



# notes

Social Housing Fire Safety Strategy Group

Thursday 16<sup>th</sup> October 2014

Media Resource Centre

Llandrindod Wells, LD1 6AH

## Attendance

Aelwyd HA	Bill Meiklejohn	North Wales Fire & Rescue Service	Bob Mason
British Automatic Fire Sprinkler Association Ltd	Ian Gough	Pembrokeshire Housing	Barry Davies
Bron Afon Community Housing	Chris Weeks	Pennaf Housing Group Ltd	Keith Morris
Bron Afon Community Housing	Neville Brown	Rhondda HA	Neil Lewis
Charter Housing Association Ltd	Brett Gilbert	Seren Group Ltd	Emma Pearson
City & County of Swansea	Darren Whetton	South Wales Fire and Rescue Service	Steve Tottle
Community Housing Cymru	Shea Jones	Tai Calon Community Housing	Kevin Thomas
CT Cantref	Paul Watson	Tai Calon Community Housing	Robert Jones
CT Cantref	Richard Lewis	Tai Ceredigion Cyf	John Jones
Family HA	Ceri Thomas	Tai Ceredigion Cyf	Wayne Williams
First Choice HA	Andrew Moucher	United Welsh	Luke Mitchell
Linc Cymru	Adrian Brain	Valleys to Coast Housing Ltd	Sue Jones
Melin Homes	Chris Mclean	Wales & West Housing	Anthony Williams
Merthyr Tydfil HA	Wyn Clement	Wales & West Housing	Johanna Burns

Merthyr Valleys Homes	Sarah Roberts	Wales & West Housing	Mike Wellock
Mid & West Wales Fire and Rescue Service	Richard Davies	Wales & West Housing	Sean Gough
Mid & West Wales Fire and Rescue Service	Craig Turner	Wales & West Housing	Simon Legg
Mid & West Wales Fire and Rescue Service	David Phillips	Wales & West Housing	Vaughan Williams
Mid & West Wales Fire and Rescue Service	Ryland Williams	Welsh Government	Colin Blick

## Apologies

Caerphilly County Borough Council	Angela Hiscox	Cartrefi Cymunedol Gwynedd	Bryan Griffiths
		Pembrokeshire Housing	Nigel Sinnett

## Feedback from the National Fire Safety Group

Andy Frankum (AF) and Peter Gannaway (PG) will continue to share the roles as chair and vice chair. Andy Frankum discussed the possibility of splitting the Midlands regional group due to geography and attendance.

A discussion re the existing terms of reference took place. The amendments discussed and agreed. Changes included membership to include consultants and other members including non social landlords. It was discussed that consultants for the purposes of the TOR would be directly engaged consultants via employment or a formal contract with a social landlord rather than those consultants selling products and services. The terms of reference should also reflect existing external partner's arrangements such as ARMA.

Update re PAS7 fire management standard and lead authority was provided by Peter Gannaway. BB7 w have produced PAS7 are now looking to develop a housing sector specific guidance incorporating the principals of PAS7. Tom Gilbert who has sector experience has been heavily involved in the creation of PAS7 and its promotion.

Mobile Scooter guidance has been devised by the Welsh Regional Group. PG asked each rep to ask at regional level the issues that impact them the most with a view to looking at future work streams for the group and tech standards panel. This year's focus will be scooters, PAS7 and competency.

AF presented an overview of the website, level of traffic and the geographical location of use. Presentations have been added to the website for BASFA. Fire door week

information was placed on the website – information on the fire inspection scheme and other events.

PG reported that the level 3 award has had to date a low take up, PG asked for possible reasons why, the group considered missing budget setting for this financial year, other course such as CIEH level 3 fire safety. There was limited no. of open course dates. AF to update the NSHFSG website with dates of any open courses.

Les James from Carmarthenshire gave an overview of recent enforcement challenges after they were issued with a number of enforcement notices. This result saw Carmarthenshire and West Wales fire and rescue service requesting a determination by the Welsh Government. No determination was given and the fire service withdrew their notices after Carmarthenshire provided a fire safety strategy and action plan. Working in collaboration brought a successful conclusion.

Richie Davies from Mid and West Wales Fire Service attended the meeting to give an overview of a new secondment. Welsh Government have funded a post to assist Welsh social housing providers and the business sector on fire safety matters, the post holder will seek to address the frustrations and concerns of business and regulators alike.

