Smoke (Heat) Detectors

Table 5 — Spacing of Detectors on Honeycomb/Coffered Ceilings

Height (H)	Max Distance between any point and the nearest Smoke (Heat) Detector	Spacing of Smoke (Heat) Detector
(m)	(m)	(m)
≤ 3,0	4,0 (3,0)	8,0 (6,0)
≤ 4,0	5,0 (4,0)	10,0(8,0)
≤ 5,0	5,5 (4,5)	11,0(9,0)
> 5,0	6,0 (5,0)	12,0(10,0)

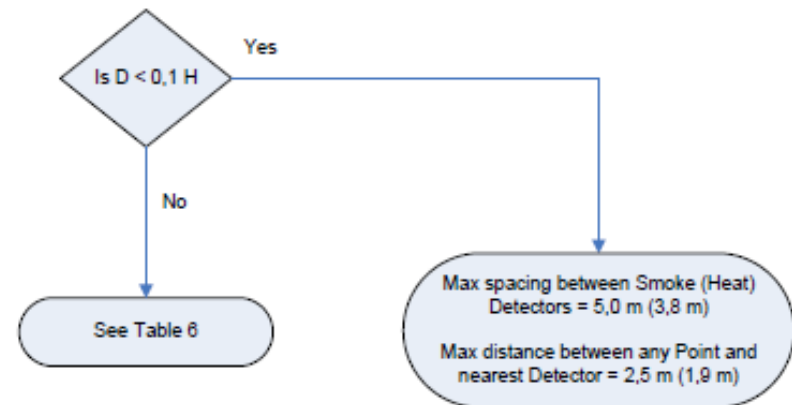
Closely Spaced Beams/Joists (Clause 6.10.5.8)



Key

- a Length
- b Maximum space between detectors
- D Depth of beam
- 1 Detector

(a) Typical closely spaced beams/joists



(b) Maximum detector spacing

Table 6 — Spacing of detectors on ceilings with closely spaced structural beams/joists

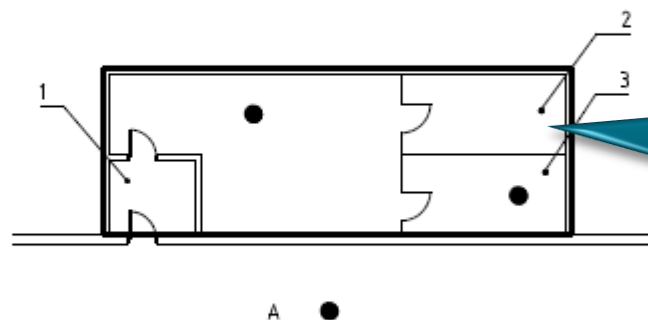
Height (H)	Max Distance between any point and the nearest Smoke (Heat) Detector	Max Distance between Smoke (Heat) Detectors
(m)	(m)	(m)
≤ 3,0	1,1 (0,75)	2,3 (1,5)
≤ 4,0	1,4 (1,0)	2,8 (2,0)
≤ 5,0	1,5 (1,1)	3,0 (2,3)
> 5,0	1,6 (1,2)	3,3 (2,5)

Figure 10 — Closely spaced beams/joists

Toilets

Opens onto
Escape Route.
Required L1 or
L3

Omitted by Risk
assessment
Provided less
than 2m²



Cubicle does not
reach to within
300mm of ceiling.

Key

- 1 Area < 2m²
- 2 Open cubicle
- 3 Sealed cubicle, L1 Category
- A Detector

Figure 11 — Toilets/WCs with multiple cubicles

● New Limit table

Building type	General characteristics	Special risk conditions						Max
		Environment	Activities/Processes	Degree of control over 3 rd parties	Strong electromagnetic fields	Occupancy	Malignant actions	
Small systems	Less than 40 detectors						< 2	2
General office	Little or no dust, fumes, insects and good management		X			X	1 per 150 detectors *	2
Apartments	Living	X				X	1 per 150 detectors *	2
Department stores, Retail stores, Food stores	Mainly used by general public. Some facilities provided for employees.		X	X	X	X	1 per 100 detectors *	4
Hotel	Mainly used by general public. 24 hour operation			X		X	1 per 100 detectors *	4
Large restaurant, Large pub, Large night club	Storage and preparation of food/drinks, serving areas, seating areas etc.	X	X	X	X	X	1 per 100 detectors *	4
Cultural activities	Museum, art gallery or other public building with normal occupancy.		X	X		X	1 per 150 detectors *	3
Entertainment hall	Large assembly and seating areas, with associated ticket offices, bars, circulation, etc.		X	X	X	X	1 per 150 detectors *	3
Leisure centres, Swimming pools, Sports halls.	Fumes possible from swimming pools. Used by general public.	X	X	X		X	1 per 150 detectors *	3
Car parks	Provision for car parking and access.	X		X	X	X	1 per 150 detectors *	3
University campus	Lecture theatres, offices, workshops, eating places, laboratories.		X	X		X	1 per 100 detectors *	4
Schools	Classrooms, sports halls, teaching facilities.			X		X	1 per 150 detectors *	3
Hospital, Nursing home, Long term residential	Large number of bedrooms and associated catering, dining facilities, lounges and circulation spaces.	X	X	X	X	X	1 per 150 detectors *	3
Laboratories, Pharmaceutical plants		X	X	X		X	1 per 150 detectors *	3
Airport terminals, Bus stations, Railway stations	Waiting areas, concourse areas, ticket offices	X		X	X	X	1 per 100 detectors *	4
Workshops	Light engineering works and associated staff facilities	X	X	X			1 per 100 detectors *	4
Storage facilities	Warehousing with associated office space and facilities for employees			X			1 per 150 detectors *	3
Industrial site	Generally would include shift work	X	X	X	X	X	1 per 75 detectors *	5
Severe environmental conditions	Fire engineering principles and considerations should be applied to find a stable yet safe system (e.g. "Filtration" of alarms – see 7.4.2 and 7.5.2 regarding in-depth special investigation.							

NOTE 1 The Service Organisation should investigate and advise the responsible person/User if the rate of false alarms in the previous 12 months has exceeded the guideline false alarm rate per annum.

NOTE 2 False alarms originating at manual call points are usually the result of human action and should be fully investigated.

* Denotes detection device i.e. aspirating, flame, optical beam etc.

