



Warwickshire Private
Landlords Forum 8th Nov 2011

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(Midlands & Norfolk)



Agenda

- Standards & Regulations
- Grades & Category of systems
- LACoRS Guidance
- Siting Alarms
- CO Alarms

BS 5839-6:2004 – What is it?

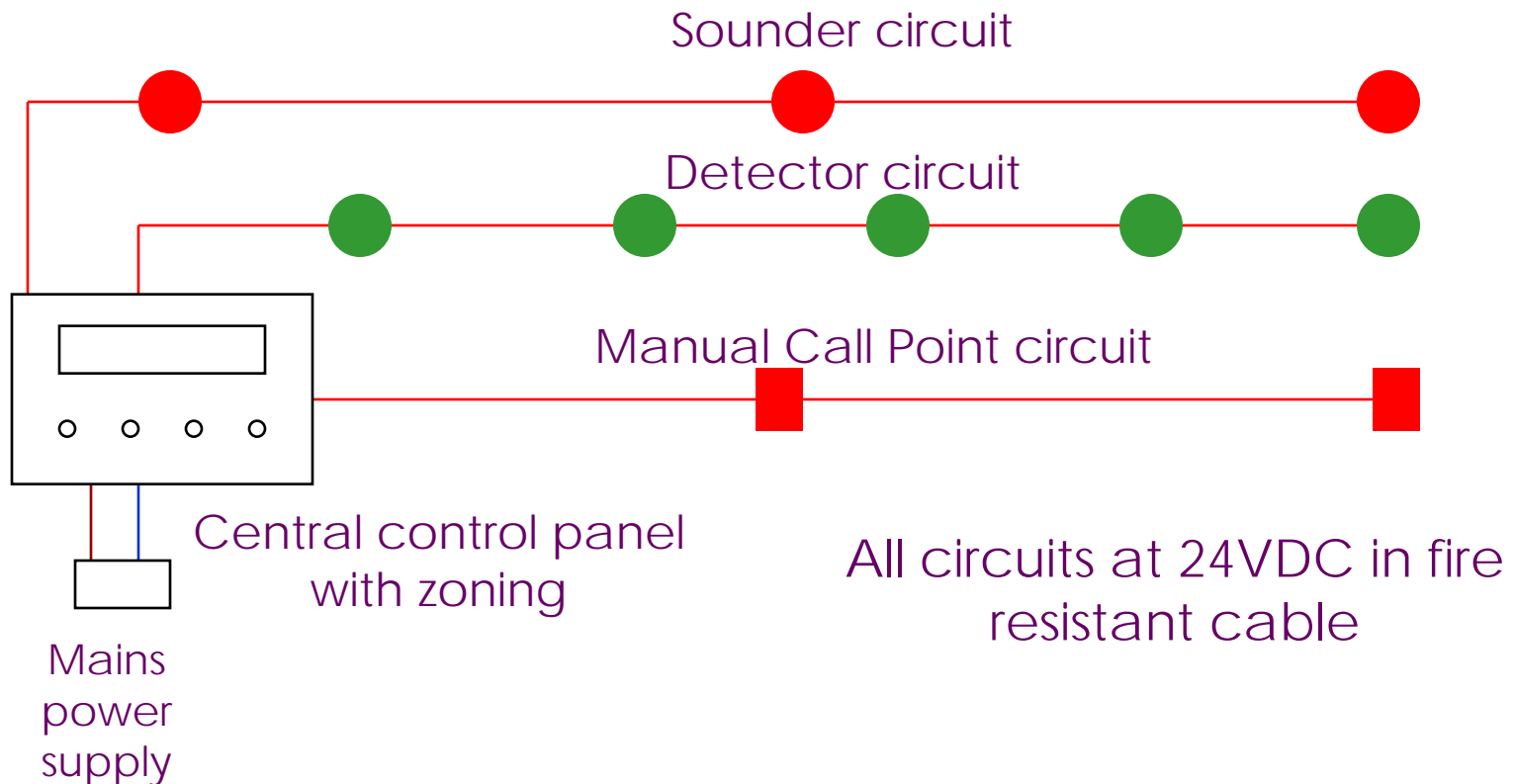
- Guidance for selection, siting & installation of fire alarm systems for dwellings
- It is considered to be ‘Best Practice’
- Building Regulations requirements based on this standard
- NICEIC recommends compliance with this standard for New-Build

Grades & Category

- Grade of system - refers to the type of system to be installed
- Category of system - refers to the extent of the system - the number of alarms installed