**Firex Update**, AF reported that that the Fire Ex was well received, the agenda was full, and speakers were excellent. 40 delegates attended and feedback was excellent.

**ARMA Update**. PG reported no significant movement since the last meeting in the collaboration and inclusion in the group. The group will be updated at the next meeting.

**CFOA Update** The building control and fire procedural guidance is in consultation and a copy is on the group website. BS9999 and BS9991 are both due for review. The development of BIM was discussed and how its use in complying with Reg 38 and data sharing. BIM is a 3D modelling project that will enable data sharing to achieve compliance. Also noted that the new fire minister was Penny Mordaunt MP during the cabinet reshuffle.

Paul Jenkinson from North Wales Fire and Rescue Services recently attended the latest meeting of the group now called the High Risk Accommodation group which meets quarterly in London. Currently CFOA is developing a position statement on extra care accommodation which will state CFOA aspirations in relation to the minimum fire safety measures to be included. These are likely to include:

- Provision of fire suppression systems
- min LD1 fire alarm system
- important to ensure that all construction relating to fire separation, compartmentation and fire barriers is done appropriately (as there have been

some serious fires where the quality of construction was a serious factor in the unexpected fire spread.

### **(NSHFSG) website**

CHC would encourage everyone to join the National Social Housing Fire Strategy Group (NSHFSG) website by following this link below:

- <http://www.shfsg.info/>

### **Fire safety measure/fire sprinkler pilot updates and Q and A Colin Blick – Welsh Government**

WG are funding a pilot programme for the design and installation of fire sprinklers in social housing. It's anticipated that the sprinkler systems for the pilot studies will have mains fed water supply and be designed and installed to BS 9251: 2005 (please see below however for further information on the revised BS 9251:2014)

The pilots include 217 properties covering 13 sites with a mix of development scale, development type and geography. It involves 10 local authority areas in Wales. BRE, as consultants to the Welsh Government, will provide a detailed monitoring programme, covering experience in relation to:

#### Pre-installation

Design

Regulatory requirements and compliance

#### During installation

Compliance issue

Contractor, sprinkler installer issues

Site issues

Material issues

Installation, designs that have changed due to site issues

#### Post installation

Commissioning

Future maintenance issues

Welsh Government is treating the study based on the scenario that the regulations are currently in force (flats and dwellings not in force until January 2016). The BRE are not giving advice-they are just monitoring the pilots (as if RSL's are undertaking these pilots in a real life scenario)-look at slides "based on scenario". Monitoring will include telephone discussions, site visits on line questionnaires. First meeting of RSL's and Steering Group was held on the 6 June.

The strategy will also consider costs at design stage, installation stage and if necessary post

completion stage. Key stakeholders will include RSL's/Housing Associations, system designer, system installer, building contractor, building Control body, Water company, Lead contractor and Architect/designer. RSL's have received the Monitoring Strategy and been informed that BRE will be in contact in relation to commencing the strategy. Its key to ensure the supply chain is engaged to ensure data is captured.

Schemes comprising apartments for the elderly are generally considered 'for residential purposes' under the building regulations and therefore would be subject to sprinkler requirements from January 1<sup>st</sup> 2016. If the level of care results in it being a registered care home then the requirements apply from April 30 2014. Specific schemes should be discussed with the building control body being used. HMO's fall into the first category on the timetable i.e. the 30 April 2014 date.

The **revised BS 9251:2014** (Fire sprinkler systems for domestic and residential occupancies) has been released which will have an implication on new installations. Flow rates have eased slightly. This could mean less risk for a pump system within the standards. It seems that from the early feedback that Welsh Government has received, designers and installers will be using the new standard for the pilot study. It's an opportunity for many of the pilot schemes to be based on the revised standard. The new BS 9251 makes self testing of pumps a requirement. The pump must turn periodically or it could cease!