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Cabling

Cable Type

- Clarification issued in 2010 incorporated into 2013 Revision:
- “Standard” fire alarm cable is the minimum requirement i.e. Cable that passed En50200 PH 30 test.
- Enhanced fire alarm cable i.e. Cable that passed **both** the EN 50200 PH120 and BS 8434-2 * tests. shall be employed in the following cases:
 - safe evacuation not within limits of fire authority.
 - Phased evacuation
 - cables routed through different areas that may remain occupied.
 - Buildings over 30m
 - Places of assembly subject to risk assessment
- *(I.S.3218:2013 clause 6.2.3)*

Cable Support

- Fire Resistive Cables : to maintain their integrity they should be supported in a way that has equal fire resistance to the cable.
- Best done by fixing directly to the building structure using manufacturers recommended supports. (e.g. copper P clips)
- Steel conduit or Tray also permitted provided steel cable ties are used.
- Suitable cable glands required unless using steel conduit.
- *(I.S.3218:2013 clause 6.14)*

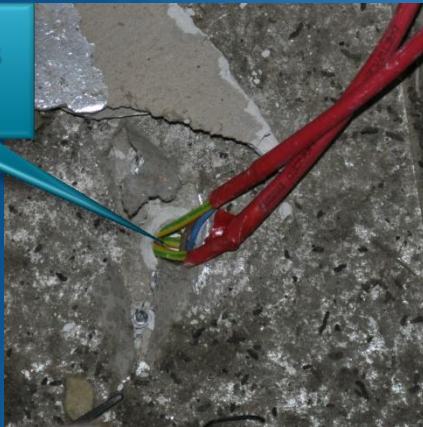


Plastic ties will melt quickly

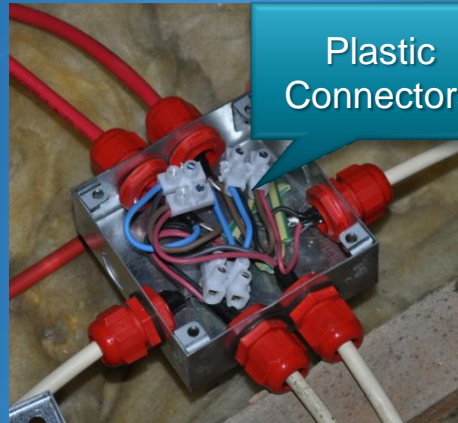
Example 4: Cable Support (Common Bad Practice)



Inner cores
exposed

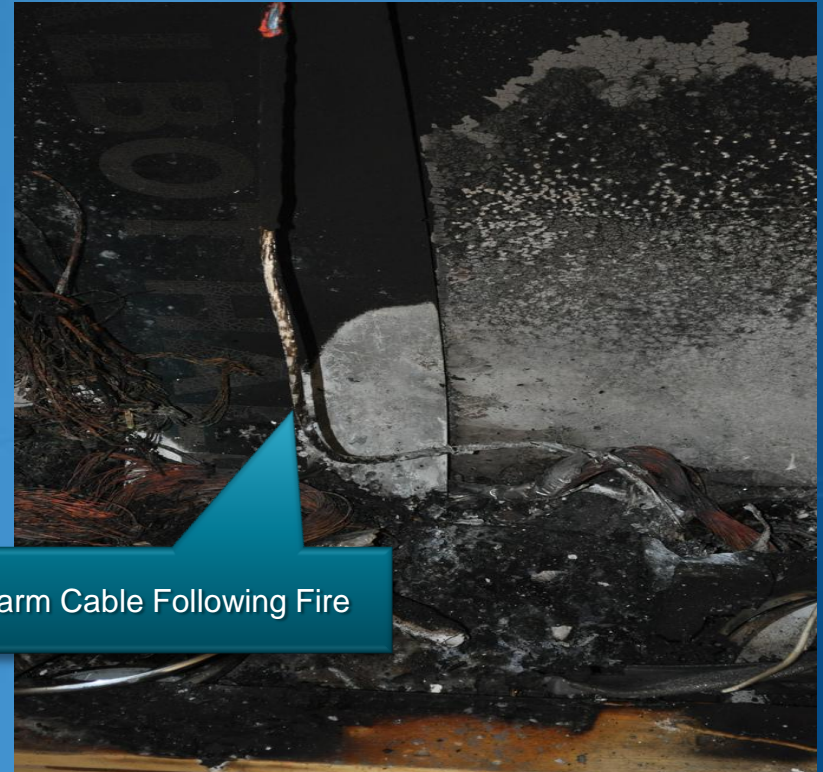


Plastic
Connectors

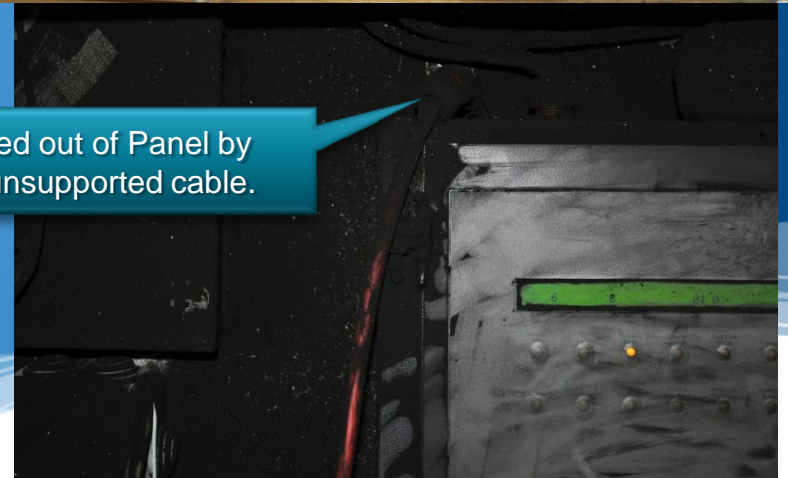


Examples : Cable Support (Common Bad Practice)

- When exposed to fire outer insulation becomes charred and brittle. If not supported can break exposing inner cores.
- Loose cables pose additional hazard for fire fighters.



Fire Alarm Cable Following Fire



Cable pulled out of Panel by weight of unsupported cable.

