

The importance of early warning devices

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The importance of early warning devices

- The title of today's conference includes the phrase 'How to manage the risk' with respect to fire and thatch. I want to place the importance of early warning devices within that context.
- Early warning is not a cure – as a building owner/user you can do much to avoid a fire and reduce its potential impact.

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- We've already heard from the insurers; addressed the recognised risks associated with the use of wood burning stoves; discussed the trends; impact on historic buildings ; the science; the fire investigator's and the loss adjuster's role.
- You know the programme as well as I do.
- But -

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- There is no easy option in the use of thatch. You will be living and/or working under a very special kind of roofing. Wildly glamorous/chocolate box effect. Rarity. Warm in winter and cool in summer. The magic word 'sustainable'.
- Slates and tiles are not quite the same.
- All buildings depend on the common sense of their occupants.

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- There is of course, guidance, based on research , usage and experience typified by the LABC Dorset Model as revised in 2009.
- That property you live/work in does comply with this guidance doesn't it?
- Your building does have:

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- Thatch on battens on fire and water resisting barrier on top of the rafters. You can get into your roof space and check? You can't look straight up at the thatch?
- Your chimney is 1.8m above the ridge of the roof and not just peeking above?
- You're not in a terrace with more than three thatched properties – are you?
- Any fire resisting barrier is sealed with an intumescent mastic – isn't it?
- You do have a domestic smoke alarm system complying with BS 5839-6: 2004 – don't you?

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- That's warning of smoke **inside** the property – also useful if there are detectors in the roof space.
- You haven't got any cables running through the thatch not in conduit – have you?
- You don't have down lighters below a very shallow roof space – do you?
- Or a halogen security light resting on the thatch near the front door?
- Or a new boiler flue tucked ju-ust under the thatch?

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- This is where I come in with talk of early warning devices.
- There was a system in the past which picked up increases in temperature just outside the chimney, alerted a call centre which contacted the key holder to warn them to look outside and see if there were any signs of smoke.

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- This has been resurrected using commercially available line detectors set to produce an audible alarm if the temperature in the thatch immediately adjacent to the chimney goes above 180°C. There's another version you'll hear about using a probe.
- I know of one consultancy that considers the greater likelihood of cause of fire resulting from burning embers thus making this approach unhelpful.
- However -

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- If I may digress – I used to start as well as investigate fires and have tried to reproduce the effect of ember-ignition using a small British Standard crib – a number 4 – as for furniture. It does work but takes an awfully long time to develop (~2h) by which time there will be quite a lot of fire spread not immediately visible but still too late to save all of the roof unless it has been installed to the Dorset Model.

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- Not sure how you can get early warning of that – you will have to depend on other approaches to reduce embers – not placing and lighting the barbeque under the eaves; not lighting the wood burning stove with lots of paper and very lightweight kindling; not forgetting fireworks. Not forgetting the role of the spark arrester.

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- But you can get early warning about the temperature in your thatch close to the chimney.
- Mind you – if I just turned up with a length of line detector and a good spiel – you might not have any confidence in it.
- That's why I recommend getting a provider who has had their system subjected to a certification system.
- Such as – and here is the sales pitch -

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- The one at International Fire Consultants Certification (IFCC).
- i.e. The Thatched Property Chimney Monitor Scheme which provides ongoing third party certification together with confirmation of performance of heat detection according to the principles of EN54-5: 2001 (prEN54-5: 2011). This was designed for the evaluation of point sensors and is also applicable to linear type sensors.

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- We also certificate the installer.
- I have some paperwork on that at the back of the hall
- You may be interested to find that those of us who do think about the possibility of fire don't have them quite as often. This results in:

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- Preventing or at worst controlling the spread of fire
- Products need to be installed properly to a high standard of workmanship
- A good product **incorrectly** installed compromises:
 - Product performance
 - Property
 - Life safety

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- IFCC installer certification schemes complement IFCC product certification
- Together they give confidence to insurers, specifiers, building owners, enforcement authorities and regulators
- The IFC Certification quality mark enables certificated installer companies to demonstrate the superiority of their workmanship
- And gives you confidence in the Fire Safety of your building

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All IFCC schemes are accredited by UKAS