Types of suppression system:

- Water Sprinkler – approved systems (BS 9251/12845)
- Water Mist – Draft BS 8458 out for public consultation

The current planned Part B requirements are based on water sprinkler systems. Guidance within the Approved Document B (Fire Safety) allows for future systems that will meet the equivalent criteria of compliance

Categories of sprinkler system

- Residential – Designed to BS 9251 (currently under review, public consultation complete)
- Commercial – Designed to BS EN 12845 (12845 is more for hospitals, etc-bulk of RSL properties wont fall into this)

The expectation is that BS 9251 will meet the requirement. Where residences fall outside the scope of BS 9251 then the relevant standard will be BS 12845. Key differences between the systems such as:

- Water supply – tank size, duration time, flow rate
- Power supply
- Pump sets

**Timetable:**

**30 April 2014** - new regulations came into force for Care Homes, children's residential homes, halls of residence, boarding houses, certain hostels

**1 January 2016** - new regulations will come into force for dwellings and flats

#### **Transitional provisions :**

- Application submitted prior to the coming into force dates will have 12 months in which to commence-for example an application for a care home submitted on the 29 April 2014 will have until 30 April 2015 to commence the work
- Multiple work schemes????

#### **Pilot programme spring 2014 – spring 2016:**

An interim report of the programme is to be published in Autumn 2015 and a final report in mid 2016.

Events will be organised-post study in North and South Wales

- Study will be based on the scenario that the regulations are currently in force (flats and dwellings not in force until January 2016)
- Neath Port Talbot College have started an up-skilling training scheme for plumbers
- It is intended to extend this to professionals such as Building Control bodies in Wales

None of the pilots are with Dee Valley or Severn Trent (they are all with Dwr Cymru)-therefore lessons learnt need to be shared across Wales. There are also no pilots in private housing-WG still talking to one private developer.

#### **Associated to pilot study**

Neath Port Talbot College have started an up-skilling training scheme for plumbers. It is intended to extend this to professionals such as Building Control bodies in Wales. It was noted that there aren't enough plumbers in the market at the moment. The fire safety group were encouraged to send people on a range of courses that Neath Port Talbot college were running.

Thames Water is carrying out training for water regulations and plumbers etc go on these courses. As yet they do not do fire sprinkler training. However, they are watching with interest what NPT College are doing. The link below is to Severn Trent's 'fire sprinkler connections' policy. Severn Trent cover part of Wales and so they are important in regards to the Sprinkler Measure in particular- particularly for housing providers who might consider connecting a sprinkler system directly to the main:

<http://www.stwater.co.uk/businesses/new-connections/single-property-water-connections>

Ian noted that the fire safety order is impacting England now to an extent e.g. they are starting to put in sprinkler systems in Cheshire. Wales could be in a position to pass on lessons learnt and what has worked well.

If a pump was to fail-Ian Gough from BAFSA noted that new pumps could sound an alarm if there was a failure. Ian mentioned that Severn Trent have produced their own company policy which will be really helpful.

Issues around the potential need for tanks and pumps was discussed and the element of risk. It was noted that the actual installation issues were key to the pilot studies and not so much the maintenance issues. It was noted by an RSL representative that maintenance costs should be considered as part of the pilot as they could be significant in providing the full picture (solar thermal technology being used as an example). Installation is going to be one of the key issues of the pilot projects though and notably cost and whether tanks and pumps are needed or not.

Ian Gough mentioned information on the life span of the systems-Ian noted that work was needed to be done on this and that an independent study may well be carried out. Ian may raise it with the BAFSA Council; however, we could probably get some information from the USA (where domestic sprinklers have been in use for much longer) that would help in the interim.

A private developer is putting a sprinkler system in a show home and asking people to visit to see what they think. Andrew from first Choice noted that they are currently working on their first fire sprinkler retrofit (which includes a tank and pump system).

**Action:** CHC to look into the opportunity for potential site visits. Current examples of sprinkler schemes in the sector were noted-e.g. First Choice, Merthyr Valleys Homes, Bron Afon, Wales & West-an update from a particular scheme could be held at the next fire safety group meeting. Please feel free to send through example of any fire sprinkler schemes that you have to [shea-jones@chcymru.org.uk](mailto:shea-jones@chcymru.org.uk)

## **Watermist**

Draft standard for consultation for watermist systems – last date for comments is the 31 October

Questions?

