### project safety journal.com Autumn 2023

health, safety and wellbeing in the built environment

# Principal designers under the spotlight

HSE report reveals how well the role is working



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Safety for helmets





**Better information management** page 16

Member profile page 18

I'm convinced that demolition could be made safer. There's one obvious way that could happen – appointing demolition contractors earlier in the project to allow more time to plan
 Mike Kehoe, C&D Demolition Consultants



Why we need PPE that fits page 9



association project safety

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While we aim to use images that demonstrate best practice in this magazine, some are for illustrative purposes only.

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#### Atom Media Partners

Project Safety Journal is published for the Association of Project Safety by Atom Media Partners, 26 Bedford Square, London WC1B 3HP Telephone: +44 (0)20 7490 5595 www.atompublishing.co.uk | eva@atompublishing.co.uk

#### **Project Safety Journal**

Editor: Denise Chevin denise@atompublishing.co.uk Production editor: Sarah Cutforth Art editor: Heather Rugeley Advertising manager: Samuel Ford sam.f@atompublishing.co.uk

#### Printing

Printed by Precision Colour

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### Welcome

As the days start to shorten and the annual APS conference approaches, there is plenty to get to grips with in this issue of Project Safety Journal. By **Lesley McLeod** 

t's hard to believe the Association for Project Safety (APS) is heading into autumn already, especially when we don't seem to have had much summer. But I always like the fresh feeling you get after the annual APS conference. If you get your skates on you can still nab a ticket for this year's online extravaganza – just head to the website.

Once the big day is over, there's always a bit of a back-to-school feel. And, just as we all remember new books, pencil-cases and shoes, uniforms of another sort are in the spotlight in our opinion piece by Sandi Rhys Jones. She highlights problems women have in getting PPE that fits.

We have lots on lessons too. There's more on this season's APS webinar programme and an inspiring piece from Mike Kehoe on demolition. Mike is going to be taking a deeper CPD dive into the subject following his sellout session earlier in the year. You can keep up to date with whatever is going on at www.aps.org. uk/events – things keep changing so it's always worth a fresh look.



Lesley McLeod Association for Project Safety



Talking about taking another look at things, we have a couple of great pieces focusing on the ever-evolving Building Safety Act (BSA). Check out our lead news story on the way the regulations are panning out. Our legal update from the team at Fladgate is a must-read too. It sets out in very clear terms why the BSA matters to everyone, and not just those working on higher-risk buildings in England. There is also an update on making

There is also an update on making social housing safer and a great reminder as the days get colder and wetter and the heating goes back on – if it was ever off! – about fire regulations for roofing projects. There are CPD points to be had for the quiz following that piece too.

We have also got quite a bit about things happening at the Health and Safety Executive (HSE). There are some key reflections in our focus on recent prosecutions. And our cover story looks more widely at what we can take away from the implementation of the CDM regulations. We have a round-up of the top results of the HSE's recent review of the regulations and we hear from industry experts on their reactions to the findings. Safe to say it's a bit of a mixed bag, with some parts of the rules apparently working well where there is still work to do on others.

Certainly, one of the success stories is how CDM 2015 has helped improve information flows. This can only be a good thing and there is an interesting piece from our own Allan Binns, who – with Fran Watkins-White – represents the APS England Central region. There's more about the regions – and who to turn to in your area – when we hear from Peter Taylor who is attending meetings of the board of directors on your behalf.

Never forget APS is your association. We are there to help you all attain and maintain the knowledge to do your jobs well. But we also aspire to be a community. If there are things you want us to cover, please let us know. But, for now, as the nights definitely start to draw in, sit down with a cuppa and read on. ● Lesley McLeod is CEO of the Association for Project Safety.





## K GOVERNMENT

### Raft of new measures announced on building safety

Requirement for second staircases and new funding for cladding remediation among sweep of changes

ew buildings in England taller than 18m will require second staircases, the housing secretary has announced.

