

Shouldering the responsibility

In the third instalment of their series on competency and fire engineering Mostyn Bullock BEng (Hons) CEng FIFireE and Adam Monaghan BSc (Hons) CEng MIFireE investigate those responsible for fire safety design

“It’s okay because it’s been signed off by Building Control”. How many engineers have been told this when standing on site looking at something that clearly has not been constructed according to the fire strategy or in accordance with the appropriate code or best practice guide? We would hope that most know this carries little if any weight at all on the liability trail. However, the fact that it is uttered with any sort of conviction is testament to a pervasive misconception.

Its root lies in the paucity of understanding that exists in relation to who is responsible and liable for the fire safety design, its adequacy, delivery and fitness for purpose in the active life of the building.

Simply put, all too often it appears that Building Control approval is viewed by the project team as certification of the works (design and construction). This it is most certainly not. But do project teams really understand the extent and limits of what it actually provides?

What Building Control approval effectively provides is assurance to the occupiers of new buildings that there has been some independent regulatory scrutiny of these works and that some site visits have been undertaken. The true extent to which Building Control approval protects members of the project team from the outcome of their undertakings is much more difficult to conclude. However, the extent (or lack of) of the assurance is easy illustrated by the typical statement from a Building Control body below:

‘We certify that works undertaken and approved by us have been inspected and so far as we have

“Simply by means of a common sense understanding of the delivery chain, the designer should realise that he or she remains responsible for the adequacy of their design”



A brand new car park below a multi-storey building opened in 2013. Spot the fire exit sign? It’s behind the gas pipe. Signed off by the Building Control body but the construction delivery team remains liable for this defect

been able to ascertain comply with all relevant Building Regulations and that this certificate is not conclusive evidence of compliance with the relevant Building Regulations’.

This means the certificate provided is not conclusive evidence of compliance and does not certify that the works comply with Building Regulations. This limitation has been demonstrated in cases arising from defects in buildings that come to light in buildings post-handover, even though the Building Control body has approved the design and carried out an agreed schedule of inspections with the project team. Liability for these defects almost always rests with the project team despite occasional attempts by the plaintiff to attach a degree of liability for damages on the body which provided the Building Control function. This often comes as a bit of a surprise to designers who remain legally fully responsible for the adequacy of the design and contractors who remain legally fully responsible for the adequacy of the construction of that design.

The liability is not transferred or shared with the Building Control body. When carrying out its Building Regulations approval role, the Building Control body is acting in neither the capacity of a designer or contractor. As such CDM regulations do not apply to the Building Control body in this

Technical Perspectives

role and the Building Control body will carry no professional indemnity insurance for the design or construction.

Evidence of this could be the regularity of failure of project teams to hand over meaningful fire safety information to the occupier for Regulation 38 compliance. This would go some considerable way to demonstrate the ownership of the project team for the design and delivery of the building. Instead, what seems to exist is a collective sloping of shoulders around the project team table when it comes to responsibility for fire safety with this being driven by a mixture of ignorance or unwillingness in respect of the need to do so.

Quote, with kind permission for its use, from GM Building Control:

'One of our main concerns, and it is a real worry having dealt with many of these 'FE' buildings as they are used, undergo change and alteration, is that the fire safety design information is almost never properly passed on. As BCBs we do all we can, but

the box. The designer is not expected to worry themselves whether it is okay or not because that is Building Control's job, is it not?

Well, no, it is not. If those responsible for the execution of projects thought logically about what the Building Control body actually has to do and for what fee they might realise the folly of this approach.

The Building Control body has the responsibility for reviewing the design for compliance with many different aspects of the Building Regulations (Parts A through to P), not just fire. Even very experienced Building Control professionals are not experts in all these aspects and are not able to audit the design on a peer review basis. And, even if they were, the fees for the Building Control provision do not allow for this level of scrutiny.

Therefore, simply by means of a common sense understanding of the delivery chain, the designer should realise that he or she remains responsible for the adequacy of their design.

