Fire Safety in high rise residential buildings

Role of the Fire Service

Andy Cloke
Station Manager Technical Fire Safety Central support
South Yorkshire Fire and Rescue
Lakanal House, Camberwell, 3rd July 2009

- 6 fatalities
- 15 residents injured
- 1 fire fighter injured
- 40 residents assisted to safety by Fire and Rescue Service
- 90 families had to vacate home as a result
Shirley Towers, Southampton 6th April 2010

- 2 Fire fighter fatalities
- 2 Fire fighter injuries
- Over 100 persons evacuated
- Over 20 fire appliances
Residential property is covered by two pieces of legislation

**Primary legislation is the Housing Act 2004**
- Housing Authorities responsible to ensure whole building is checked through a risk assessment to determine H&S issues.
- Local Authority housing are enforcers.

**Regulatory Reform (Fire Safety) Order 2005**
- Requires Responsible person to complete a Fire Risk Assessment of Common Areas of the building and record and act on the findings
- Fire Service is the enforcer.
Regulatory Reform (Fire Safety) Order 2005

• In Residential types it applies to:
  – The common parts of HMOs (but not Shared Houses)
  – The common parts of buildings containing flats and maisonettes.
  – The common parts of Sheltered Accommodation
  – Does not apply to individual flats, maisonettes, bedsits or residential units
PART 2

FIRE SAFETY DUTIES

Duty to take general fire precautions

8.—(1) The responsible person must—

(a) take such general fire precautions as will ensure, so far as is reasonably practicable, the safety of any of his employees; and

(b) in relation to relevant persons who are not his employees, take such general fire precautions as may reasonably be required in the circumstances of the case to ensure that the premises are safe.
Fire Safety in high rise residential buildings

- Fire door
- Fire-resisting construction
- SC Self-closing fire door
- OV Openable vent at high level for fire service use (1.0m² minimum free area)
- D Dwelling

Maximum travel distance 4.5m

Intermediate floor
# CFOA Joint Enforcement Protocol

<table>
<thead>
<tr>
<th>Type of premises</th>
<th>Lead Enforcer</th>
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</thead>
<tbody>
<tr>
<td>Single dwellings, including shared housing</td>
<td>LHA</td>
</tr>
<tr>
<td>All HMOs whether or not subject to mandatory licensing</td>
<td>LHA</td>
</tr>
<tr>
<td>All self contained flats whether purpose built or converted</td>
<td>LHA</td>
</tr>
<tr>
<td>Premises with mixed commercial and residential, and sheltered housing</td>
<td>FRA</td>
</tr>
<tr>
<td>Hostels, Bed and Breakfast, Hotels</td>
<td>FRA</td>
</tr>
<tr>
<td>All multi occupied accommodation owned or managed by LHA</td>
<td>FRA</td>
</tr>
</tbody>
</table>
Regulatory Reform (Fire Safety) Order 2005

• Imposes onto the Responsible Person:
  – A duty to take general fire precautions (Article 8).
  – A duty to undertake a fire risk assessment (Article 9).
  – The risk assessment must be in writing if:

• 5 or more persons employed,

• The premises are subject to an Alterations Notice
  (issued by the fire authority)

• A Licence or Registration is in force
  (eg Premises licence, Fireworks Registration, HMO)
Regulatory Reform (Fire Safety) Order 2005

• Who is the Responsible Person?:
  – The Employer in control of a workplace.
  – The occupier or person who has control of any premises.
  – Or the owner where neither of the above has control.
  – In respect of HMOs – Landlord/Owner.
Managing Fire Safety

• Good management of fire safety involves:
  – Ensuring fires are unlikely to occur in the first instance.
  – If they do occur they are likely to be contained and controlled quickly, effectively and safely.
  – If the fire occurs and grows, everyone is able to escape to safety easily and quickly or remain in safety.
Fire Safety in high rise residential buildings

• What standard of safety should be applied?
Fire Safety

Fire Safety risk assessment

sleeping accommodation

HM Government

The Chief Fire Officers’ Association
of the UK fire and rescue service
BRITISH STANDARD CODE OF PRACTICE

CODE OF BASIC DATA FOR
THE DESIGN OF BUILDINGS

CHAPTER IV
PRECAUTIONS AGAINST FIRE

Part 1. Flats and maisonettes
(in blocks over two storeys)

THE COUNCIL FOR CODES OF PRACTICE
BRITISH STANDARDS INSTITUTION
The fire at Lakanal House has prompted a review of standards within this type of building.

The fire was unusual in many ways and it is important that lessons learnt from a full investigation into this incident should be used to improve fire safety and fire-fighting operations, to ensure the safety of its occupants.
5.7.2 Areas for consideration

- Consideration should be given to conducting a review as to how the responsible person under the Regulatory Reform (Fire Safety) Order 2005, can be assured that their assessment of risk is suitable and sufficient, particularly where the premises is of a higher risk. This assurance is particularly important where the responsible person may be relying on using someone else to undertake the risk assessment.

- Where appropriate, the current Fire Safety Order guidance would need to be amended accordingly.
Fire risk assessments

- Poor standard of risk assessments
- Do not challenge first principles
- Unwilling to undertake invasive inspection
- Assumptions made upon which rest of assessment conducted
- Do not fulfil Responsible persons’ obligation to all parts of building
- Delegates decisions to Fire Authority
Common Problems

Fire Safety in high rise residential buildings
Common Problems

• Original construction did not comply with standard
• Second fix problems
• Subsequent refurbishment of
  Heating systems
  Electrical rewire
  Kitchen/bathroom upgrades
  Venting
  Cable TV/Satellite TV/Telephone system
• Uncontrolled work by leaseholders
Common Problems

Compartmentation
Common Problems

Fire stopping

Fire Safety in high rise residential buildings
Common Problems

Venting
What can we do?

- Additional active measures
- Review emergency plan
- Review occupancy profile and measures required
- Review Risk Assessment
5.2.2 Area for consideration

- Consideration should be given to undertaking a review of information available nationally for occupants of high-rise residential premises to ensure that there is a consistency of guidance in terms of what actions should be taken when a fire occurs within their building. Any review should be undertaken with key stakeholders including the fire and rescue service, housing associations, landlords and tenants’ representatives.
**Tenant Information**

- **Smoke alarms**
  - Types
  - Location
  - Testing
  - HSCs – Fire and Rescue
  - Maintenance

- **Fire Plan**
  - Fire in flat
  - Escape plan for building

- **Prevention Advice**
  - Cooking
  - Smoking
  - Electrical safety
  - Candles

- **Landlords legal responsibilities**
  - Tenants responsibilities
  - Contact numbers
High-rise flats – built to be fireproof

Keeping your building safe

Never use or store bottled gas cylinders in high-rise flats.

Never tamper with dry riser inlets on landings. It could cost lives if they’re not working properly when there’s a fire. If you see a dry riser vandalised, report it immediately to your Housing Association/Factor.

Never park so you block access to high-rise flats. Access roads are designed so that fire appliances can get as close as possible to fight fires.

Built to be fireproof

You’re not at any more risk from fire because you’re living in a high-rise flat.

High-rise flats are built to be fireproof. Doors, walls and ceilings will hold back flames and smoke. Most fires don’t spread further than one or two rooms.

If there’s a fire in another flat in the building, you’re usually safest in your own home, unless you’re affected by the heat or smoke.

Visit www.dontgivefireahome.com for practical fire safety advice. Or talk to your local firefighters. You’ll find contact details on the website, in your local library and in the phone book.
Any Questions?