Michael Gove's Department for Levelling Up, Housing and Communities (DLUHC) has been consulting on a second staircase mandate since the end of last year.

The secretary of state said that the new 18m threshold would "provide much-desired clarity to builders" and that transitional arrangements would be put in place "to make sure that there is no disruption to housing supply".

DLUHC had mooted a 30m threshold when it first began consulting on the measure earlier his year but bodies such as the Chartered Institute of Housing backed a lower number, in line with recommendations made by the National Fire Chiefs Council.

The introduction of a second staircase requirement in London by mayor Sadiq Khan for blocks of 30m or taller has already led Michael Gove: "This responds to the call from the sector for coherence and certainty" This is a considered and gradual evolution of safety standards, which, when taken with our other reforms, ensures the safety of people in all tall buildings Michael Gove, DLUHC

to a swathe of developers taking schemes back to the drawing board.

Gove said: "This [new threshold] responds to the call from the sector for coherence and certainty. This is a considered and gradual evolution of safety standards, which, when taken with our other fire safety measures and reforms, ensures the safety of people in all tall buildings – both new and existing."

#### **Cladding costs**

In the same month, Gove also announced the full opening of the Cladding Safety Scheme (CSS) which allows costs associated with removing unsafe cladding in mid-rise buildings to be covered by government funding. This will protect leaseholders from costs where the responsible developer cannot be made to pay.

The scheme will be available to all medium-rise buildings between 11 and 18m high across England and high-rise buildings over 18m outside London where fire safety professionals have recommended that works must take place. The scheme will also be available to the social housing sector.

Meanwhile a joint statement from the DLUHC, the Building Safety Regulator, the Local Government Association and the National Fire Chiefs Council warned enforcement action would be stepped up against building owners and developers who are not remediating these buildings.

The statement said: "With the implementation of the Building Safety Act's new building safety regime, and the imminent launch of the Building Safety Regulator, we are tightening the regulatory screw. Regulators will not hesitate to take enforcement action against building owners if they do not comply with their legal duties."

In further developments, the Building Safety Regulator announced two independent provider schemes for

#### Building safety expected timetable for October

A flurry of new secondary legislation is expected in the run up to October when much of the legislation kicks in. In October 2023:

• The Building Safety Regulator (BSR) finally becomes the new building control authority for higher-risk buildings (HRBs).

• The building inspector and building control approver registers will open – with requirements relating to their registration becoming enforceable in April 2024.

• Existing HRBs need to be registered with the BSR.

• Gateways 2 and 3 for buildings in scope of the Building Safety Act are now expected to come into force – though draft legislation is awaited. Gateway 1 is already in place (since 2021), at the planning stage.

• The golden thread is expected to be in place – draft legislation and guidance is still awaited.

building control professionals wishing to take the first step in becoming registered building inspectors.

The Chartered Association of Building Engineers (CABE) and the Building Safety Competence Foundation (set up by Local Authority Building Control) have been named as the first organisations to become independent competence assessors for all building control surveyors in England.

The competence assessment is part of the pathway for building control professionals to become registered building inspectors – a key part of making building control a regulated profession.

Required by the Building Safety Act 2022, registrations will open in October 2023 and become mandatory from April 2024, when building control will officially become a regulated profession. More than 4,500 practising building control professionals will need to be assessed and certified by April 2024. ● See Legal, p20.

# Social landlords must up their game

The Social Housing (Regulation) Act 2023 will bring about a more proactive approach to standards



ew legislation aimed at improving social housing conditions became law in July 2023. It will also allow standards to be set on the competence and conduct "of all staff involved in the provision of housing management services".

The Social Housing (Regulation) Act 2023 introduces stronger regulation of social landlords and a more proactive approach to consumer regulation.

The Act enables the Regulator of Social Housing (RSH) to set standards on the provision of information and enhances requirements around tenant safety.

The legislation aims to rectify conditions in social housing that led to the Grenfell Tower fire, where 72 people died, and the death of twoyear-old Awaab Ishak following exposure to mould. Four million households (17% of all households) live in rented social housing in England.