### E mail:

[Enquiries.brconstruction@wales.gsi.gov.uk](mailto:Enquiries.brconstruction@wales.gsi.gov.uk)

[Website for information: wales.gov.uk/topics/planning/buildingregs](http://wales.gov.uk/topics/planning/buildingregs)

## **Primary Authority Scheme Adrian Hall, Better Regulation Delivery Office, BSI**

Primary Authority was extended to include fire safety from 6th April 2014 and new partnerships have already been registered as the business community demonstrates an appetite for Primary Authority in relation to fire safety. Many fire and rescue services are currently in negotiations with businesses to establish partnerships, and are working with business organisations such as trade associations to offer Primary Authority to smaller businesses. For more information please see:

<https://primaryauthorityregister.info/par/index.php/background/fire-safety>

Why do we need primary authority?-Advice, multiple compliance relationships, uncertainty and reluctance to invest. Primary authority is an established scheme

Role of the primary authority-relationship management, information, advice, tools etc, assured advice, inspection plans, cost recovery, safeguards

Role of the enforcing authority- Proactive and Reactive Inspections, Heeding Assured Advice, Inspection Plans, Enforcement Activity – Notify Primary Authority, Emergency Activity, Challenge, Determination Process

What does primary authority deliver?

### **Business**

- Consistent, reliable regulatory advice
- A single point of contact
- Confidence
- Investment and Growth
- Released Resource

### **Local Regulators**

- Better informed
- Issue resolution
- Released resources
- Improved targeting

How is a Partnership Established?

- Existing Relationship
- Previously Enforcement Experience
- Tender Process

### **Direct Partnership**

Business eligibility (1)- a business regulated by more than one local authority

- Premises in multiple local authority areas (for example a landlord with many premises)

Business eligibility (2)-co-ordinated partnership- A business that is part of a group of businesses collectively regulated by more than one local authority, where these businesses ‘share an approach to compliance’:

- Members of a trade association
- Franchisees
- A group of related companies following the same compliance controls.

Benefits - large landlord scenario

- Landlord has many properties and is well informed
- Planned approach to maintenance and investment
- Primary authority is able to influence business approach
- Primary authority familiarises itself with stock etc
- Advice can be issued – carefully considered and takes into account local circumstances
  - Certainty
  - Investment

#### Benefits - small landlord scenario

- Landlord has few properties and may not be well informed
- Landlord looks to Landlord Association for advice
- Landlord Association has worked with a primary authority to develop appropriate support materials
- Advice is clear to landlord and gives assurance if complied with

#### Primary authority for housing

- Supports:
  - Business/landlord and regulator relationships
  - Regulatory system – efficiencies and expertise
  - Driving up standards
  - Housing and Fire Primary Authority Partnerships

RSL's could seek advice, for example, on care homes and fire safety guidance relating to different property types. It was noted however, that certain things do not fall under PA-for example, advice in relation to solar PV might come under building regulations/planning for example.

The primary authority provides assured advice that is statutory pinned. In order to get advice, there are no limits on the numbers (as part of a group for example) that can collaboratively ask for advice. A group of RSL's could get advice or CHC could liaise with the PA and co-ordinate response with members. Partnerships can be intense or light i.e. it was noted that in assessing property types and fire safety advice, the PA might well go to an individual property to assess the situation before giving advice. It was also noted that PA advice can be challenged.

A conversation between the PA and the enforcing authority may well be enforced. It was noted that the fire service are starting to get to grips with working with the PA although its early days. The fire service can provide strategic advice of course. It was noted that our fire group was already helping co-ordination between partners to avoid conflicting information. There are separate levels of PA and they have separate arrangements (e.g. environmental health, Fire safety, etc)

It was noted that if you entered a fire safety partnership, you need a parallel partnership with the RRO and HHSRS.

**CFOA host a fire safety reference panel (guidance)-CFOA group on extra care mentioned again.**

## FURTHER INFORMATION

<https://primaryauthorityregister.info/par/index.php/home>

Free Primary Authority training courses can be booked via the BRDO website

Email: [adrian.hall@brdo.bis.gsi.gov.uk](mailto:adrian.hall@brdo.bis.gsi.gov.uk)

## Hoarding Risks and timber frame construction Ian Gough, BAFSA, MIFireE MCABE – Senior Technical advisor

Ian noted that the most important thing in fire safety is the 'use of the building'-it's been clouded hence why there are issues of interpretation in relation to which guidance applies for which accommodation type -extra care/independent living, etc.

### Third Party Certificated contractors

BAFSA have produced an Information File to explain to specifiers, regulators, insurers and others the benefits of specifying Third Party Certificated contractors involved with the design and installation of automatic fire sprinkler systems. BAFSA recommends that specifiers consider using 'Third Party Certificated' contractors for this work. Provided installation and design work is carried out by 3rd party certificated contractors (as recommended in ADB) there should be few problems. There are separate third party certification schemes explicit for each of the sprinkler design standards. Third party certification is a voluntary process which reputable companies decide is a way of them demonstrating their competence and abilities to their clients. The independent third party is confirming that the certificated company/organisation is competent and suitable to undertake a certain type of work within recognised scope parameters.