I.S.3218

Certification Overview

IS3218 Completion Certificates

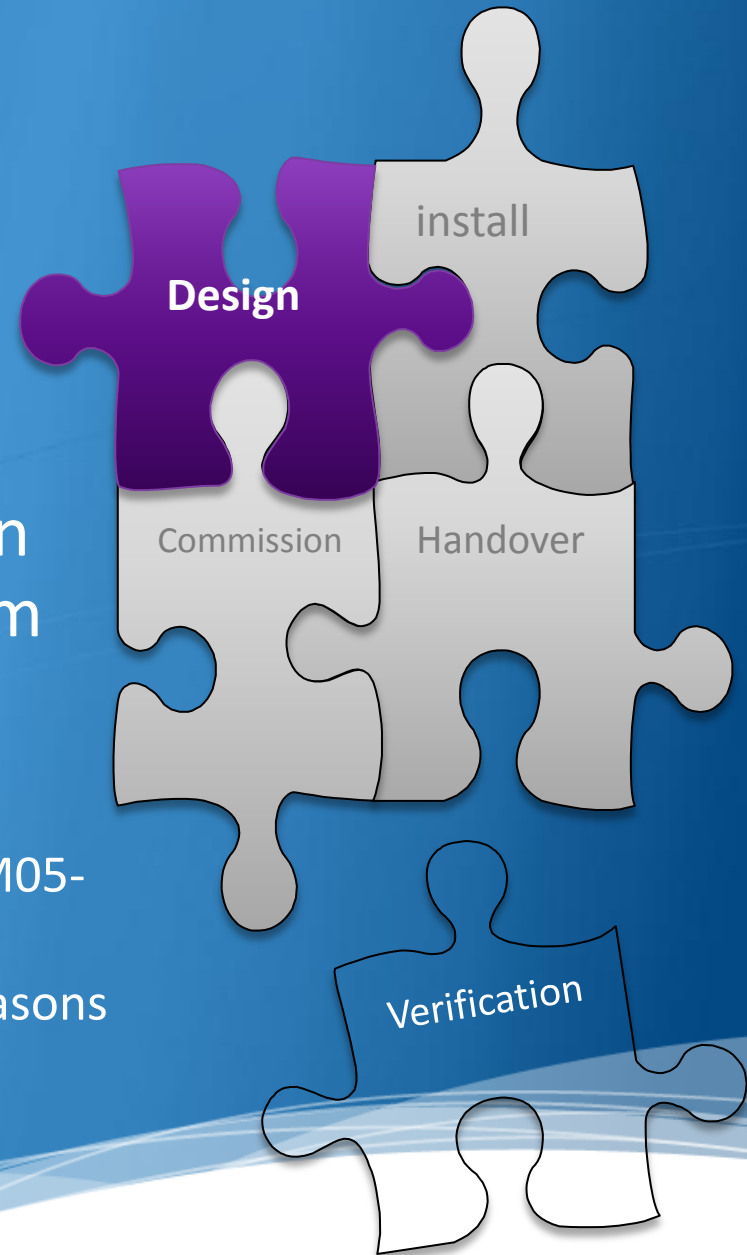
- 4 Certificates Signed By:
 1. Designer
 2. Installer
 3. Commissioner
 4. Client (Handover)
- Optional 5th Certificate for Verification.
- Required for New Systems and Modifications to existing, since 1989.
- Not controlled documents but should be issued on headed paper of company.



Design Certificate:

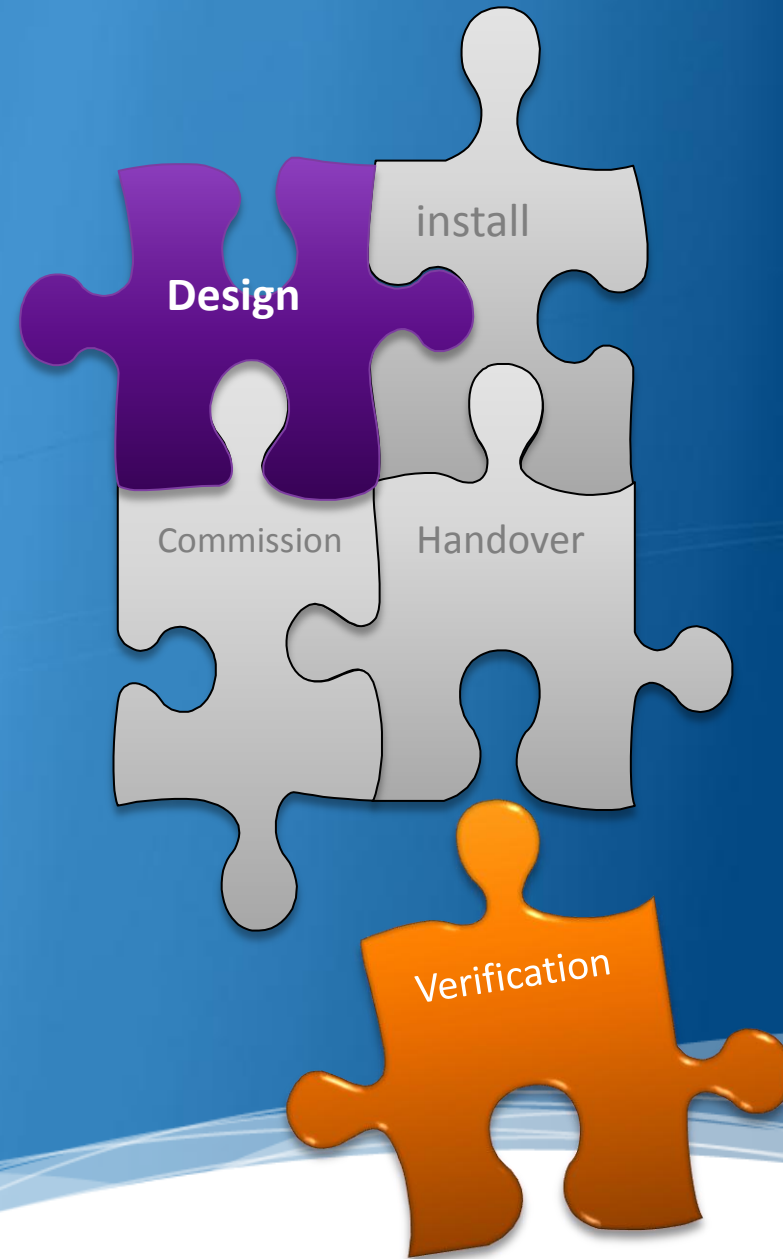
I.S.3218:2013 Annex C1

- Designer certifies:
 - System designed to comply with IS3218
 - Certifies his competence to do this
 - Modifications to existing system will not adversely impact on the original system.
- Certificate includes a list of design drawings for the compliant system
- Certificate records any variations from the standards for example:
 - Use reduced sound levels in hospitals (HTM05-03).
 - Engineered solutions for environmental reasons etc.