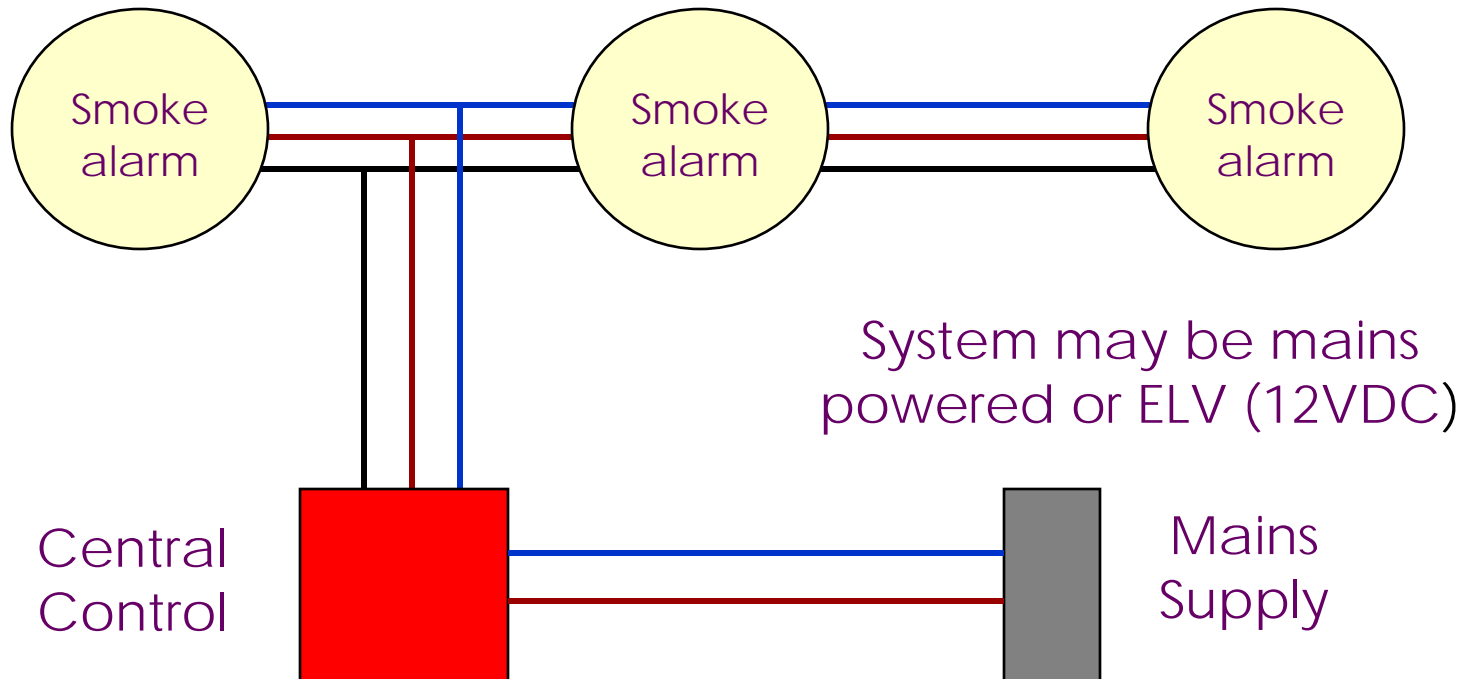
Grades of system

- Grade A and B – similar to commercial type fire alarm systems



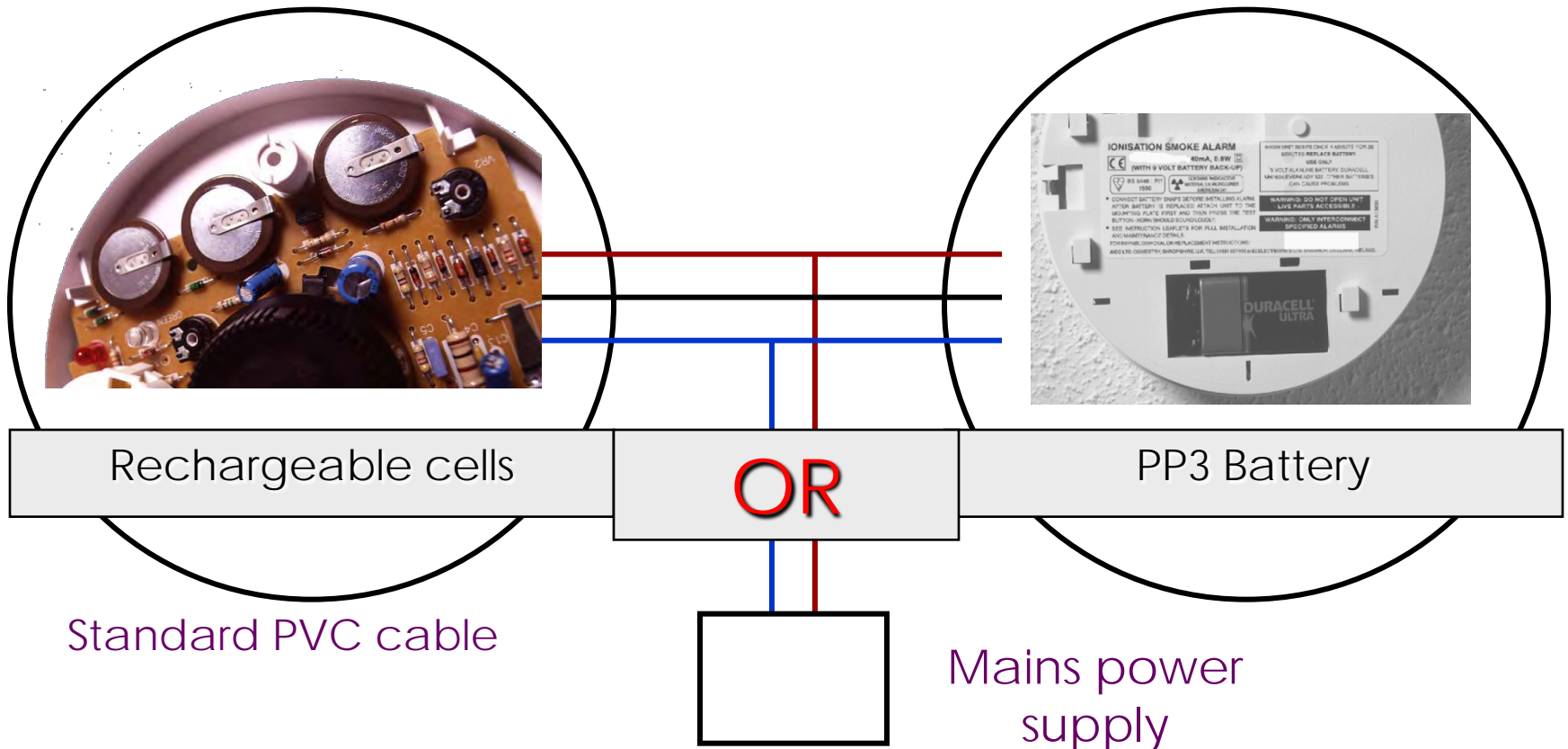
Grades of system

- **Grade C** - A system of fire detectors and alarm sounders (can be smoke alarms), mains powered with a standby supply and central control equipment.