The certification bodies (of which there are currently only three in the UK insofar as fire sprinklers are concerned) will audit a proportion of the work as part of their normal processes and duties. At the moment, unfortunately we have only 2 BAFSA members with the appropriate certification in Wales. Ideally more contractors in Wales will become Third Party Certificated contractors; otherwise you may have to look further afield for suitable contractors (particularly for North Wales) if you want Third Party Certificated contractors.

**Action:** It might be worth liaising with one of the certification bodies for the possibility of additional assistance and advice and maybe even inviting one, such as FIRAS (who can boast the largest membership of residential and domestic sprinkler contractors), along to a future meeting or conference.

BAFSA try to list installation contractors who are members of BAFSA by region on their website <http://www.bafsa.org.uk/find-member-company/installers.php> However, please bear in mind that not all 'Commercial' listed contractors will have an interest in 'residential & domestic' installation work.

**Action:** BAFSA's 'Information File' might be of help and it will be included on CHC's

website along with the notes of this meeting. Please note that the information file was published in October 2010 and therefore some information in relation to current British Standards, for example, might be slightly out of date.

## **Hoarding risks**

**Action:** The BRE full report looking at hoarding risks and an indicative hoarding fire experiment, prepared for the London Fire Brigade, can be seen on CHC's website.

For information on hoarding awareness week, please see the link below. The first ever hoarding awareness week was held back in May this year:

<http://www.cfoa.org.uk/HoardingAwarenessWeek2014>

Growing concern of UK fire & rescue services resulted in the Chief Fire Officers' Association seeking to raise awareness

Increase awareness of:

- Central & local government
- Social housing landlords
- Adult social care agencies
- Mental health agencies
- Any other organisations/agencies who can help
- Other 'blue light' services

## **Indicative Hoarding Fire Experiment**

A London Fire Brigade project carried out by the Building Research Establishment (BRE) had the objective to "To provide an initial indication of whether or not a sprinkler system is likely to be effective in controlling (or suppressing) a fire in a room involving typical 'hoarding' materials."

Details of the project include:

- BRE Global provided a 4m x 4m x 2.5m test rig
- Timber frame and plasterboard with a single door opening
- Filled with 'hoarding materials' to a level defined in the 'Clutter Index' to level 6
- Domestic sprinklers installed as per BS 9251: 2005: -
- One centrally mounted ceiling head
- Sidewall head fitted to RHS wall
- Fire smouldered for 6 min 40 seconds – smoke detector did not operate
- At 7 min 44 seconds smoke detector operated and temp increased rapidly

Some of the results include:

- At 8 mins 14 seconds the sidewall sprinkler operated
- Temperatures at ceiling = 162.4°C
- Sprinkler significantly reduced room temperature
- After 10 minutes the sprinkler turned off
- But fire started to grow again!

The conclusion included:

- A domestic sprinkler system is likely to be effective in controlling and suppressing a fire in a room containing 'typical' hoarding materials
- However, the fire did begin to grow again after 10 mins (because of 'shielding')
- Consideration may need to be given to ensuring longer duration of water supply

It was noted that a sidewall head for a sprinkler system could be a better system for a room full of clutter. A hoarding situation may well mean that the fire can spread again as the material may shield the fire. This could be more of an issue for rural places more so than urban in terms of response time of the fire service. If you are designing a system for a building which contains a hoarder then you may well need a longer duration of water from a sprinkler system. If so, would this provide further water supply issues? **BRE to do more tests?**

Hoarding goes hand in hand with other issues. It was noted that having hoarders can be a difficult situation. You need a court to sign an eviction order-it's difficult when people are vulnerable. There is work to be done with RSLs and the fire service educating courts on the risks of hoarding. The fire service has no right of entry into the building. Is it possible to offer a different form of accommodation where it's safer for a hoarder? It was noted that environmental health may well get involved in these matters.

Good practice-Bron Afon HA are working with social services, fire service, members of the family, etc in de cluttering properties and have had success.

**Action:** the group to get or put together guidelines on hoarding. This will be discussed at the next meeting with plans to invite Mid & West Wales' fire and rescue service community fire safety team to discuss hoarding in particular.

