

Terry Edge, the lead official on the Furniture and Furnishings (Fire) (Safety) Regulations 1988, at DTI/ BIS/BEIS from 2004 until 2016, reports on yet another regulation that needs reviewing

The UK's ineffective and dangerous furniture flammability regulations

FIRE Foreword: The Fire and Rescue Service's campaign to save lives through ensuring foam filled furniture was made fire-safe reached its zenith in the 1980s with the Furniture and Furnishings (Fire) (Safety) Regulations 1988, saving hundreds, if not thousands, of lives in the UK. However, the complete turnaround and inevitable slide to ashes is evidenced below as the story continues from pg 27 with all the same ingredients of modern materials, deregulation, reducing costs and a recalcitrant industry in another example of failure to safeguard citizens by not putting public safety first.

t the time of writing, the first reported cases of cyanide poisoning in Grenfell Tower victims are appearing in the media.

C One family, with a seven months pregnant mother, followed advice to 'stay put', but when their flat caught fire, fled. By then, however, they had already breathed in toxic fumes. One daughter has been diagnosed with cyanide poisoning and her mother tragically lost her baby.

Two of the biggest sources of hydrogen cyanide are from burning sofas and mattresses containing flame retardants (FRs), that comply with the UK's Furniture and Furnishings (Fire) (Safety) Regulations 1988 (FFRs). For at least three years, however, it has been known that in practice most sofas are ignitable.

It is possible, therefore, that in Grenfell Tower, firespread was faster, and levels of toxic fumes were higher, than they should have been. The same threat faces every single citizen in their own homes, with serious consequences for firefighters.

It used to be assumed that the FFRs were saving lives and preventing fires. But the government's evidence and

"It is possible, therefore, that in Grenfell Tower, fire-spread was faster, and levels of toxic fumes were higher, than they should have been" Trading Standards' research, published in 2014 and 2015, proved that the main ignition 'match' test fails in practice by over 80 per cent.

Failing Regulations

To quote from the 'Technical Annex' published by BIS in March 2015: 'Consumers are, in many instances, being led to believe that the furniture they buy is match resistance when it is not so in its final form... The [FFRs] rely upon a combination of ignition resistance measures; if any one of these measures is compromised it can lead to catastrophic failure of actual final composites'.

This means that the huge amounts of FRs (around one to three kg per sofa) used to meet the laboratory test requirements are also largely ineffective at preventing fires, yet their dust gets into our bloodstreams anyway. And the toxic fumes they produce from burning products seriously damage the health of firefighters too, with US evidence showing alarmingly high rates of cancer in Fire Service personnel (it is not easy to access UK figures).

In soon-to-be-published UK testing research, the bottom line shows that an EU sofa without any FR treatment is actually safer than a UK sofa with treatment, because any escape time provided by FRs (and the research shows this is far less than claimed by the industry) is outweighed by the effects of toxic fumes produced by them.

Before 2014, the justification for the FFRs lay in a statistical analysis commissioned by the Department for Business (now BEIS) in 2009, supplied by Greenstreet Berman Ltd (following an earlier analysis by the University of Surrey in 2000). It is true that the UK's fire statistics show that deaths, injuries and house fires have decreased since the late 80s. However, while these show items first ignited – sofa, mattress, etc – they do not, and clearly cannot, say what exactly saved a life from fire. DCLG officials have recently said that the decrease could be mostly, if not entirely, down to the huge increase in smoke alarms and decrease in home smoking. Indeed, fire statistics in New Zealand, which has no furniture flammability requirements, show very much the same rates of decrease as the UK.

The 2009 report claimed that around 54 lives per year were being saved by the FFRs. However, these figures were based on the assumption that the FFRs work. This report (and the preceding 2000 report) showed a steady decrease in lives saved by the FFRs – 70 in 2000 to 54 in 2009 – the reduction attributed to the other factors mentioned earlier. But, again, both reports were based on the assumption that the FFRs are effective. Now that we know they mostly are not, the figure for lives saved by the FFRs clearly needs to be drastically reduced.