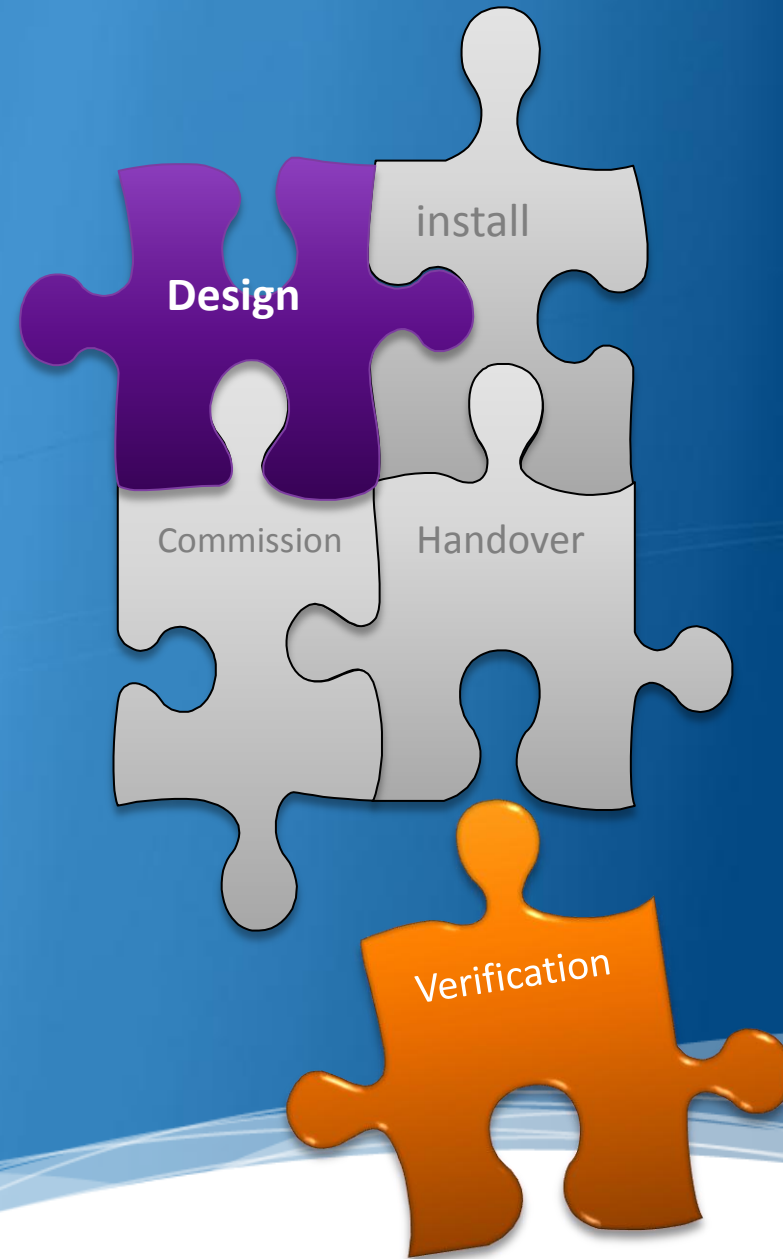
Design Certificate:

- Design certificate should be issued before installation and commissioning process. (IS3218:2013 Clause 5.4.3)
- Certificates of Installation and Commissioning should not be issued until after issue of the Certificate of Design.
- Where it cannot be adequately determined who shall sign the Certificate of Design, then it shall be the responsibility of the party who has determined the category of the system to sign the Certificate of Design. (IS3218:2013 Clause 5.4.3)

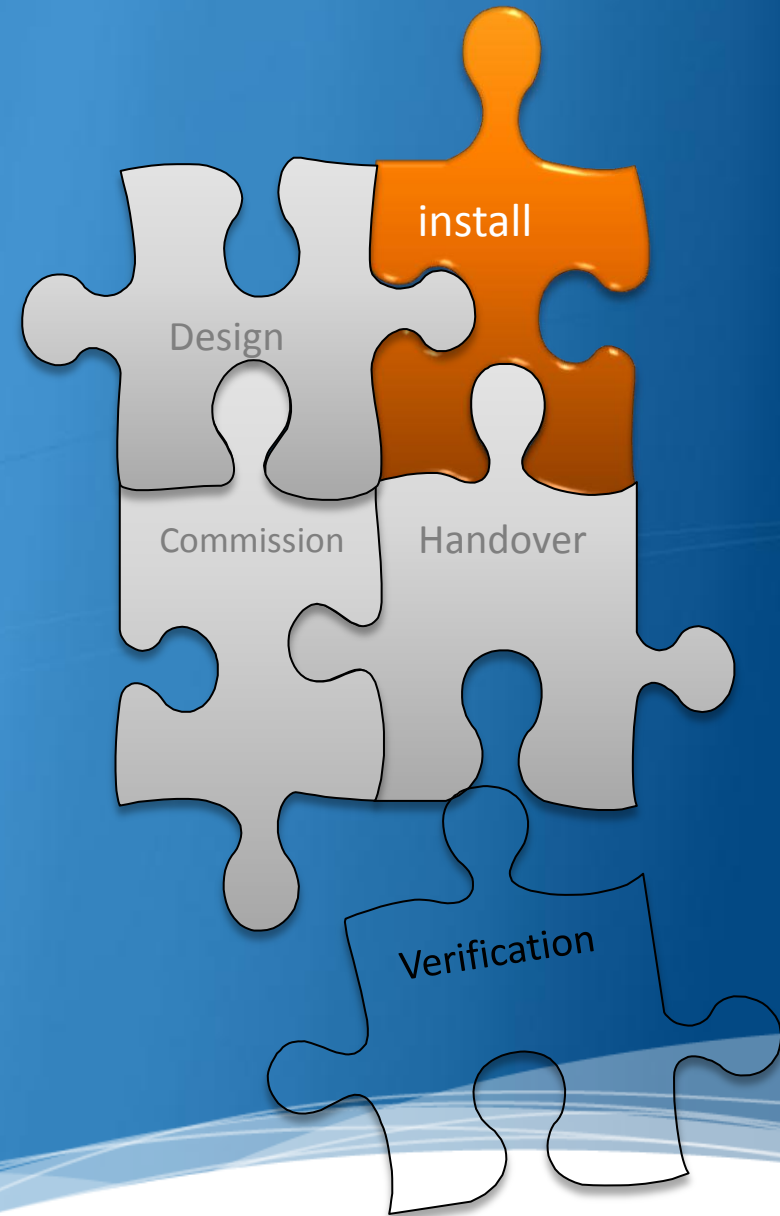


Design Certificate:

- “Ideally, a single party should maintain overall responsibility for the system design, development and implementation process”.
(IS3218:2013 Clause 6.2.9)
- Where it is not possible verification process (as set out in clause 8.5.11.2) should be considered.



