

Fire Detection & Alarm in Care Homes

- A review of issues and solutions based on case histories and experience.
- Presented by Dave Bartlett
Chairman FIA Installers &
Maintainers Commercial Section and
FIA Board Member

The Responsible Person

- Who is it?
- Do they know their responsibilities?
- Do they have a recent relevant risk assessment?
- Do the staff know what their responsibilities are?

Regulatory Reform (Fire Safety) Order

- Introduced 2005
- Effective 1st October 2006.
- CLG website for the guidance document “Fire Safety Risk Assessment – Residential Care Premises”

Risk Assessment

- Critical points to consider:
 - Evacuation
 - Design
 - Sound Levels
 - DDA compliance
 - Unwanted (False) Alarms
 - Maintenance

Evacuation

- What are the implications if you allow evacuation?
- Do you need to evacuate?
- Will residents be evacuated by staff or leave themselves?

Evacuation

- Most evacuations are unnecessary.
- If an alarm goes off the source of the alarm should always be checked by staff before any evacuation is commenced.
- In many cases it will be an unwanted alarm.

Evacuation

- Competent Fire Detection Maintenance companies can easily help to reduce unwanted alarms/evacuations, i.e.
 - add “double knock” to the detection.
 - introduce a “check” delay
 - introduce an alert signal rather than a full evacuate.

Sound Levels

- BS5839 Pt 1 recommends a headline sound level of 65 dB minimum or 5dB above background noise.
- Most fire alarm sounders generate at least 90dB at 1 metre unless muted.
- HTM05-03 suggests 45dB to 55dB in patient areas.

Sound Levels

- It all depends on your Risk Assessment.
- Sound Levels can be what you want as long as the Risk Assessment explains why and the system certificate shows it as variation to BS5839.
- If staff will evacuate then very minimum sound levels may be OK except to alert staff.

Unwanted Alarms

- Smoke detectors detect particles as well as smoke.
- High frequency inverters and similar can cause interference.
- All unwanted alarms can, in theory, be avoided.

The Unwanted Alarm checklist.

- Burning food.
- Builders work.
- Candles
- Smoking
- High Frequency Interference
- Hairspray
- Shower steam
- Bad management
- Thrips
- Poor maintenance
- Dirty detectors
- Deliberate activation
- Water leakage
- Cabling faults
- Faulty control panel
- External pollution
- Premature remote signalling

Detection in apartments

- If you have detection in apartments unwanted alarms are more likely.
- You could initially signal staff where possible before initiating a full alarm
- You could have a local reset in the apartment if the occupants are independent

What problems do you have
that we haven't looked at?

Back to evacuation

- Have a policy to allow a check before evacuation – it may be an unwanted alarm.
- If there is no fire do not evacuate (my recommendation but your responsibility!)
- Remember that what you do is your choice based on your management plan.

Fire Brigade

- The Fire Service no longer issue fire certificates and all such certificates are now invalid.
- Due to the risk to life in a care home it is recommended that they are involved in completing a risk strategy, i.e. do they want residents to stay in their rooms or leave the building?

Care with mental illness

Some additional precautions may be useful:

- physical protection of call points
- key operated call points
- cages over low level detectors
- control panels out of patient circulation areas.

Some final thoughts

- Maintenance needs to use a competent company – cheap often means low competence.
- A competent maintenance company will provide specialist advice.
- On addressable systems make sure that address labels are correct and clear or the wrong decisions will be made.