The new qualification requirements will apply to relevant managers working for housing associations and local authority landlords, and • The Act will provide an important foundation for increasing the focus on professionalism Gavin Smart, Chartered Institute of Housing

to contracted services providers, including arms-length management organisations and tenant management organisations.

During its passage through parliament, the Act was amended to include a requirement that homes must also be energy efficient.

However, there is still no detail about how energy-efficiency measures, new homes and regeneration or remediation works will be funded.

The chief executive officer of the Chartered Institute of Housing, Gavin Smart, said: "The Act will provide an important foundation for giving tenants a greater voice, improving access to redress and increasing the focus on professionalism in the sector." •

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### Do I look safe in this?

New CIOB president **Sandi Rhys Jones** on why she is spearheading a new campaign to make better-fitting PPE available for women

he matter of poorly fitting PPE is by no means a new one and is certainly one we shouldn't need to be discussing in 2023.

But construction industry events and social media are awash with accounts from women who have had negative experiences with PPE and it's an issue I aim to address using my platform as CIOB president for 2023/24.

I first became involved in efforts to improve PPE for women in 2009, when the Purple Boots Campaign was set up by a group of women from the Women's Engineering Society, the Association of Women in Property, Women and Manual Trades, Women into Science and Engineering (WISE) and Arup.

We carried out a safety survey on properly fitting PPE and collaborated with Dunlop to produce safety footwear – but, despite efforts, there was little progress beyond this.

Roll on nearly 15 years and my interest was reignited after reading a LinkedIn post from an engineer friend voicing concerns over her daughter not being provided with appropriate fireproof PPE until her welding course was almost completed.



Sandi Rhys Jones CIOB president The post led me to expand the work I was doing with an internal working group at CIOB, and a survey was carried out. It revealed that 46% of respondents (both male and female) said the PPE they were given did not fit properly, while almost half of female respondents said they can never find PPE specially designed for women.

The next step was to work with Construction Management magazine and CIOB People to bring together a round table of people from the industry to share a wealth of experience and, importantly, to identify actions.

It became clear that there are some manufacturers producing PPE designed for women, but there are significant blockers to sourcing it.

Employers need to review their purchasing of PPE. Too many women are unable to find suitable clothing from company supplies and are buying their own directly. One male construction manager told me that he personally sources appropriate PPE for women in the company, as the supplier doesn't provide it.

Yet ill-fitting kit is detrimental to safety. Big gloves and overlong

#### It amazes me that we expect anyone to want to work in our industry when we can't give them the basic kit to keep them safe

sleeves are a problem when operating machinery. One round table participant – Katie Kelleher, an experienced crawler crane driver who is now technical and development officer at the Construction Plant-hire Association – told us about wearing ill-fitting boots that caused plantar fasciitis.

Harnesses and belts cause rubbing and abrasion. Helmets and hard hats rarely come in small sizes and have been modelled on the face/head shapes of white men. Because of the discomfort and inconvenience, at times the temptation is for people not to wear ill-fitting PPE, which puts them at risk.

Stephanie Eynon, head of standardsmakers engagement and inclusion at BSI, says: "The round table has helped me think about the part standards play and the opportunities to improve. These may be standards providing better for guidance for employers on how to manage the process of acquiring the right PPE or perhaps standards for the products themselves."

It amazes me that we expect anyone to want to work in our industry when we can't give them the basic kit to keep them safe.

This isn't just an issue faced by women, but also by people for whom standard PPE isn't compatible with body shape and size, religious headwear or other clothing. Nor is it a problem purely for construction. Hospitality, healthcare, emergency services and sport are all sectors where there are issues with PPE provision.

We need to attract more people, we need to acknowledge that we're all different shapes and sizes and we need to keep people safe. As Helen Gawor, director of strategy and innovation at ISG, emphasises, properly fitting PPE is not an aesthetics issue, it is a safety issue. The solution is: think it, not "shrink it and pink it".