- **Installer Certifies:**
 - system had been installed in accordance with design cert, specification and drawings,
 - installation complies with Clauses 6 and 8 of I.S. 3218:2013,
 - their competence to do this work ,
 - and any modifications to existing system will have no adverse effect on that existing system .
- Certificate includes a list of as installed drawings for the compliant system



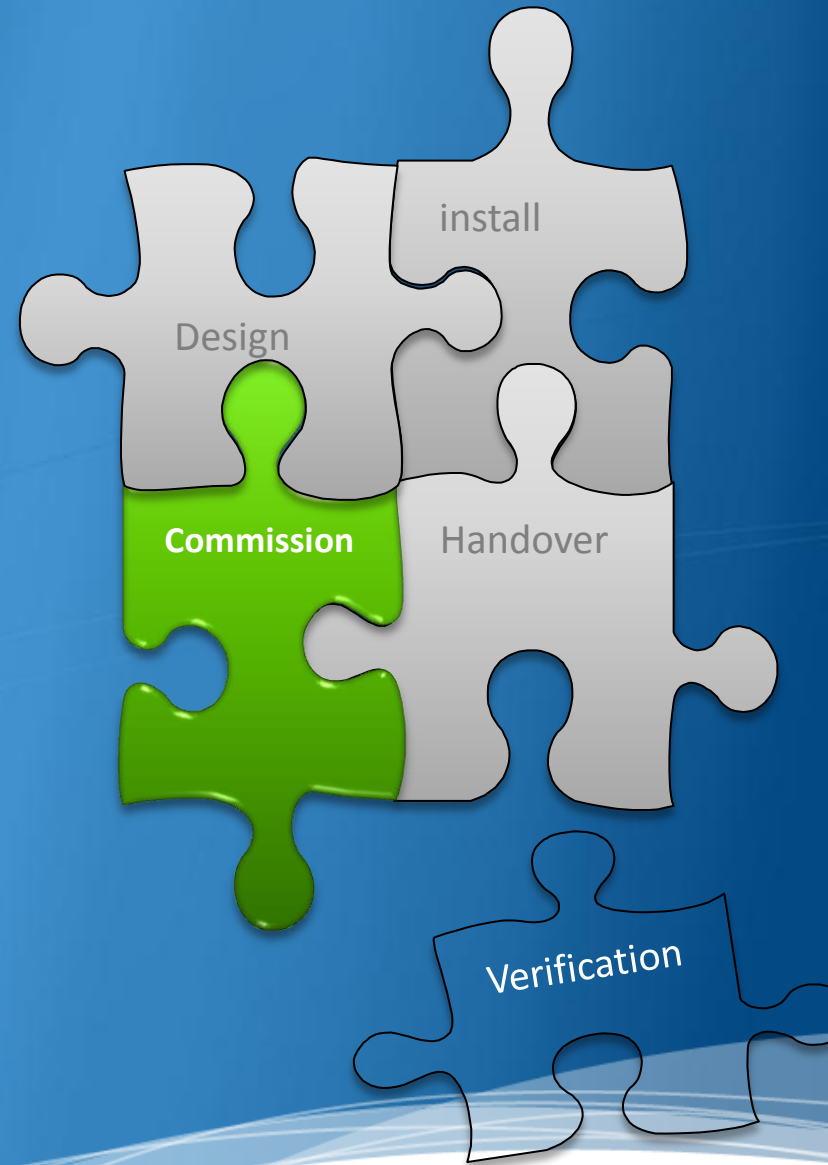
Certificate of Installation

- As well as certificate of Installation, the installer is also required to issue a separate certificate of compliance with Electro-Technical Council of Ireland Limited (ETCI) ET101 guidelines, for the wiring following testing of cabling. (Clause 8.5.3)
- ETCI cert. are controlled certificates purchased from RECI and ECSSA and may be subject to periodic inspections by them.



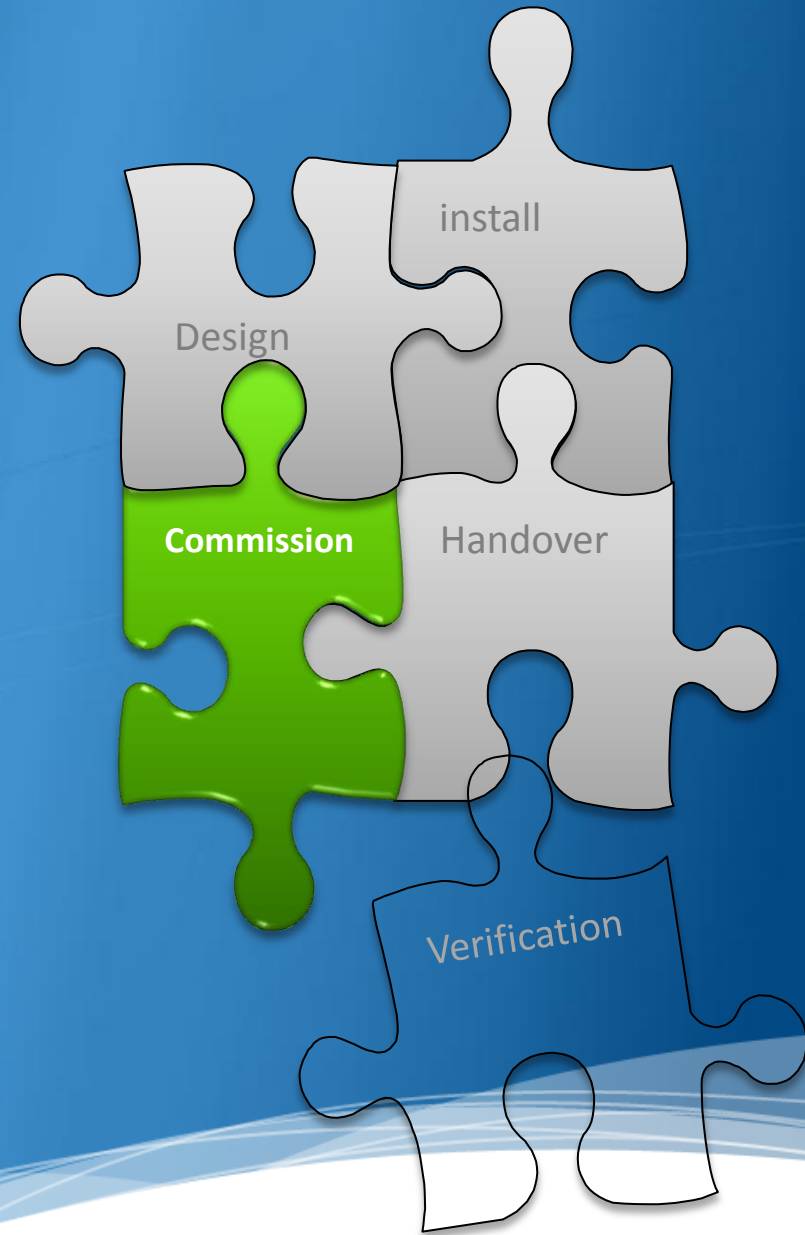
Certificate of Commissioning

- 3 Types of commissioning Certificate:
 - New system (Annex C3)
 - Modification (Annex C4)
 - Early Handover (Annex C5)
- Commissioner Certifies:
 - They have inspected, tested and commissioned the system in accordance with IS3218.
- Certificate should include a list of variations from both the standard and the Designer's specification (or a declaration that there is none)



