Could Building a Safer Future create a change in culture for the construction industry?

It is something of a sad truth that cultural change is often driven by tragedy or hardship – be it the banking sector in the wake of 2008, or regarding carbon emissions in the face of climate change.

Relating to fire safety, two fires in the 1980s – the Bradford City Football Stadium fire of 1985 and in the Kings Cross Underground Station fire two years later, which together led to 87 deaths – quickly led to specific legislation to hopefully prevent such tragedies happening again.

More recently, the Grenfell House fire in June 2017 claimed the lives of more than 80 people. The appalling incident has led to a thorough review of building regulations and the processes by which building designs are approved.

In May last year the Building a Safer Future[1] report was published – an independent review by Dame Judith Hackitt which contained 50 recommendations for the Government on how to deliver a more robust regulatory system.

In the report, Dame Hackitt calls for "*a radical rethink of the whole system and how it works.*" "*This is most definitely not just a question of the specification of cladding systems,*" she wrote, "*but of an industry that has not reflected and learned for itself, nor looked to other sectors.*"

And while the recommendations are aimed specifically at high-rise residential properties, Dame Hackitt remarks that the whole construction industry can learn from her findings, saying that "*the ideas proposed in this report have broader application to a wider range of buildings and to drive change more broadly.*"

Dame Hackitt points to four key drivers of what she calls a "*system failure*" in the construction industry.

Firstly, ignorance of regulations and guidance. Secondly, indifference, due to the motivation for time and cost efficiency. Third, a lack of clarity on roles and responsibilities. Fourth, inadequate regulatory oversight and enforcement tools.

Given that the Government, in December 2018, issued an implementation plan[2] for the recommendations of the Hackitt Review, it is fair to expect regulatory change to come shortly. The construction industry should take notice and start planning accordingly.

[1] Please visit https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707785/Building_a_Safer_Future_-_web.pdf to download

[2] Visit https://www.gov.uk/government/publications/building-a-safer-future-an-implementation-plan for more information

A background to passive fire protection

At the firewall division of ISD Solutions, we specialise in the design, installation and maintenance of some of the industry's most innovative fire protection products.

As such, we keep a keen eye on the maintenance of standards throughout the development and construction processes on projects in which we are involved.

In terms of a fire strategy for the protection of a building, our specific concern is in Passive Fire Protection (PFP) – the components, materials and systems which form or sit within the fabric of a building and which do not need energy or command to operate.

The partner of PFP is Active Fire Protection (AFP), which involves items or systems such as fire extinguishers or standpipes, sprinklers, gaseous agents and foams, detection systems such as smoke or heat sensors and hypoxic air prevention which starve the fire of oxygen.

These are all areas in which we have some expertise, however, PFP is our specialism. It is aimed at controlling the spread of fire and smoke within a given fire compartment for a prescribed period of time.

Methods by which this can be done include:

- protection of the structural frame of the building
- the use of fire-retardant coatings
- using walls, floors, ceilings and glazing which are resistant to fire
- stopping the spread of fire using penetration seals, cavity barriers, ductwork and dampers and a fireproof building envelope
- installing fire resisting doors, industrial shutters and hardware.

Each of these aspects of PFP should be carefully considered during the design phase of a building project, observed during construction and monitored the following completion to ensure that fireproofing measures retain their integrity throughout the lifespan of a building.

Consideration should be given to human behaviour in event of a fire and the basic principles of means of escape, the performance of a building in case of fire, testing procedures and assessment of manufacturers' claims regarding the performance of their products.

One would expect all of these considerations to be high priority during a construction project and, to be fair, they usually are at some stage during the process.

However, we often find – and this is something discussed during Dame Hackitt's[3] review – a disjointed approach to fire safety and a resulting vagueness in duty and responsibility which can severely compromise standards. We are therefore pleased to see that measures are being put in place to tackle these issues.

[3] See Building a Safer Future: Chapter 2; Part 1; Sections 2.9 to 2.21

How will a change in culture affect the construction industry?

Now that we know the Government plans to implement all of the recommendations of the Hackitt Review, we can begin to see how they will impact the construction industry.

Measures such as a move to support third-party certification schemes for products, also extended to installers, should be welcomed.