I have a year as president ahead of me and I look forward to working with other organisations and institutions to bring about practical change. The #PPEthatfits campaign will, I hope, be a legacy of my time in office. ● Sandi Rhys Jones OBE DLitt PGDip FCIOB FWES MCIM ACIArb is president of CIOB.



# Principal designers and CDM: under the spotlight

How well are principal designers fulfilling their role under the CDM regulations? And how could it be improved? We begin with a look at the findings of new HSE research and ask experts for their views

#### Clients need to recognise the benefits PDs can bring to projects and ensure they unlock this by adequately resourcing and enabling this aspect **HSE** spokesperson

he principal designer (PD) role was introduced when the Construction (Design and Management) Regulations were updated in 2015.

This was to provide a replacement for the role of CDM coordinator with the PD having responsibility for coordination of health and safety during the preconstruction phase. PDs must plan, manage, monitor and coordinate health and safety in the pre-construction (design) phase of a project.

A reason for the change at the time was to give responsibility for CDM during the design phase to an individual that can influence the design.

But exactly what activities are PDs carrying out? And to what extent is the PD role operating in comparison to the functions set out in the CDM Regulations 2015?

To gain more insight, and to help it to understand how the role was working in practice, the HSE commissioned consultants to carry out a wide-ranging review.

The survey was conducted between February and March 2021 and the report published in June 2023. The findings were based on answers from 849 respondents who completed a structured survey. It should be noted not every respondent answered all the questions. Information from 20 stakeholder organisations was also included.

Compliance with the functions set out in the CDM Regulations 2015 is variable. Answers indicated, for example. that:

• 62% of PDs were appointed at the concept design stage, with 27% appointed after this when many key design decisions had been taken; nearly three-guarters agreed the PD understood the

oversight role and ensured that health and safety was an integral consideration in design;

 nearly seven in 10 (69%) agreed that the PD interacted with designers and client-appointed designers to mitigate risks. This



Other roles undertaken by the organisation whose main duty role was PD

Percentage of respondents who agreed that the PD held design review meetings

dropped to 38% for temporary works designers - indicating things were not working as well there;

• two-thirds (66%) agreed that the PD held design review meetings and about the same number (68%) agreed they had a process to consider and resolve any issues raised;

• 71% agreed the PD made sure that the client was aware of the importance of preconstruction information: and

• 68% agreed the PD had identified the need for the principal contractor to have the right information at the right time, though only 40% agreed that the PD interacted with the temporary works designers again highlighting an issue with this particular interface.

According to the results the role of the PD was considered a success in a number of aspects. These are:

• early consideration of design/health and safety:

 better coordination and communication between different teams/dutyholders;

 improved integration of safety and design:

• more understanding/awareness of design risk; and

• improved project information. On the other side of the coin,

areas were identified where more focus is needed:

there is a need for more designer-

led design risk management; • the current understanding of the PD

role is not always sufficient;

• some PDs are not empowered or given the authority to undertake the role and may not be 'in control' of the preconstruction phase;

contracts and procurement routes

influence how the PD role is undertaken; some organisations are more willing to undertake the PD role than others generally, the respondents suggested

that designers/architects do not want to take on the PD role; the PD is perceived by some to be

a low-value role;

 not all those with PD duties have integrated the PD role within their organisation:

 PDs' interaction with temporary works needs to increase; and • the potential value of BIM is only

being realised on some projects. Asked what the HSE is taking from

the findings, a spokesperson said: "The report provides further insight into the range of interconnected factors influencing the effectiveness of PDs during the preconstruction phase. Clients need to recognise the benefits PDs can bring to projects and ensure they unlock this by adequately resourcing and enabling this aspect of preconstruction decision-making. PDs need to better enable designer-led risk management at preconstruction."