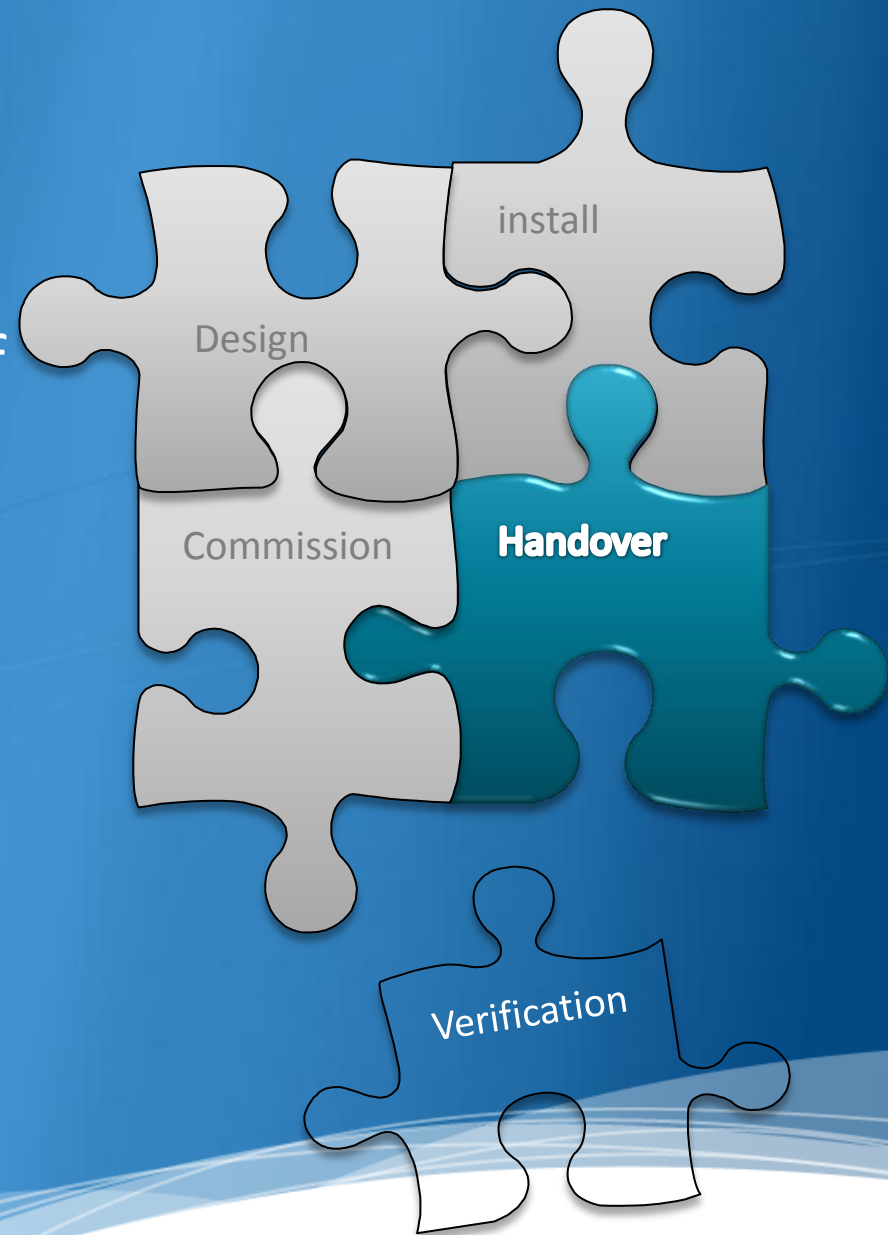
Certificate of Commissioning

- Commissioning Process includes (but not limited to):
 - 100% test of full system. (*Clause 8.5.8.4*)
 - Measure sound levels to confirm they are adequate (*Clause 8.5.8.4 d*)



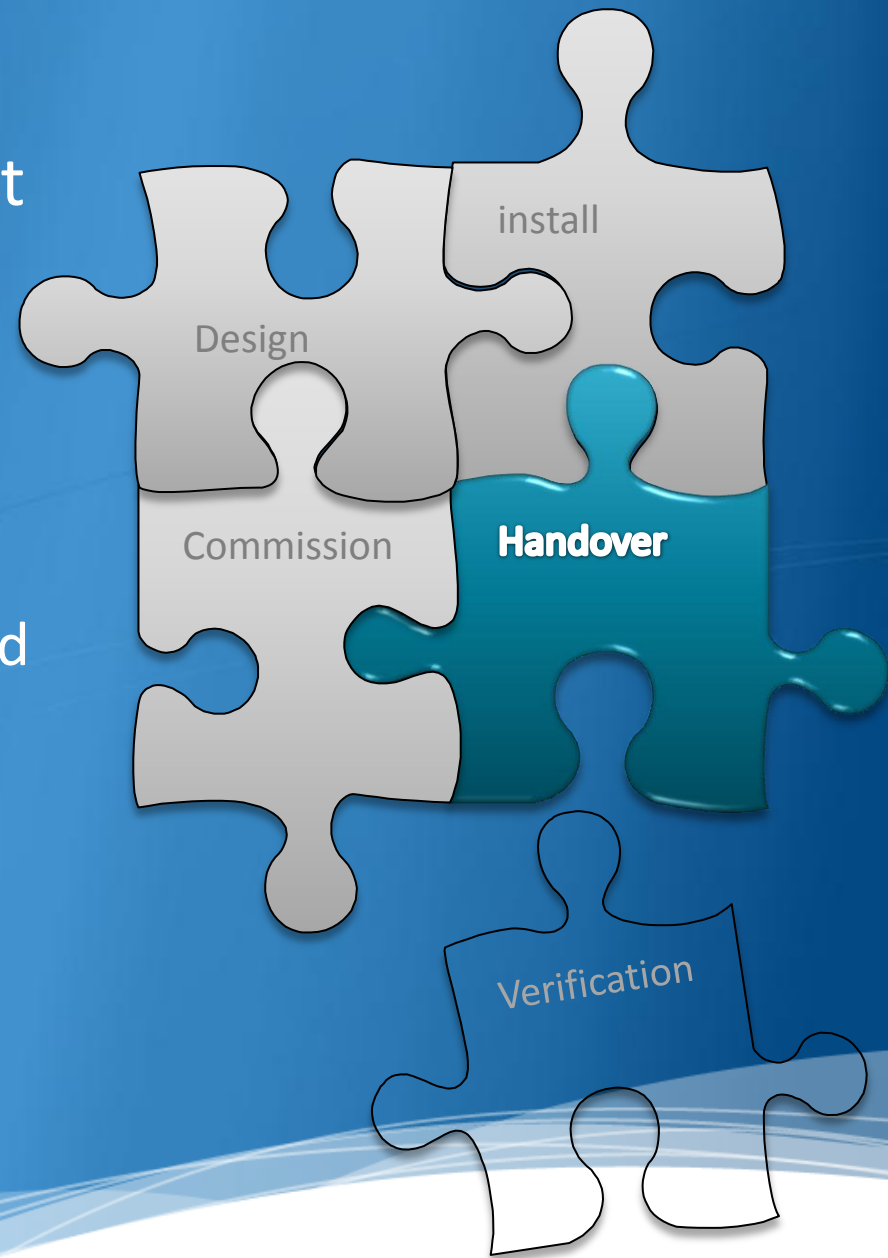
Certificate of Handover

- Issued to the User/Purchaser
- Signed by the “Responsible Person” for the acceptance of the fire alarm system.