Please inform your local fire service of any hoarding issues. The fire service may be able to help with safety, getting a court order, de cluttering, etc. The fire service recognise hoarding as a risk and the fire service have officers who actually work with vulnerable adults.

**Action:** Richard Davies from Mid and West Wales Fire and Rescue Services noted that they have a community fire safety team who are doing work on hoarding and more.

They will be invited to speak at the next fire safety group meeting.

Sometimes water mists systems can save on tank size but, like for like, are usually MORE expensive than a standard BS 9251 sprinklers. Mist systems do use less water.

## **Timber frame construction**

The challenges posed by modern timber frame construction are increasing:

- Taller heights of such buildings
- Larger 'footprints'
- Modern insulation requirements and materials
- Legal implications of fires that may affect persons outside the building of origin.

Timber frame construction is not exactly new. USA and Canada got lots of experience in timber frame construction. FPA and RISCA have produced a joint code of practice. This document has been produced at the request of RISCAuthority members in response to a noted change in UK claims experience in respect of lightweight timber frame (LTF) buildings both in-construction and once completed and occupied. The report seeks to explore the impact that lightweight timber frame buildings might have in the UK, as a future dominant building method, based upon current UK statistics and historic US experience.

**Action:** The report is available to view on CHC's website.

Light timber frame residential Market share 1998-2009:

England: 1998 = 2% 2009 = 17%

Wales: 1998 = 3% 2009 = 26%

Scotland: 1998 = 43% 2009 = 70%

## **FPA Review – 2007**

During construction phase, fire is a particular problem:

- Escape problems for site staff due to distances involved and speed of fire spread
- Partial occupancy risks
- Lack of protection for fire-fighters (no fire-fighting shafts)

## **Construction Sites: Fire Losses**

Difficult to ascertain actual amounts as fires on sites are not classified as 'primary fires' by fire and rescue service: -

- HSE say *"there are approx. 11 fires on construction sites each week"*

- Informed sources estimate that there are probably 80 – 90 fires each week
- One July 2011 insurance industry estimate suggests that there are 11 fires each day on construction sites costing £400m/year
- The peak losses in the UK were in 1992 when more than £150 million was paid out on just two fires

### **Buildings Under Construction -What Are the Problems?:**

- Lack of awareness that there IS a problem!
- Poor management and planning, lack of supervision
- Legislation, such as there is, normally only concerns itself with the safety of life
- Multiple ignition sources:
  - Smoking, electrical; hot work; generators/compressors, cooking
- Fuel everywhere:
  - Gases, diesel, petrol, timber, waste materials/packaging
- No fire compartmentation, no fire detection, no sprinklers, shortage of fire fighting water, poor access
- Lack of training
- Poor response from workers unless motivated
- Partial occupancy
- New methods of construction

### **Joint Ministerial Submission – 2009**

Business & Community Safety Forum & Practitioners' forum. The provision of fire sprinklers was not specifically recommended; however, a number of matters highlighted – in addition to FPA Review:

- 'Defend in place' strategies questioned.
- Workmanship quality concerns – particularly of passive protection.
- Longer term issues e.g. 'DIY' e.g. drills, cavity fills, people drilling holes for cables?

Definition of '**large**' timber framed buildings:

- 4 storeys and above, or
- With a footprint of 2,500m<sup>2</sup> or more, or
- A contract value in excess of £2.5 million.
- **Fire Service Circular 38/2009**

### **London Report – 2010**

Tall & timber framed buildings: -

- Sprinklers identified as an aid to fire-fighters.
- Report acknowledges that changes to Building Standards are unlikely in the short

term.

- However, the potential role of the Mayor in promoting measures, such as fire sprinklers, in new developments at planning stage is raised.

### **Recommendation 2:**

- By the end of 2011 the UK timber frame construction industry should actively promote to its members a variety of fire safety measures, including fire suppression systems and site security measures that are designed to reduce the risk of fire on construction sites during non-working hours when the danger of arson or accidental fires is highest.
- The HSE should then consider whether any of those fire safety measures should be promoted for use on construction sites

### **HSG 168: Fire Safety in Construction**

- Proposes the use of the '5 Steps'
- Gives good guidance on
- FRA methods but focuses on life safety issues
- Provides some very good examples of hazard reduction
- New section on timber framed buildings
- Clarifies travel distances
- Unfortunately does not mention the use of automatic fire suppression

### **Dubai Technology and Media Free Zone Authority: Circular 118 HSE 23/10/08**

Requires sprinkler systems to be made operational if basements/car parks of buildings under construction are to be utilised.