Grades of system

- Grade D - mains smoke/heat alarms with an integral standby supply



Grades of system

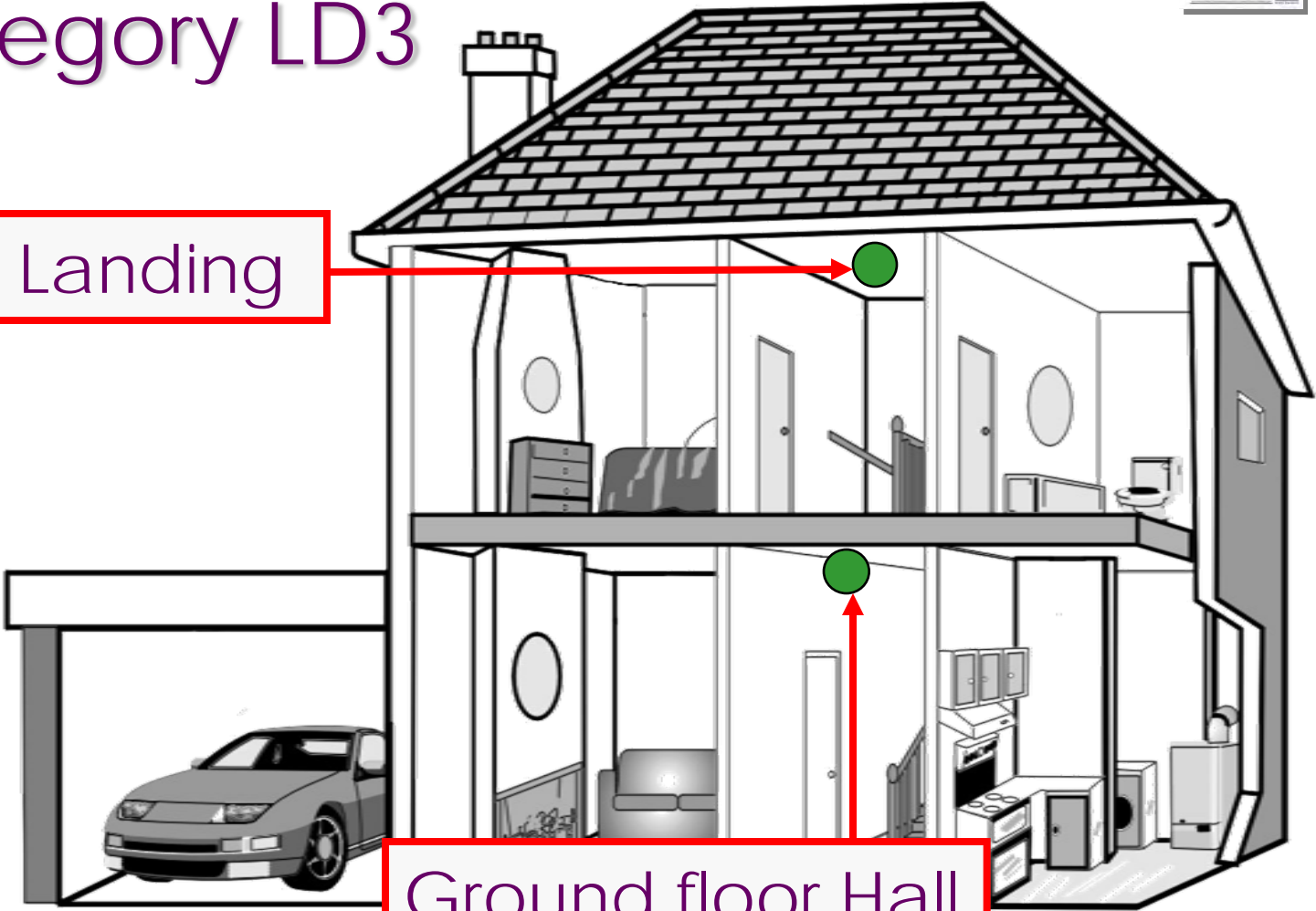
- Grade E - mains smoke/heat alarms with no standby supply
- Grade F - battery powered smoke/heat alarms

Categories of system

- LD3 – a system incorporating detectors in all circulation spaces that form part of the escape routes from the dwelling.
- Hallways, Landings
- Open Plan – Lounges, Sitting Room