They added: "HSE is using insight from this report to inform approaches that improve implementation and enable other industry developments like modern methods of construction (MMC) and the drive to net zero and digitalisation." >



**66** The HSE's desire to see

the architect take on the PD

APS president elect and head of membership

role has not materialised

Mark Snelling and Andrew Leslie,

There were few surprises in the report

and results reflect what our members

have been telling us. But there were a

number of headline takeaways for us:

 the PD rarely gets involved with temporary works designers;

architects are not keen on taking

• around a fifth (19%) of respondents

did not consider the PD to be in control

of the preconstruction phase. Given

that the PD is "a designer with control

principal designer", this appears to be

over the preconstruction phase as

there is not much happening

on domestic projects; and

• there are issues with

design and build;

on the PD role;

Mark Snelling, managing director, Armfield Project Management, and APS president elect (left) and APS head of membership Andrew Leslie

Percentage of

respondents

who did not

consider the

PD to be in

construction

control of

the pre-

phase



PD activity 'complete design risk assessment'. Yet, it is a designer's duty to identify risks associated with their design, not that of the PD.

The Hackitt report praised the effectiveness of the CDM regulations in achieving a culture change in health and safety. In 2018 someone seems to have persuaded Dame Judith Hackitt that CDM 2015 had been a great success. As a result, the new dutyholders in relation to building regulation compliance – Building Safety Act 2022 (BSA) etc – will be modelled on CDM 2015.

This research piece indicates that the culture change aimed for has not been fully realised and has significant variation from sector to sector and typology to typology. It is patchy to say the least. The report does not touch on the relationship the PD CDM is likely to have with the new PD BSA.

Once again, the HSE's desire to see the architect take on the PD role has not materialised across the board. The greatest missed objective under CDM 2015 is that the PD role would be taken up by one of the 'design team'. The report confirms that a significant number of PDs are not the project's lead technical designer.

Finally, there is a remarkably high percentage indicating that health and safety file (HSF) information gathering, and outcomes were effective, and the HSF files were to a good standard.

This conflicts with feedback received by APS from members, which highlights difficulties at the early stages of a project. There are also further issues when getting the principal contractor (PC) and designers to provide information for the HSF when final compilation is taking place. More often than not this drags on well after practical completion and into occupation.

Generally, the report has gathered some interesting statistics, but gives the impression of having been edited to exclude more obvious critical responses.



Other roles held by the PD on a project

a significant failing within the industry. The indicator of health and safety capability, observed by the largest number of respondents (49%), was a 'track record of construction design and health and safety risk management skills, knowledge and experience'.

PDs need to work within the legal framework set out by the CDM Regulations 2015 but also understand the requirements of relevant construction health and safety legislation. While it is not impossible to learn this through self-study, it is alarming that half of the industry feels practitioners need no formal training in this area.

Another concerning outcome appears to be the tendency for clients, through ignorance of the PD role, to appoint PDs based on (low) fees, to the exclusion of quality and performance.

One key statement identified the need for more designer-led design risk management. This is reinforced by Table 4-1, which shows the following



The roles of the CDMC and planning supervisor were flawed but I am yet to be convinced that the replacement with the PD was the right thing to do

Samantha Mepham, national head of health and safety, RLB UK Although there are many areas of the survey findings that I agree with, for me the report demonstrates a fundamental issue with the PD and CDM Regulations 2015 in general and the 'one size fits all' mentality.

In my role as head of health & safety at RLB, I have witnessed, as the survey indicates, the principles of CDM applying well with large, engineer-led projects, but this does not always translate to projects outside that sector.

Most designs in engineer-led projects are inherently safe – they do not work unless they are. For the other projects – less systems-driven – it can feel like health and safety needs to be added, in addition to many other priorities.

The survey states that some stakeholders expressed concern that competencies were lacking. In particular, designers lacked health and safety competencies and health and safety practitioners had no design experience.

Grenfell has shown us that building regulations alone do not always capture the practical application of health and safety, whether it impacts buildability or in occupational use.

CDM is also often oversimplified but having knowledge of the CDM regulations is not enough for health and safety competence.