Certificate of Handover C6

- Includes a checklist to say that they have:
 - Witnessed the system in operation, (including links to Alarm receiving centres if applicable)
 - Received Design, Installation and Commissioning Certificates.
 - Received all drawings
 - Received all Manuals
 - Sufficient people have been trained on the system.



Certificate of Verification

- Optional verification Certificate
- Test done by competent independent person
- *“The prime objective of the verification process is to independently assess, as far as is reasonably practicable, that the system as installed meets the standard set out in the Design, Installation, Commissioning and Handover certification”. (Clause 8.5.11.2)*



Certificates for Ongoing Maintenance

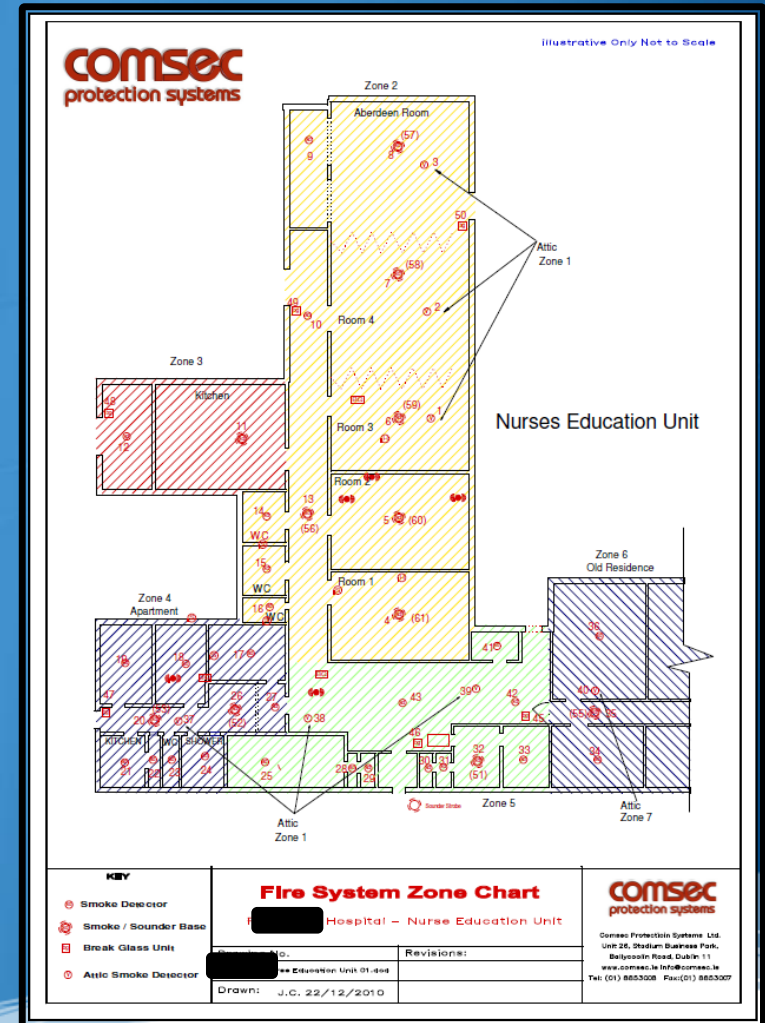
- Certificate of servicing/testing of fire alarm should be issued to users following:
 - Quarterly inspection and tests;
 - Annual inspection and tests;
 - (Since 2013 revision these certificates are to include dates of quarterly test)
 - Special servicing following a fire or false alarms.
- Display Certificate:
 - Displayed next to the control panel showing date of last service/next service.



Is it working?

Example 3: Zone Charts:

- Zone Chart:
- “On or adjoining to the CIE shall be a diagrammatic representation of the building (zone chart), showing at least the division into detection zones, and the Access and Egress points to the building”.
(Clause 6.12.8.2)



Example 3: Zone Charts:

- Required since 1989 standard.
- How important are they?
- How often do you see zone charts?
- Also required in UK under their BS5839 standard.
The following findings from a Scottish sheriff's report into Rosepark Care Home fire illustrate their importance*.

**Reference:*

*SHERIFFDOM OF SOUTH STRATHCLYDE DUMFRIES AND GALLOWAY
Fatal Accident Inquiry*

<http://www.scotcourts.gov.uk/opinions/2011FAI18.pdf>

Zone Charts: (Rosepark Care Home)

- Rosepark Care Home Fire
- 10 People killed, January 2004.
- Several factors found to have contributed to the deaths.
- One being the delay in locating source of fire:
 - Building split across two levels.
 - Main Entrance on upper level.
 - Fire Panel Labelled “Ground Floor and Lower Ground Floor.
 - Staff used “ground” and “First”
 - Staff Searching Lower Level while fire was on upper level



*Photo from BBC news website.
http://news.bbc.co.uk/2/hi/uk_news/scotland/4213535.stm*

Zone Charts: (Rosepark Care Home)

- One of the findings of the report
- “RP4.1: *It would have been a reasonable precaution to have provided clear information at the fire alarm panel (and, in particular, a diagrammatic representation) such as would enable staff to identify quickly and accurately the location of the detector which had been activated.*”*



Photo from BBC news website.
http://news.bbc.co.uk/2/hi/uk_news/scotland/4213535.stm

● *(SHERIFFDOM OF SOUTH STRATHCLYDE DUMFRIES AND GALLOWAY Fatal Accident Inquiry Report <http://www.scotcourts.gov.uk/opinions/2011FA118.pdf>)

3rd Party Certification

3rd Party Certification



● Recommended by IS3218:2009

- *“... Within two years of the publication of this Standard, Commissioning providers shall be able to formally demonstrate competence in commissioning procedures. **Commissioning providers who are third party certified and registered should be preferred (see 5.2.9 g).**” (IS3218 2009:Clause 7.5.8.1)*
- *“... Commissioning providers should be certified by a Certification Body that is accredited by a member of the European Cooperation of Accreditation (EA), (IS3218 2009:Clause 5.2.9 g)*

● Currently optional.