So far this may be quite straightforward for

"The ethical imperative on a competent a professional fire engineer is to ensure that anything that he or she is submitting for said approval passes his or her own test of adequacy"

all we can get is a signed piece of paper to say the information has been passed on. Where it is passed on is rarely understood and put into practice. We get dozens of calls a year from building managers, agents, property managers, consultants, fire risk assessors asking "how does this building work?" or "This building doesn't comply with anything, why have you approved it?"

'It is clearly not our role, but we find ourselves explaining how the fire strategy design intended to building to be operated and maintained. In practice it's just not working once the Building Regulations process is completed'.

In our previous article we referred to a drift of fire safety 'design' to a position of negotiating minimum fire precautions with the Building Control body without adequate rigor or toughness. If the outcome is a design that a suitably qualified fire safety designer believes will work and is prepared to shoulder responsibility for, then all well and good. Unfortunately there is considerable pressure exerted on designers to design on the erroneous assumption that the only objective is to get the Building Regulations approval tick in

practitioners in the built environment to understand but it then gets more complicated. Who is responsible when there is no fire engineer engaged? Who is responsible for the fire safety design if the architect acts on suggestions from the Building Control body? At what point does this 'advice' begin to attract liability? What about the ongoing debate with respect to conflicts of interest under Regulation 9 of the Approved Inspector Regulations (which will we not go into further detail on in this article)?

Put very simply, if there is no fire engineer engaged on the scheme the lead designer (usually the architect) is responsible and liable. If the lead designer acts on advice from someone who is not a designer, ie. the Building Control Authority, the lead designer is responsible and liable for the outcome of this advice irrespective of their competence in relation to fire safety engineering. We doubt very much that lead designers are commonly aware of this.

The basic fact is the Building Regulation approval is important. It protects applicants from future prosecution under the Building Act. But it is certainly not the only control. How will the client

use the building? What other constraints are they working to? How will it be built, maintained and have the associated risks controlled and mitigated (CDM!)? Who controls the fire safety during construction? Who will be responsible for management procedures? ie. general and process fire precautions as required under the RRO.

The real point here is that Building Regulation approval via an appropriate Building Control body is of course required, but is actually just something that happens along the way. It is not the single defining point of the adequacy of the building, nor should it be.

There are many other misconceptions:

- “We’ve done this previously and it was okay.”
If that was the case we would never move on and highlight concerns with the status quo. There is a danger of this being received wisdom.
- “It’s got a certificate so it must be all right.”
The authors have both experienced situations recently where the “certification” does not accurately reflect a fire tested or suitably assessed arrangement and sometimes, even if it does, the scope of the certification is not relevant to the specifics of the project.
- “No one has ever told us this wasn’t okay before.”
Again, a real danger of received wisdom.
- “The product brochure says that’s it got the right level of performance.” It’s fair to say that the majority of product brochures reflect accurate performance and the manufacturers produce fire test evidence to prove performance on request. But there are some that do not and even drift dangerously close to misrepresenting the factual performance of their products. It is not the intent to single out any specific products or materials here but in the authors experience it seems greater scrutiny is needed on the claims made in relation to material performance.

Project teams need to better understand and combat these misconceptions. As discussed in our previous articles, perpetuation of the *status quo*, the potential lack of competence of those responsible and the consequent lack of scrutiny means that those who are potentially liable take decisions without adequate knowledge. Again, the fire engineering profession must do more here to educate and stand up for the right product, the right system, the right built arrangement and not bow down to flawed thinking, decision making or marketing.

So who is actually responsible and liable? Some views below.

- The client instructing the work is responsible for ensuring it is carried out in accordance with the Building Regulations. Of course this means the client needs to appoint competent teams to

“This requires a certain toughness and the competent fire engineer needs to challenge this culture and be prepared to tell people what they need to hear rather than what they would like to”

deliver (see CDM point below) so this liability is shared appropriately through the design and supply chain. Where enforcement action is taken by the local authority, punitive measures can range from a £50 fine to up to six months imprisonment. We are not lawyers but are pretty sure prosecution can extend to designers and contractors.