Category LD3

1st floor Landing

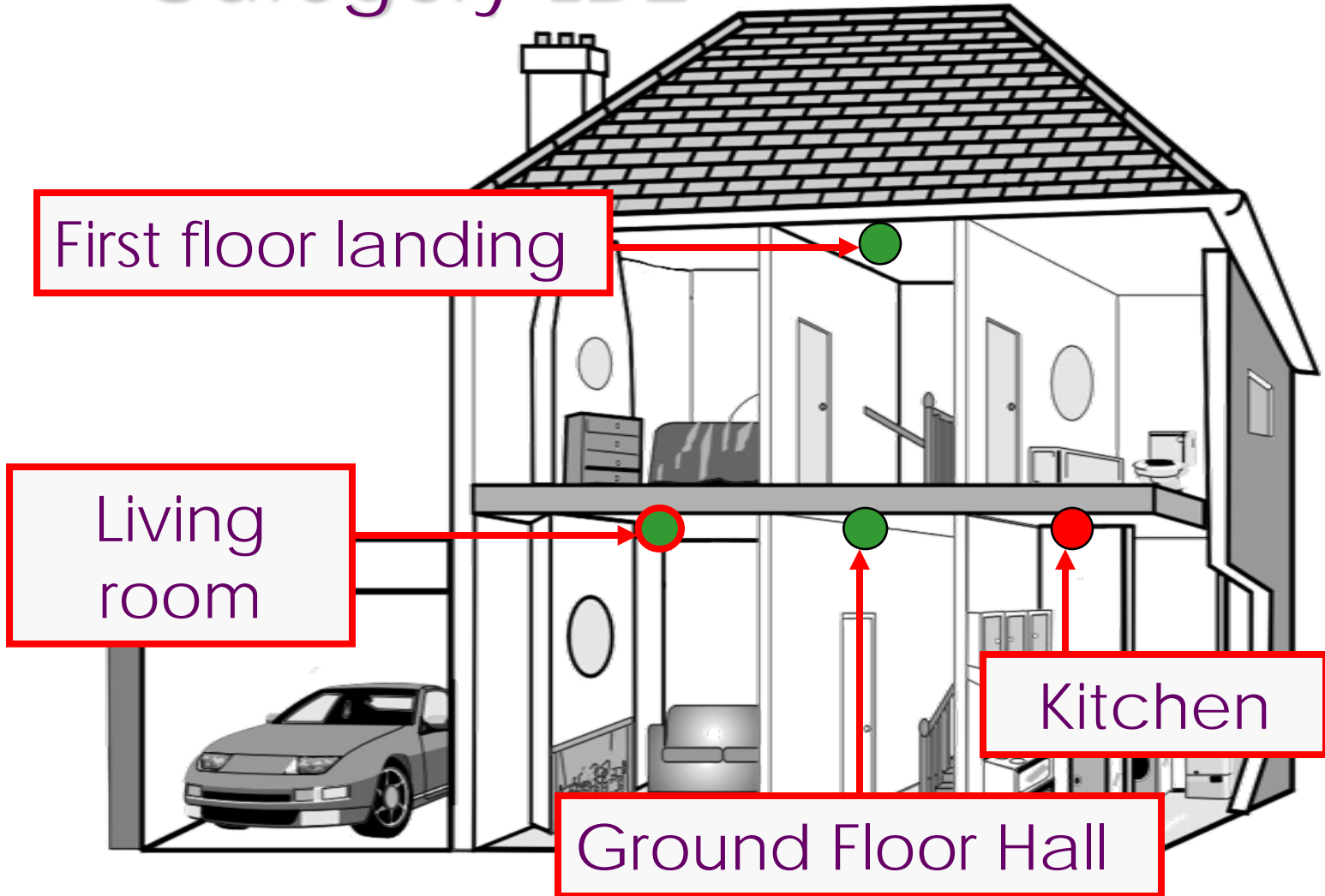


Ground floor Hall

Categories of system

- LD2 – a system incorporating detectors in all circulation spaces that form part of the escape routes from the dwelling, and in all rooms and areas that present a high fire risk to occupants.
- Same as LD3 plus Living Room & Kitchen (+ Bedrooms in HMO's)

Category LD2



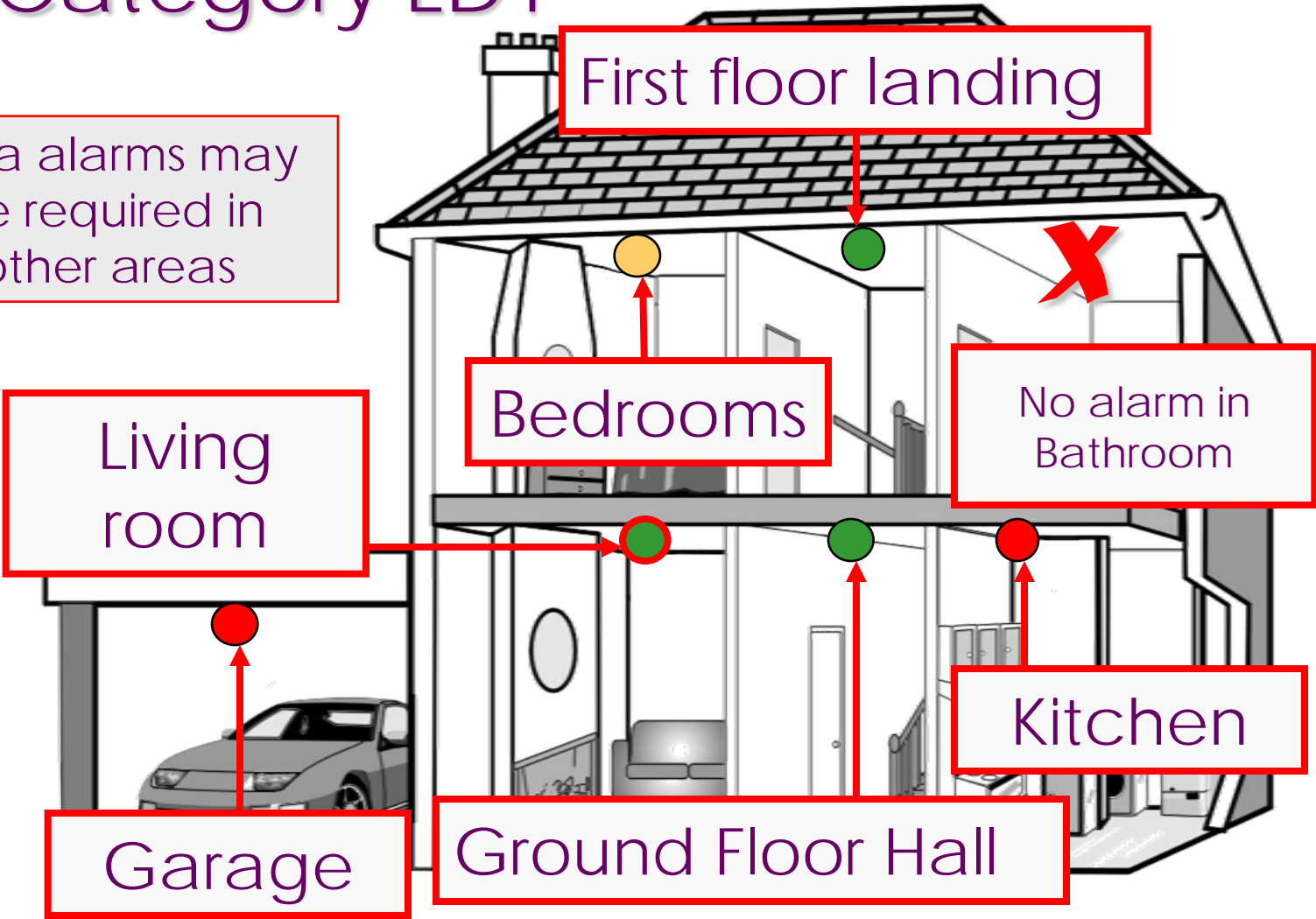


Categories of system

- LD1 – a system installed throughout the dwelling, incorporating detectors in all circulation spaces that form part of the escape routes from the dwelling, and in all rooms and areas in which fire may start, other than toilets, bathrooms and shower rooms.
- Alarms everywhere!