A competent PD should certainly have design knowledge and experience, but they should also understand and know how to apply the multiple pieces of health and safety legislation needed to support implementation. This is something that can't be covered on a two-day PD course alone.

The roles of the CDM coordinator (CDMC) and planning supervisor were flawed but I am yet to be convinced that the philosophy behind the replacement with the PD was the right thing to do, especially when citing that a key benefit of removing the CDMC was cost savings.

It was unrealistic to assume that a lead designer would take on the role and liability without financial reimbursement that equalled/ exceeded existing charges.

The survey explains that others can/are appointed to assist both the client and PD, meaning there have been potentially three roles created to replace one, which does not seem cost effective.

CDM 2015 requires everyone to prioritise health and safety, but it is inevitably going to be 'watered down' when competing with other priorities – and, furthermore, put at risk when you remove the role that had the sole focus on health and safety.

#### Where a CDM adviser was appointed

CDM adviser appointed by	Yes	No	Don't know
Client	43%	<b>52%</b>	5%
PD	<b>24%</b>	70%	6%
Principal contractor	<b>24%</b>	65%	11%

#### • The iron curtain between PDs and temporary works designers is yet to be lifted

**Peter Waxman,** project director, Gleeds Health and Safety and APS regional representative for England South



It's really positive that nearly 850 people gave up time to respond to the questionnaire. However, due to the multiplicity of questions, some responses appear to contradict others. Many readers of the report will take away different messages.

It's encouraging that nearly 75% of the respondents stated that they consider that PDs have a detailed knowledge of the general principles of prevention and that around 33% agreed that PDs hold design review meetings and have a process in place to resolve the issues raised.

It is also reassuring to read that it is generally acknowledged that the value the PD role can potentially bring to future projects is high or moderately high.

A less positive aspect is that, although the report notes that the element of control over the design is the fundamental difference between the CDM 2015 PD role and previous iterations of the CDM regulations, respondents said other organisations, including health and safety consultants, are more likely to perform the role than architects.

Where the role of the client was asked about, it was unfortunate to see negative commentary, including: ● "Stakeholders indicated that the PD role was not well understood by some clients"; ►

## 69

Percentage of respondents who agreed that PDs interact with designers to mitigate risks

Percentage of PDs appointed later than the concept design stage "The culture amongst clients and the design professions does not encourage the PD as a single point of control over the preconstruction phase"; and
"Once the client believes they have discharged their duties by appointing a PD, it was suggested that there was little reason for them to prioritise the role further".

Other points to note are that the iron curtain between PDs and temporary works designers is yet to be lifted, and that PDs give greater emphasis to the elimination and reduction of construction risks rather than those arising from maintenance and cleaning.

To sum up, despite knowing that we still have a long way to go, the responses recognise that team members are increasingly valuing the importance of CDM to project success.

Going forward, the alignment of CDM to the building regulations aims to encourage the PD role to be undertaken by the architect on a project. Together with the other requirements of the Building Safety Act and subsidiary regulations, this will hopefully strengthen our positive influence on construction projects.

### Potential solutions proposed for overcoming the challenges of implementing the PD role (per response)



### 66 Issues relating to PD authority, empowerment and control may be exacerbated in design and build projects

Steve Coppin, strategic technical consultant



As might be expected, many key responses broadly reflect the issues that PDs have been experiencing for some time.

What came across clearly was the fact that procurement routes and forms of contract influence how the PD role is undertaken and issues relating to PD authority, empowerment and control may be exacerbated in design and build (D&B) projects.

If a PD sits outside of the D&B contract, perhaps as an adviser to the client, the impact on the project will be hampered – as the D&B contractor's focus is on an efficient approach to construction where an external PD may be perceived to 'just get in the way' with no added value.

In some projects, the PD is not invited to the contractor's design review meetings. This indicates that further focus could be directed at how PD appointments work in a range of contractual situations.