If the 2009 report is still to be used as a justification, and after it is modified by the now-known faults with the FFRs, it is claiming that less than one life per year is saved by the match test. On that basis, millions of UK sofa fabrics are being treated with brominated flame retardants which start wearing off immediately we sit down. One of these, DecaBDE, is banned in the USA and listed by REACH as a 'Substance of Very High Concern' but still exists in millions of UK sofas.

'Red Tape Challenge'

In 2013, the Cabinet Office wanted to cut the FFRs under its 'Red Tape Challenge'. BIS, with the support of a wide range of stakeholders, argued that they should stay. Cabinet Office agreed but on the basis that measures were taken to reduce costs to industry. Again, at this time it was believed the FFRs were effective.

At the same time, BIS officials were becoming concerned about the growing evidence that FRs can be damaging to health and the environment. So they worked on a new match test that would reduce FRs by up to 50 per cent in cover fabrics, and open the doors for new technology to reduce them to nothing soon after, while in the process not just preserving fire safety levels but actually increasing them. They intended to next look at FRs in fillings but, for reasons that will become clear, this work has not gone ahead.

During research on the new match test, it became clear that there were problems with the current version. BIS's consultation document of 2014, backed up by the technical annex published in 2015 (thoroughly endorsed by the testing community), proves conclusively that the current match test does not work and that the new, proposed test would make furniture fire-safe.

To date, no evidence has been provided to suggest that BIS's proposals are not valid.

The 2014 proposal estimated that there could be savings of up to £50m per year for manufacturers through reduced FR use. Of course, this would mean the same level of losses to the chemical industry. So, while the consultation received positive support from over half the consultees, there were a number of negative responses from those who stood to lose from the new test.

Industry Resistance

Some elements of the furniture industry, including its trade associations, were reluctant to adopt the new test. In short, the savings manufacturers could have made were off-set by corner-cutting practices that would not be possible with the much more finely-tuned new test and which the industry obviously did not want exposed. Also, following a BBC *Fake Britain* programme a few months before the consultation, which showed major retailers' sofas and mattresses failing the ignition tests, producers told BIS they were very reluctant to be seen supporting changes to public safety measures that might save them money.

In October 2014, Stephen McPartland MP, Chair of the All-Party Parliamentary Furniture Industry Group, threatened the BIS Minister, Jo Swinson, with a judicial review if she implemented the new match test. At the same time, Andrew Stephenson MP, with a large part of the chemical treatment industry in his constituency, challenged Swinson in an Adjournment debate in similar fashion, after being briefed by industry (albeit with much that simply was not true).

In December 2014, under pressure from Oliver Letwin MP and Matthew Hancock MP, Swinson decided to delay implementation. However, she left office having instructed her officials to get the new test implemented by April 2016; but it has remained blocked.

Also in December 2014, Stephen McPartland was given a place on the board of Furniture Village and £43,000 a year (ongoing).

In August 2016, the *Sunday Times* wrote an article about the unexplained delays to the new match test. A month later, BEIS went out to consultation again. Incredibly, they included the same proposed match test as in 2014. But, no doubt through fear of criticism over unjustified delays, BEIS officials also included some other changes to the FFRs which were incomplete and controversial, thereby ensuring any changes would inevitably be further delayed, which has proved to be the case.

In July 2017, with still no consultation response from BEIS, the British Furniture Confederation wrote to the BEIS Minister, Margot James MP, to complain, and provide their own set of draft new regulations. However, these are also incomplete and badly drafted, and therefore cannot result in anything other than 'no change'.

The BFC draft also fails to recognise that the current match test and therefore the FFRs do not work. This, despite some of the same people behind the BFC's draft having advised Swinson back in February 2015 that just a bit of extra work was required on the test foam for the new match test (even though it was not). As said, Swinson left office having agreed with them, on the basis that this would mean the new match test would be implemented by April 2016 at the latest. But industry never undertook this work and is now proposing that the entire British public and our firefighters should remain at risk of death in unnecessary house fires.

With people in Grenfell killed or damaged by cyanide poisoning from inside the building, it is time to take a serious look at the FFRs and ensure they are made safe.