Category LD1

Extra alarms may be required in other areas



Relative frequency of fires

	Fires	Deaths
Kitchen	54%	15%
Bedroom	12%	30%
Living room/Dining room	12%	40%
Access Area	6%	
Refuse Area	3%	
Laundry	1%	
Roof space	1%	

Fire Safety Guidance

- All existing properties are covered:
- Single households
- Shared houses
- Bedsit HMOs
- Purpose-built flats & buildings converted into self-contained flats to a standard not in compliance with Building Regulations 1991

Fire Safety Guidance

- All tenures are covered:
- Owner-occupied
- Private Rented
- Social Housing
- Does not apply if the property was built or converted in compliance with Building Regulations 1991 or later

Fire Alarm Systems

“There is no risk low enough to negate the need for some form of system”

- Single household up to 4 storey –
Grade D, LD3
- Shared House HMO up to 4 storey -
Grade D, LD3 + Kitchen, Lounge, cellar
- Shared House HMO 5 –6 storey -
Grade A, LD2 + all risk rooms

Fire Alarm Systems

- Bedsit HMO up to 2 storey – mixed system
Grade D, LD2 in common areas + heat alarm
in bedsits.
Grade D alarm in each bedsit
- Bedsit HMO 3 to 6 storey – mixed system
Grade A, LD2 in common areas + heat alarm
in bedsits.
Grade D alarm in each bedsit

Fire Alarm Systems

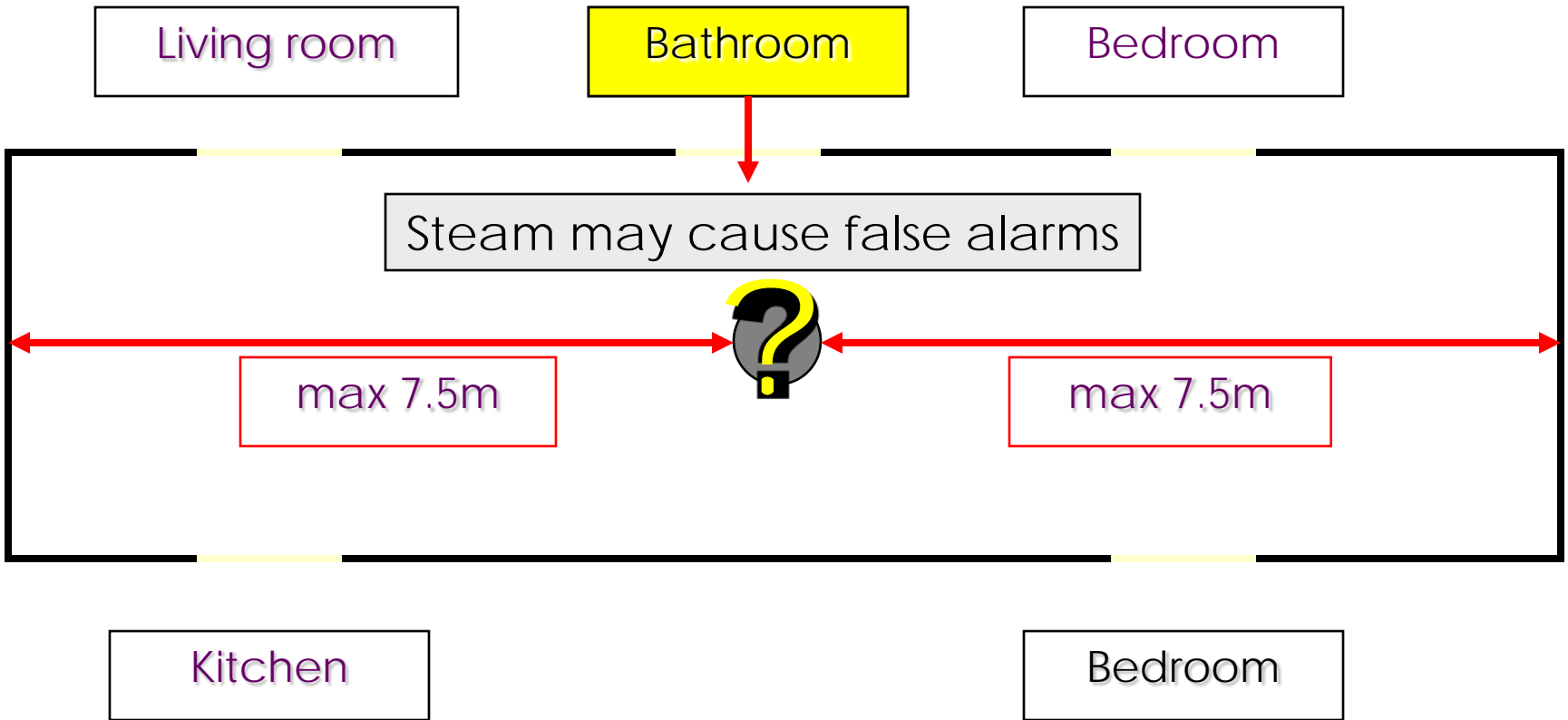
- 2 storey house converted to flats, not to Building Regs – mixed system
Grade D, LD2 in common areas + heat alarm in entrance to flat
Grade D, LD3 in each flat
- 3 - 6 storey house converted to flats, not to Building Regs – mixed system
Grade A, LD2 in common areas + heat alarm in entrance to flat.
Grade D, LD3 in each flat