In addition, if the D&B contractor runs the design via its design manager/ contracts manager, this may limit the PD's contact with the contractor's design team. Again, focus could be directed at how PD appointments work in a range of contractual situations.

The PD role was seen by some as another service that could easily be offered by health and safety consultants. Respondents suggested that some designers do not want to take on the PD role. **40** Percentage of

respondents who agreed that the PD interacted with the temporary works designers Others highlighted the increasing cost of obtaining PI insurance as a barrier to designers taking on the PD role. This contributes to the bundling of the PD role with other professional construction services and/or the role being filled by 'cheaper' alternatives.

More positively, it is good to see that the promotion of designer-led design risk management meant that the PD role was embedded in some design organisations and there was more awareness of the implications of design decisions.

On some projects, more thought was going into preconstruction, such as better preconstruction information. RIBA has developed templates and practical guides to help its membership discharge their designer and PD duties. Other design-oriented professional institutions, whose members regularly undertake the PD role, could consider similar initiatives.

The research was conducted by Mike Webster of MPW R&R with assistance from Richard Roles of RJ Roels and Natasha Perry of Catchfly. *Implementation of the Principal Designer Role within CDM 2015* can be downloaded at www.hse.gov.uk/research/rrpdf/rr1198.pdf. A full breakdown is available as a technical appendix, from which the charts were taken: http://mpwrandr.co.uk/implementation-of-the-cdm-2015-principal-designer-role.

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# Better information = safer occupation

**Allan Binns**, safety director at Ryder Architecture, APS regional representative for the England Central region and executive of the Building Safety Alliance, explains how better information management equates to safer buildings and examines the role CDM has to play in keeping residents safe



n preparation for the Building Safety Act, the safety team at Ryder Architecture has partnered with its digital counterpart at sister company BIM Academy. This unique collaboration between safety and digital primarily exists to support 'accountable persons' with the development of building safety cases for their new and existing high-rise residential buildings.

Creating a building safety case, a structured argument why a building is safe for occupation, can be complicated and time-consuming. To help building owners navigate this, Ryder and BIM Academy developed a guide (*How to Develop a Building Safety Case: 4 stages to compliance*) providing an overview of the steps required to define, gather and maintain the information required.



Allan Binns Safety director, Ryder Architecture

#### Format

As a robust argument, a building safety case has to be up to date at all times. This means that every time you make a change to your building – big or small – you will need to update the relevant information. For this reason, a building safety case needs to be editable and, ultimately, digital.

However, not all asset owners are digitally enabled. It is therefore important to consider the minimum viable solution when establishing the information requirements for a building safety case. This is a primary concern of the Building Safety Alliance, defining – at a base level – what information is needed and in what format.

This is understood to be a balancing act. There is a danger in thinking that

PDFs – because they are digital – will be sufficient and so, for those of us involved in design and construction, it will be business as usual.

As a universal standard, PDFs work well to communicate as-built information at a set point in time and in an accessible format. However, they are difficult to modify and are therefore not well suited to the needs of a building safety case.

If not maintained, as-built information starts to lose value from the second it is handed over. It is essential that we work with accountable persons at the start of a project to understand their competence and their systems so we can best support their needs.

Particular thought should be given to how residents, and those actively

#### **66** A building safety case has to be up to date at all times. This means that every time you make a change to your building big or small - you will need to update the relevant information

involved in maintaining the building, will input to the building safety case. They have a key role to play, raising safety concerns and documenting routine inspections respectively.

#### Content

The information to be included in a building safety case depends on the building. Each case will be assessed on its own merits by the Building Safety Regulator. There is no checklist.

The criteria that a case will be assessed against, however, are somewhat clearer. A building will be understood as safe for occupation if the accountable person can demonstrate all reasonable steps to mitigate building safety risks have been taken. In this context, building safety risks are defined as the spread of fire and structural failure.

To support asset owners with their new duties, PAS 8673 (Built Environment - Competence requirements for the management of safety in residential buildings -Specification) sets out a competence framework for the management of safety in residential buildings.