● Accreditation currently operated by two companies:

- National Standards Authority of Ireland (NSAI)
- Management Systems Certification Limited (MSC)

● Launched by NSAI in 2006 for “Commissioners” – initial launch stated Design and Install to follow but this hasn’t happened.

3rd Party Certification

- Industry Slow to Adopt Scheme

- First company registered in 2006 was Comsec Protection Systems Ltd.
- Only two companies registered in 2009 when new standard launched.
- Currently 8 companies listed on NSAI site as accredited.
- MSC (the only other company currently providing a scheme) have only 1 company registered (*as of Oct 2013*)
- FESA (A trade body for the industry) currently has 80 members listed on their Website. This is only a portion of those installing/commissioning fire systems.



3rd Party Certification

- Why has the industry not embraced the scheme?
 - Not compulsory?
 - Not specified by designers?
 - Not required by large user groups e.g. government bodies such as HSE?
 - Not insisted on by Fire officers?
 - Expensive?
- The recommendation for 3rd Part certification dropped in December 2013 revision replaced with “should be considered” in foreword.

Lessons to be learned from

Other Industries

Other industries -

● Intruder Alarm Systems.

- An Garda Síochána launched in the mid 90's a policy on Monitored intruder alarms to reduce number of nuisance calls.
- Will only respond to calls from companies/homes with URN.
- Must be installed by certified alarm installer.
- PSA act in 2004 made 3rd party certification compulsory.



Other industries

Registered Gas Installers:

- *Since 2006, the Commission for Energy Regulation (CER) has worked with the gas industry to put in place a new regulatory system to supervise the work of gas installers with respect to **safety**. This new statutory-based regulatory system has replaced the previous voluntary register operated by Bord Gáis*.*



Electrical Installations:

On 21st October 2008, the Commission for Energy Regulation (CER) appointed the Electrical Contractors Safety & Standards Association (Ireland) Ltd (ECSSAI) and the Register of Electrical Contractors of Ireland Ltd (RECI) as the new electrical safety supervisory bodies (SSBs). These SSBs are now responsible for regulating the activities of Registered Electrical Contractors (RECs).#



- Reference:
- *<http://www.rqii.ie/about-us/the-rqii-register.2713.html>
- #<http://www.safeelectric.ie/about.php>

The future

... will it improve?

2013 Revision of IS3218:

- NSAI Standards:

- 2013 Revision of standard dropped clear recommendation for 3rd Party certification and replaced it with following comment in foreword:

“... should be able to demonstrate their competence to the satisfaction of the Client/User, and are advised to consider third party Certification ... ”

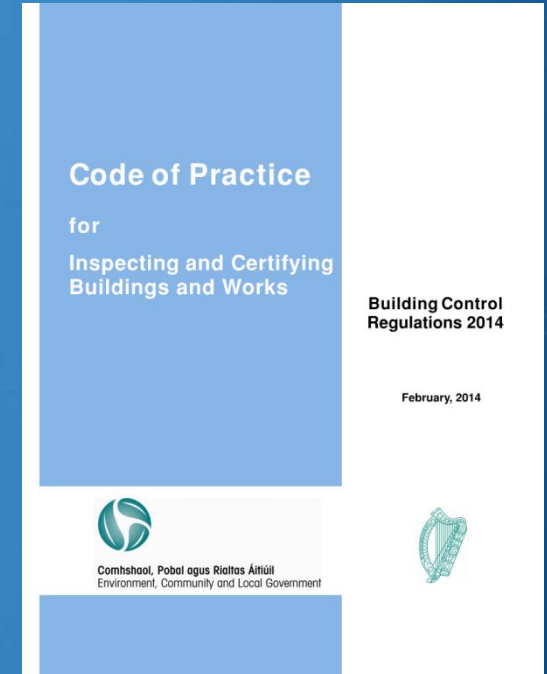
- Highlight legal obligations:

IS3218 2013 Clause 5 “The issuing of false or misleading information in this certificate is an offence under the Fire Services Act 1981/2003 as per Section 22 (6)(d).”

Fire Services Act 1981 22(6)(d) Any person who wilfully or recklessly gives to an authorised person or a fire authority information which is false or misleading in a material respect, shall be guilty of an offence.

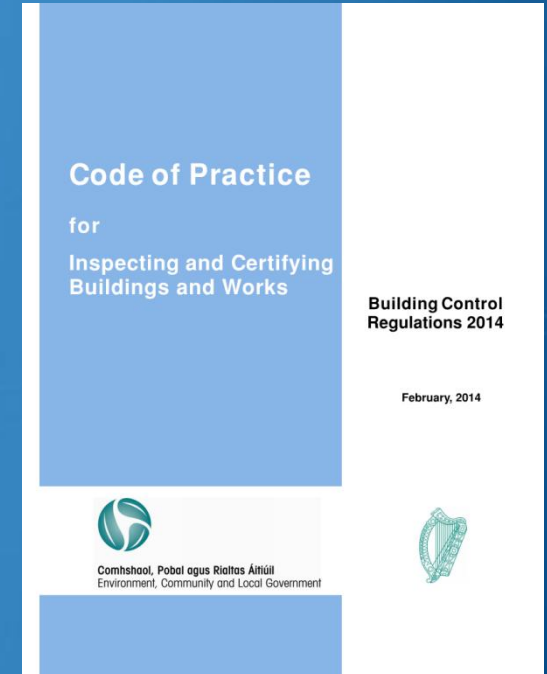
Building Control Regulations (Amendment) 2014

- Design Stage:
 - Requires a Lead Design Certifier to be appointed for entire building:
 - His certificates may be based on ancillary design certificates. e.g. fire alarm design cert / emergency lighting design cert,
- Construction Stage:
 - Requires site inspection plan.
- Completion Stage:
 - Requires Assigned Certifier to sign off on entire building.
 - His certificate may be based on ancillary completion certificates from fire safety engineer who will base opinion on Fire alarm certificates provided.



Building Control Regulations (Amendment) 2014

- Assigned Certifier must be competent and either a Chartered Engineer, Registered Architect or Registered Building Surveyor.
- Currently no prescribed qualifications for certifiers of sub-certificates.
- Still a form of self certification.



Summary - What should you be looking for as Insurers?

- When inspecting a building is there a Model cert and zone chart at the control panel?
- What is the System Category –
 - What's level is required?
 - Have you all 4 of the completion certificates (Design, Install, Commissioning and Handover) showing this?
- Is there maintenance records?
 - Log Books?
 - Quarterly and Annual Certificates?
 - Maintenance Contracts?
- Competencies?

Questions?

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