**Incorrect siting
= Slow response**

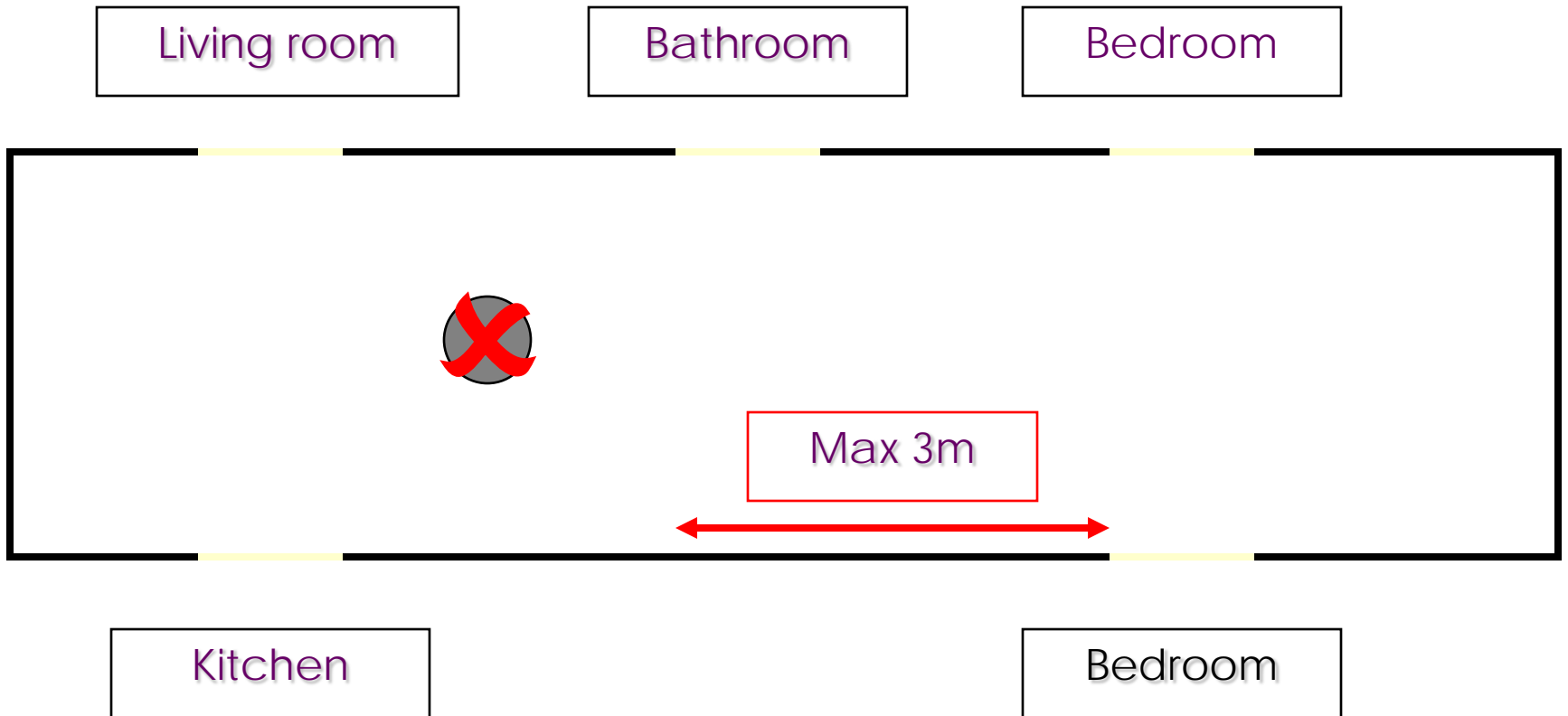


Siting - Single storey



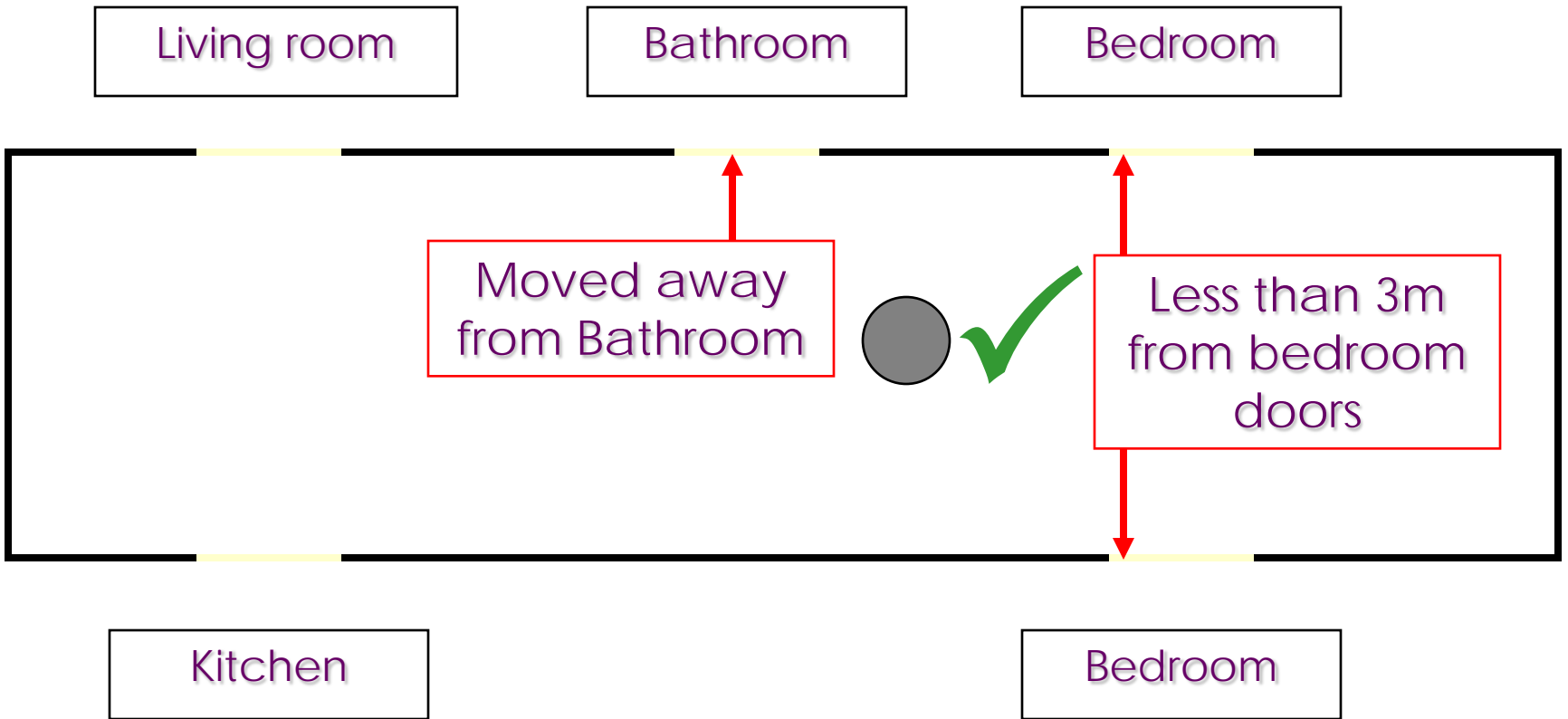


Siting - Single storey



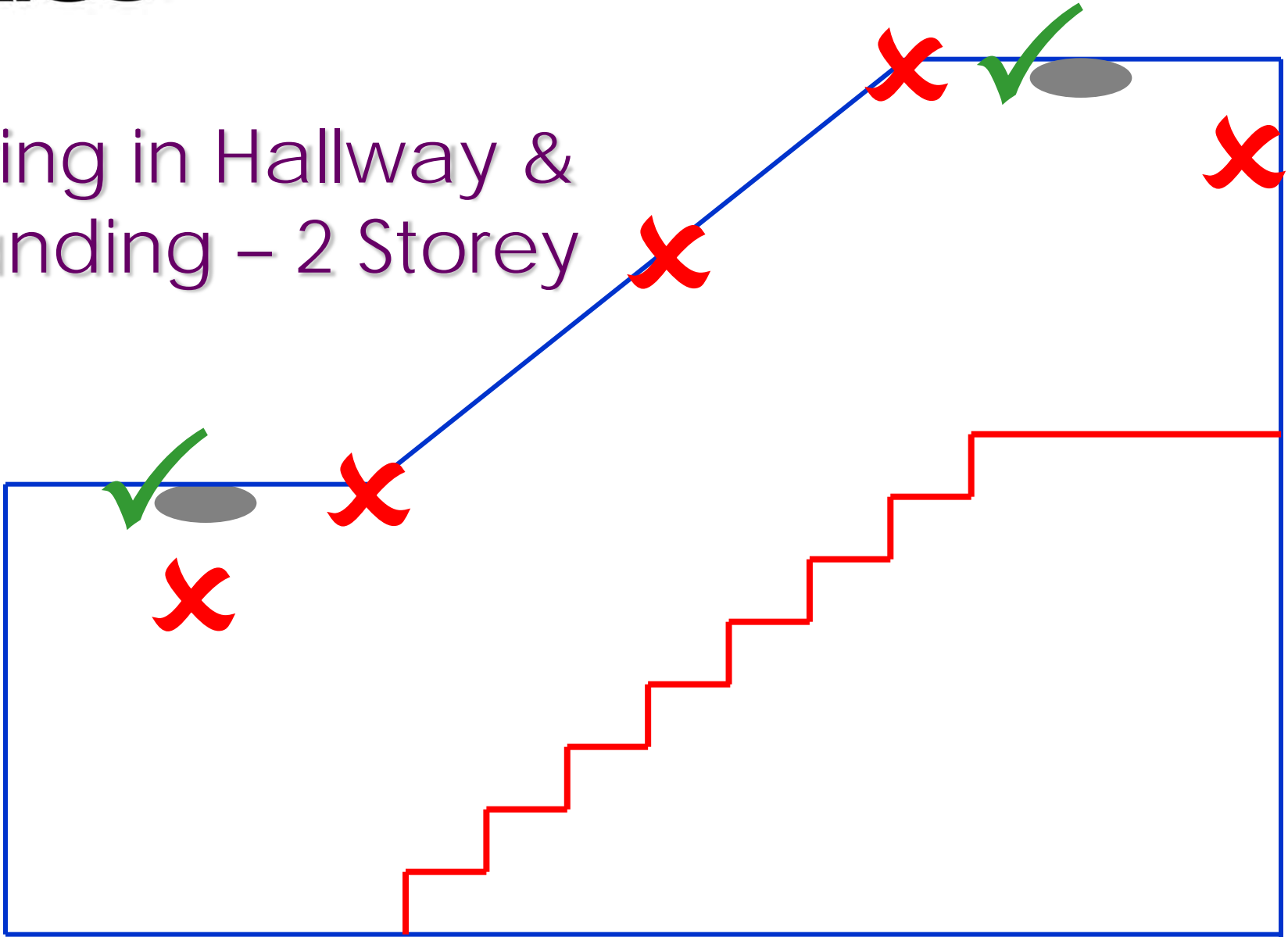


Siting - Single storey





Siting in Hallway & Landing – 2 Storey



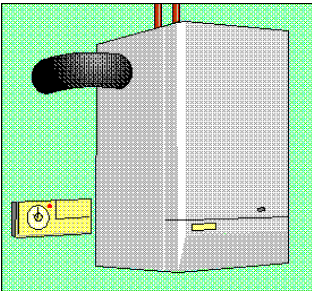


Alarm Siting & Location - Summary

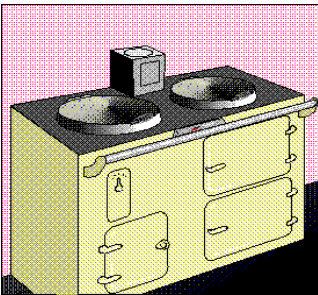
- Ceiling mount in central position
- No recommendations for wall mounting
- Consider false alarm problems e.g too close to bathroom or kitchen
- Max 7.5m from any point in the area