Ian noted a number of incidents:

- Colindale, North London in 2006. Fire during the construction of a block of flats. Cause not established but probably discarded cigarette or malicious intent. Building collapsed only 9 minutes after alarm raised
- Basingstoke 10 September 2010 "When timber-framed buildings catch fire the actual structure burns. It often leads to total collapse and that puts the safety of our firefighters at risk." John Bonney, *CFO Hampshire F&RS*
- In a Basingstoke reconstruction in 2012, fire sprinklers were put in during construction (a Temporary BS 9251 Sprinkler System)

### **FPA/RISCA Joint Code**

The Joint Code – 8th Edition, July 2012-this is now fully synchronised with the CDM Regulations and the advice in HSG 168

- Building to be compartmented and fire-stopped at earliest stage possible

- Generators and similar heat-producing machinery should not be used in structures where the timber is exposed
- Refueling of equipment must be undertaken in designated area 20m away from building under cons.
- Gas cylinders and flammables must be removed from the structure at the end of the day and stored in a secure compound 20m away from building under cons
- If temporary buildings need to be located closer than 20m, then risk assessment must be undertaken by competent professional in consultation with insurers; temporary buildings closer than 20m must be non-combustible
- All power and utilities – apart from those required for safety, fire detection and security systems must be disconnected outside working hours
- Automatic fire detection should be linked to an Alarm Receiving Centre (ARC) unless there is a 24 hour security presence on site
- Hot work to be minimised – where this is carried out it should be under permit and the site monitored for at least one hour after completion and subsequently visited two hours after completion to close the permit.

### **Bringing Forward Fire Protection**

The employer and designers in conjunction with the CDM coordinator should ensure so far as is reasonably practical that the project is designed and planned in conjunction with the contractor and their programming of the works to achieve the early installation and operation of:

- Permanent fire escape stairs inc compartment walls
- Fire compartments
- Fire stopping
- Protected structural steelwork
- Fire fighting shafts
- Wet/dry risers
- Lightning conductors
- AFD where planned
- Sprinklers where planned

### **Farnborough Apartment Block**

- New build, timber frame apartment block consisting of twenty four units and common areas over four floors.
- A 'temporary alternate' sprinkler system installed.
- This overcomes the problems of freezing etc.
- The system was 'live' during construction and at night.
- However, upon completion, the system would become 'wet' and in line with BS 9251.
- Further information can be obtained from Domestic Sprinklers Ltd, Weymouth

### **Recommendations**

- Consider the installation of automatic fire suppression (sprinklers – not mist!) at the earliest opportunity
- Only fit sprinklers where a ceiling/floor has been installed above

- Consult with water company and agree upon connection details
- Where the water company insist on metering that a suitable bulk meter is specified - where appropriate

### **New Developments:**

- Plan and coordinate with the water company re town main pipe infrastructure around their development ensuring at least a 90mm supply pipe is laid in the roads

### **BAFSA/UKTFA**

- Guidance for the Installation of Automatic Fire Suppression in Timber Framed Structures

New Methods of Another 'challenge' for the fire sprinkler industry?

CPVC pipe MUST contain water to ensure fire integrity. Therefore problems occur if pipes are unheated. However, the trial for fitting in timber frame under construction had to ensure that - albeit dry - any fire quickly opened a valve to allow water to flow (this is called pre-action - and the valve is usually opened by a smoke detector operating i.e. before the fire is hot)

Ian sits on a fire sector enforcement group-Ian sits on this. He mentioned that Stay put = defend in place = delayed evacuation. They are different terms but basically have the same meaning.

