



# BUILDERS UNDER FIRE

(Reprint of the Editorial by Adrian Barrick Building Magazine July 2002 )

**W**ill they never learn? A government-backed investigation has uncovered evidence that shoddy workmanship is exposing buildings - particularly those constructed using timber frame - to increased fire risks. Experts are concerned that failure to properly install plasterboard drylining and fire protection is allowing fire to spread uncontrolled through the wall cavity to floors above. These problems are compounded by fears that smouldering timber causes fire to reignite in cavities: Oxfordshire firefighters are so worried they now insist on returning to the scene of a blaze four hours after it has been extinguished. It's a small mercy that nobody has yet died in one of these fires; indeed, the scant comfort in this disturbing tale is that fires spreading through cavities generally give the occupants a reasonable time to escape.

That is no reason for complacency, however. The fact that timber frame buildings appear to be most vulnerable - because their cavities are lined with combustible material - brings resonances of 1983's cataclysmic World in Action programme. This is unfortunate because, in many ways, timber frame 2002-style is unrecognisable from the relatively flimsy and rot-prone systems exposed by the TV cameras 19 years ago. The Amphion Project, launched by construction minister Beverley Hughes in 2000, is piloting high-quality, sustainable timber frame homes.



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And the use of factory-made wall frames and roof trusses is also helping to ease the skills crisis, which is especially acute in housebuilding. But the blunders uncovered by BRE, Zurich Municipal and London Fire Brigade tell another story. Among World in Action's most damning revelations were slipshod practices: the message clearly hasn't got through to everybody.

The investigations by the research team, due to be published in September, will have lessons for every housebuilder, contractor and regulator in the way they seek to protect wall cavities from fire. There is a case for the cavity walls to be changed to keep flammable material out, and to remodel cavity closers to make them easier to install. But most responsibility lies with the builders, of course. The joints between two layers of

plasterboard must be staggered and properly fixed to avoid fire spreading up the building. Nor can the cavity closers designed to stop fire be pulled tight round corners, thus exposing gaps, or ripped out by irritated bricklayers. At the risk of stating the obvious, there is an urgent need for better training and supervision. Perhaps workers erecting timber frame structures should be accredited, like a CORGI gas fitter.

Given the history, though, it would be unwise to rely on builders mending their ways. Insurers, for one, aren't taking any chances. They may soon demand that only approved timber frame contractors are used; if poor workmanship is to blame for a fire, they may refuse to pay out. That will concentrate a few minds. And given how easy it is to hide mistakes, perhaps an independent third party - a building control officer, say - should check fire protection is correctly installed. To its credit, the UK Timber Frame Association is looking at many of these measures, even if they entail yet more regulation, and would add cost and delay. But frankly, the industry only has itself to blame. To heed another warning from the 1980s: whatever you do, don't play with fire.

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