- Site alarm between risk areas (kitchen & lounge) and bedrooms
- Site at least 300mm from walls and obstructions e.g light pendant - where 300mm cannot be achieved site closer to the pendant
- Max 3m from all bedroom doors
- Take account of beams, where necessary



Carbon Monoxide (CO)



Gas
Appliances

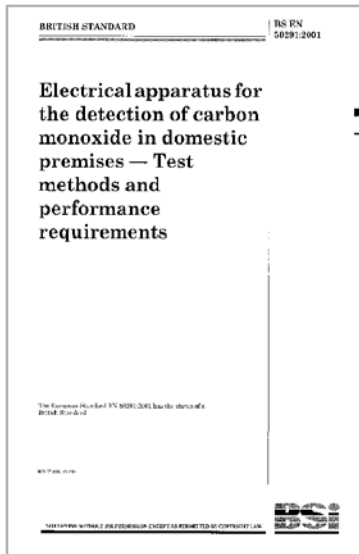


Oil burners



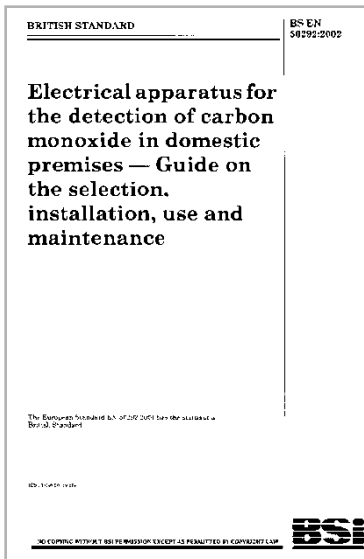
Solid fuel burners

The Risk
Areas



BS EN 50291: 2001

The standard for CO Alarms
Insist on Kitemarked alarms



BS EN 50292: 2002

The Code of Practice for
siting and installation



Recommendations for location

First priority for location:

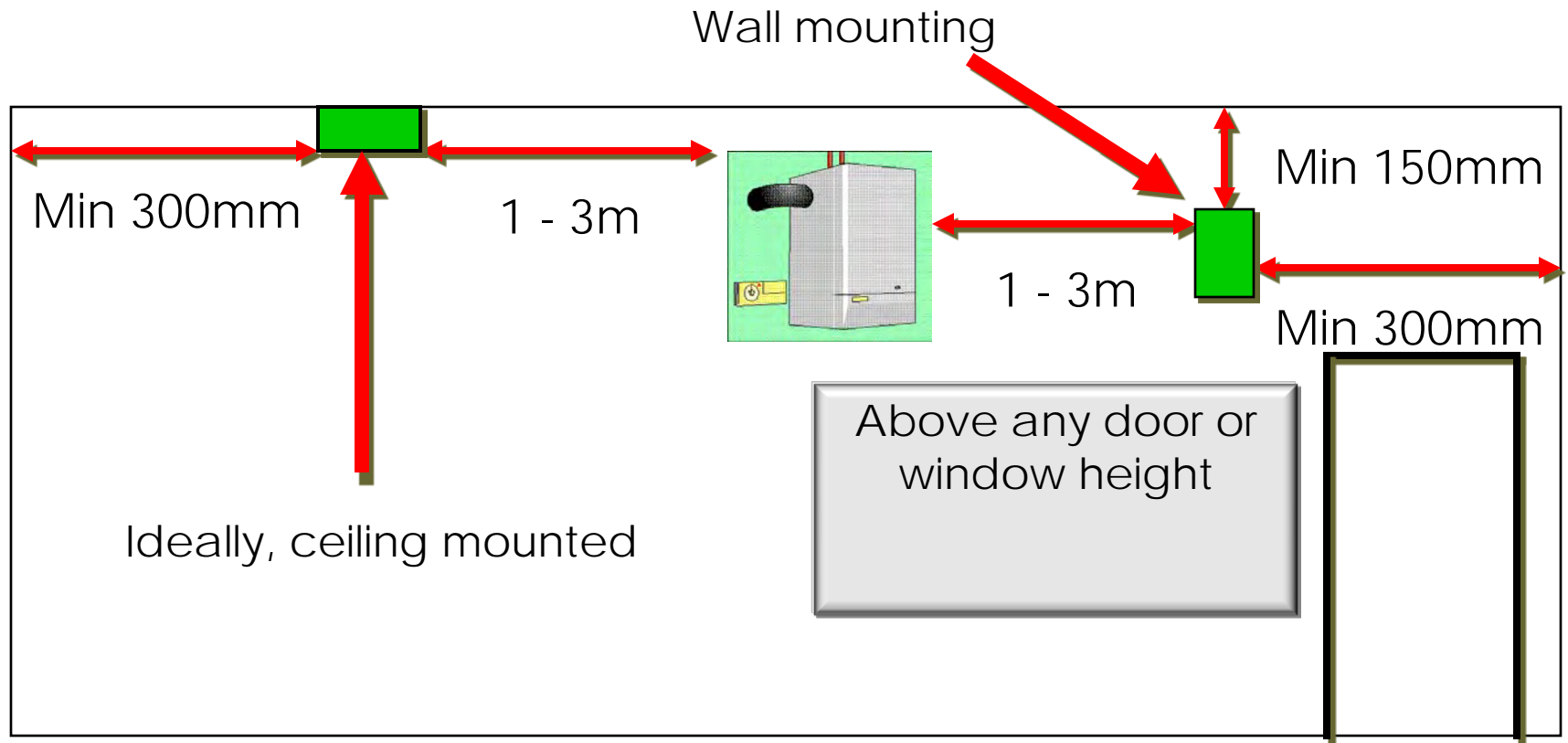
Detector in every room with an appliance.

Limited funds – priorities:

1. Flue-less or open-flued appliance.
2. Where occupants spend most time.
3. Where appliance is most used.



Recommendations for siting

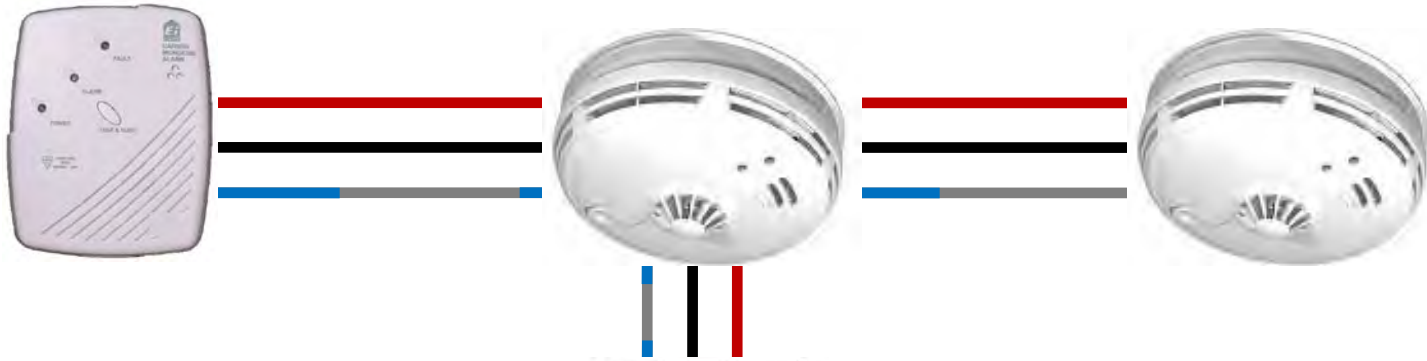




Interconnecting CO Alarms



Interconnecting CO and smoke Alarms



Only with a switch



Choosing a CO alarm

Battery powered alarm



Mains powered alarm



Mains with Back up





For more information:-

- Refer to – The logo for LACORS, consisting of the word 'LACORS' in white, uppercase, bold letters on a teal rectangular background. Below the teal box, the tagline 'promoting quality regulation' is written in a smaller, white, lowercase sans-serif font.
LACORS
promoting quality regulation
- Our website – aico.co.uk
- Contact me – John Andrews