- Responsibility for design in accordance with the Building Regulations rests with the lead designer with assistance from the design team. This includes where specifying a specific product.
- The lead designer cascades this responsibility through the design team. Any defects would be perused through the courts by the client or whatever mechanism is in place through their contractual relationship with their consultants (collateral warranties etc).
- Build quality in accordance with the design intent is the responsibility of the contractor ie. the contractor is responsible for delivering in accordance with the Building Regulations. This includes every product, material or system they select. Is it fit for purpose? Who is competent to check and who actually does the check? Inspections by the Building Control body do not certify that the works comply.
- On-site fire safety is the responsibility of the contractor under both the RRO and CDM which is in turn enforced by the HSE. On a shared site (one that a contractor is building in working premises) responsibilities applying to the contractor under the RRO applies not only for people on their site but also in the working areas of the building. In this case the fire authority also has enforcement powers. Our experience is that this is not always properly understood and insufficient or inadequate co-ordination between Responsible Persons takes place.
- Designers are responsible for compliance with CDM Regulations though the whole project process. Clients are required to use competence as a selection criterion ie. those not competent

should not be doing the design work. Remember, our first article asked how a client knows a fire engineer is competent or not?

- Manufacturers are responsible for the performance of their specific products. They are also responsible for proving the performance through appropriately competent testing and assessment and providing accurate data for designers to use.
- The RRO is very clear on who is responsible for general and process fire precautions in occupied premises. When taking receipt of a completed building surely the occupier should request adequate documentation to show what was built? How, otherwise, would they know and be able to manage it properly? Do those undertaking the first risk assessments ask enough questions of the contractor's delivery team? Do the clients use this legislation to help themselves enough? Are they put under pressure at time of handover from those about to move in, ie. "we need to move now so accept it as it is" and thereby place themselves at risk of accepting faults and defects? Of course, the principle point of contact of enforcement of the RRO by the fire authority is with the occupier but again this is a key area where the construction industry should be held to account.
- The fire engineer is responsible for everything they have had design input into (see previous articles).
- The Building Control body is responsible as custodians of Building Regulation compliance but any statement of approval from them does not certify that the building actually complies with the Building Regulations.

So where does this leave us?

Like it or not, we increasingly find ourselves in situations where clients believe approval from the Building Control body is an acceptable measure of adequacy. Such approval is not certification and does not discharge the designer of his or her responsibility for the adequacy of their design. The ethical imperative on a competent a professional fire engineer is to ensure that anything that he or she is submitting for said approval passes his or her own test of adequacy.

As stated in our previous article, this requires a certain toughness and the competent fire engineer needs to challenge this culture and be prepared to tell people what they need to hear rather than what they would like to. If the client does not want to listen, or the authority having jurisdiction is prepared to approve something that the fire engineer does not believe is adequate, then the fire engineer needs to have the strength to walk away from the job. Where the circumstances are of sufficient concern, the fire engineer should also advise stakeholders accordingly of this decision and the reasons why. As discussed herein, if things do go horribly we ARE responsible for every decision that we have made and all the advice we have provided in our professional capacity. 🔥

Correction to article published on p25 of IFP No. 8 April 2014:

As a result of an error by the IFP editorial panel, the titles to the diagrams on page 26 were swapped round. The reader should consider the left-hand caption as applying to the right-hand diagram and vice-versa.

Membership renewal

If you have not yet paid your 2014 membership fees which were due on 1 January 2014, we hope this is an oversight and urge you to contact us today.

Unpaid memberships have now been suspended due to non-payment and therefore the *International Fire Professional* journal will not be issued. In addition, IFE post nominal should not be used whilst your membership is suspended.

If your membership fees have not yet been paid and you wish to resolve this by making prompt payment of your membership fees, please see below for information on how to do this.

Direct Members

For members who remit membership fees directly to IFE head office in the UK, payment can be made over the telephone by calling +44 (0)1789 261463

and using a credit or debit card or by sending us a sterling cheque. for information on how to do this.

International Branch Members

For members of an international IFE branch, you are requested to remit membership fees directly to your branch at your earliest opportunity. Your branch will also be able to issue your 2014 membership card and collect any change of details from you. Branch contact details can be located on our website at www.ife.org.uk/branches.

Questions about renewing your membership?

If you are an international branch member, please contact your branch in the first instance who will be happy to assist.

If you are a direct member, please contact our finance team at finance@ife.org.uk.