The disjointed nature of the construction process and the involvement of different subcontractors is a major problem in apportioning responsibility. As a result, we have seen the evidence of failing standards first hand. It can be shocking, and we witness it all too regularly.

So, we also welcome the introduction for better accountability for fire safety, ideally so that one person will have oversight of standards throughout the construction process, as well as better documentation and stricter penalties.

We echo the Association of Fire Safety Professionals, which has long been calling for a full review of Approved Document B[4] and which also welcomes the ban on desktop studies for external wall systems for all buildings in the scope of the combustible materials ban.

Together, these measures are indicative of a raising of the game, to combat what was identified by Dame Hackitt as a "*race to the bottom*" for price over standards.

It's something we welcome. As a business, ISD Solutions wants to work in an industry where specialist products and services are valued highly and are installed properly, to be compatible with quality building projects where performance is priority.

There will be understandable concerns about the cost impact of higher standards in a highly competitive sector where profit margins are already tight. However, we believe the focus should be on the benefits of the new regulatory framework.

Better design processes can reduce costs in construction phases, for example. Compromises on quality may seem to reduce costs but they are equally as likely to cause expensive mistakes which need rectifying.

Improved product testing can ensure sustained building performance, while better training and workforce competence may ensure compliance and improve efficiency.

In the long-term, there is also reputation to consider.

Reputation is not just a matter of avoiding the extremely negative impact of hitting the headlines for the wrong reasons.

Businesses with reputations for thoroughness and no compromise on safety will attract investment, recruit the best, purpose-focused talent and set themselves apart from their competitors.

All of these concepts offer undeniable benefits, but they require determination and vision to realise. At ISD Solutions we see fire safety as the ideal way to start putting them into practice.

[4] See quote from Niall Rowan, CEO of the ASFP, here https://www.ifsecglobal.com/fire-news/hackitt-plan-prescribes-changes-the-fire-community-grenfell-asfp/

Industry-leading passive fire protection expertise at ISD Solutions

ISD Solutions are proud to announce that we have achieved an industry first by completing the new Level 3 Certificate in Passive Fire Protection from the Institution of Fire Engineers (IFE)[5].

Our managing director Adrian Smith is one of only 17 people worldwide – and the first construction contractor – to have passed the course, putting him at the pinnacle of his industry.

The new qualification was developed in partnership with the Association for Specialist Fire Protection (ASFP) and involved an in-depth seven-day course followed by an arduous examination.

The course contained modules on regulation, fire strategy, active and passive protection, testing and certification, building performance, human behaviour and fire science.

Mr Smith recently became managing director at composite panel specialists ISD Solutions, having previously been Technical Director since 2010.

With Brett Harrington, manager of ISD Solutions' firewall division, aiming to complete the same IFE qualification, and with two of our project managers undergoing courses in specific fields of fire protection, ISD can boast genuine industry-leading expertise in passive fire safety.

Mr Smith said: "*As the only composite panel installation company to hold this qualification, ISD Solutions can now offer qualified, professional advice, design and – very importantly – independent consideration to an extensive range of passive fire protection solutions.*

"*ISD has been installing composite firewalls and associated fire protection systems for 19 years. We recognise the importance of fire safety and the challenge the construction industry faces in ensuring a consistent and thorough approach to maintaining standards.*

"*In light of the recent Hackitt Review following the tragedy at Grenfell Tower and with changes in legislation shifting the onus of responsibility for fire safety on building projects, the construction industry needs to be aware of the broad spectrum of factors which create a truly safe end project.*

"*If we at ISD Solutions can help lead the way in raising standards, while offering a service which is of benefit to architects, specifiers, building consultants and designers, then we are happy to do so.*

"*I'm looking forward to applying this knowledge and, with Brett Harrington and our project managers set to further their qualifications, we are excited about this new offering.*"

To find out how ISD Solutions can advise you on passive fire protection within your building project, please contact Adrian Smith on ASmith@isd-solutions.co.uk or Brett Harrington on BHarrington@isd-solutions.co.uk.

Adrian Smith – Managing Director of ISD Solutions

[5] Visit https://www.ife.org.uk/write/MediaUploads/IFE_Level_3_Certificate_in_Passive_Fire__Protection.pdf for more information