### **Neath Port Talbot college qualifications**

Neath Port Talbot college-qualifications are being launched in the spring of next year. This may include an up skilling award for plumbers who may already have qualifications, people working in Mechanical Ventilation Heat Recovery, etc. Neath is the first college in Europe to carry out fire sprinkler training. It is very much so hands on practical training. The Home Builders Federation are already putting people on courses as Neath are actually training already now. The link below mentions the course, although more information on the training will be available in the New year:

<http://www.nptcgroup.ac.uk/en/schools/building-engineering-services/>

### **Richard Davies, Mid and West Wales fire service, an update on an All Wales Fire Safety Guide for Social Housing**

Richie noted that guidance in relation to fire safety needs tidying up. Therefore, to assist Welsh social housing providers and the business sector on fire safety matters, the Fire and Rescue Services in Wales are seeking to address the frustrations and concerns of business and regulators alike. It is apparent that there are too many fire safety guides, containing too many contradictions. The intention is to put together a unilateral guide to help provide consistent

advice to professionals, where fire safety plays a role within their vocation-namely managers, owners, occupiers of social housing premises and indeed the regulators of the Fire safety Order. In summary, this guidance would help illustrate how these professionals can comply with fire safety regulations and meet their moral and statutory obligations, whilst also improving the competitiveness, safety and prosperity of their business.

The nature of this project requires consultation with a wide body of stakeholders, who have a vested interest in the outcome. The Fire and Rescue Service intends holding regular and productive meetings with such stakeholders, ensuring that appropriate views, observations and opinions are recorded and acted upon. Consultees are encouraged to be proactive with the project and suggest possible solutions, to any matters they raise.

To assist in this process, the fire and rescue service has produced a brief survey <https://www.surveymonkey.com/r/rjd459>

It would be extremely beneficial if you could complete the same to ensure that your views and opinions are taken into consideration. For further information, please email Richard Davies (details below)

Station Manager Fire Safety Inspecting Officer- Swansea County Command **Mewnol / Internal:** Ext. 2228 **Allanol / External:** 0370 60 60 699 **Ffon Symudol/Mobile:** 07597098355 **Post / Mail:** [rj.davies@mawwfire.gov.uk](mailto:rj.davies@mawwfire.gov.uk) **Wefan/Website:** [www.mawwfire.gov.uk](http://www.mawwfire.gov.uk)

When the document is completed, the three Fire and Rescue Services in Wales are requesting a ministerial forward and it then could potentially be adopted as an All Wales Guide under article 50 of the fire safety order. Richie confirmed that Colin Todd is happy for him to use their purpose built flats guide and incorporate it into this one unilateral guide. Richie is also looking at LGA documents, etc. Richie will also be assessing documentation that has been produced by members of the fire safety group in the past (scooters guidance, care guidance etc). Care could be included in the unilateral guide. Richie has spoken to EROSH, CFOA, the private rented sector, etc and a range of other stakeholders. He's planning to talk to building control.

Richie has spoken to Welsh Government and he needs to speak to WG further and other groups including sprinkler groups. Richie has met the Minister for Health. He will reference CFOA UK and the care/independent group they have set up. He is 25% of way through the project. Richie noted that this is a chance to make some guidance for Wales. The unilateral guide aims to cover everything from build stage, to flats, residential homes, care homes, etc. We need buy in. South Wales key care contact-David Phillips. Richie has asked the care team south Wales to come to previous meetings. Richie was told to consider historic Scotland's conversions of traditional buildings guidance (it can cover any buildings not just traditional buildings?)

## **AOB**

CHC staff members will be meeting with both chairs of the health and safety and fire safety groups to discuss the future of the groups and the idea raised of whether or not to combine the groups. The majority vote in this fire safety meeting voted to not combine the groups-however,

CHC will not be basing the decision of whether to merge or not based just on this vote. A range of issues and factors will be raised in the meeting. In the meantime, please feel free to send any thoughts and ideas on this through to [shea-jones@chcymru.org.uk](mailto:shea-jones@chcymru.org.uk) as well as your vote if you didn't vote at the previous meeting.

### **Agreeing actions and outcomes/discussion topics for the next meeting**

**Action:** If you want to suggest sessions for future meetings then please email [shea-jones@chcymru.org.uk](mailto:shea-jones@chcymru.org.uk)

Topics suggested for the next meeting include:

- Andy Nicholson-the fire surgery- stay put policy in private residential buildings, disabled evacuation, and assisted living fire strategy
- Richard Davies- Mid and West Wales fire service, an update on an All Wales Fire Safety Guide for Social Housing
- electrical-Wales & West noted a speaker
- Pas 7
- Tom Gilbert?
- AICO
- Fire safety signage
- Mid and West Wales fire service community fire safety team-an outline of some of the work they do-hoarding, etc.
- An update from a particular fire safety sprinkler scheme?

### **Date and venue of the next meeting**

Wednesday 21st January 2014

Media Resource Centre

Llandrindod Wells, LD1 6AH