PAS 8673 is not limited to high-rise residential buildings - it is concerned with all residential buildings. In addition, the scope for managing safety is not limited to 'building safety risks', but also considers public health and public safety as part of a building owner's remit.

If we are to properly manage the safety of those residing in residential buildings, we may need to think more holistically about what information is needed.

#### CDM

Considering the advent of the new principal designer associated with the Building Safety Act, we may question the role the Construction (Design and Management) Regulations 2015 (CDM) have to play in all of this.

CDM principal designers have an overarching duty to plan, manage, monitor and coordinate matters relating to health and safety in the preconstruction phase.

By way of a crude summary, this means overseeing the design process and ensuring the designers working on the project - those people who are preparing and modifying designs - are complying with Regulation 9 of the CDM Regulations 2015.

Regulation 9 requires them to take into account the general principles of prevention, and any preconstruction information, to eliminate foreseeable risks from the project - so far as reasonably practicable.

The role is not just concerned with the design phase and how potential buildability issues may affect construction - it also engages with occupation, with a specific focus on cleaning and maintenance.

The information required to support occupation is provided in the health and safety file. In accordance with Appendix 4 of L153 (CDM Regulations 2015), a health and safety file should contain information regarding residual risks, key structural principles, hazardous materials used, the removal or dismantling of installed plant and equipment, cleaning or maintaining the structure, the nature, location and markings of significant services and means of safe access/egress.

Considering the broad church of safety concerns set out by PAS 8673, it is foreseeable that the majority of the information required for a health and safety file will also be needed to develop a building safety case. With this notable overlap, CDM will have to evolve - not just to have the right people for the right job at the right time, but to ensure that they also have the right information in the right format.

#### Better information management

When asking designers to demonstrate compliance against Regulation 9, CDM principal designers are often greeted with a designer's risk assessment (DRA), telling them - in one long breath - what the hazard is, what the risk is, who is at risk, what the likelihood of it happening is, what the consequence would be and how they're going to mitigate it.

This approach circumvents the meaningful conversations we should be having about design risk management, presenting design decisions as an openand-shut case and reducing the process to something purely bureaucratic.

The inconsistent format in which design risk information is shared is also problematic. DRAs come in many forms - mostly as PDFs, others favouring a qualitative approach. Seldom are two alike. This lack of consistency makes the information difficult to collate, hampering a CDM principal designer's ability to plan, manage and monitor the process.

None of this is the designer's fault. Unless CDM principal designers establish clear information requirements - the information needed and the format - this issue will persist.

Beyond the toilsome nature of this process, the concern is that this inconsistent and uneditable information will ultimately end up forming part of the golden thread - potentially undermining its integrity.

It is therefore crucial that CDM consultants start playing a more central role in the development of building information management execution plans. This means setting out clear expectations and information requirements to ensure that the information received is in a consistent, editable format - ready to support a building safety case.



Capital phase

Below: The value

of as-built versus

represent the effort

required in terms

of time, cost and

resource, so the

bigger the circle.

the more perceived

effort is required to

undertake the task

verification of fire

require less effort

stoppers would

indicated

For example.

than building

adaptation

as-maintained

information

The circles

Post-handover activity (Size = amount of effort/ resources required)

#### 1. Fire door closure replacement

2. Retrofit sprinkler system 3. Fire extinguisher servicing

4. Building adaptation

5. Installation of electric vehicle charging points

- 6. Fire-stopping verification 7. Boiler replacement
- 8. Re-cladding

# 'Demolition is now a fast-moving industry'

Mike Kehoe, managing director at C&D Demolition Consultants, tells **Denise Chevin** how the use of advanced technology is changing the industry and highlights the importance of appointing demolition contractors early



#### Tell us about yourself and your company.

I'm managing director at C&D Demolition Consultants – we advise clients on strategies for demolition and oversee demolition, but don't do demolition ourselves. I've been in the demolition industry for 35 years, with 25 of those years at director and managing director level. I've been an APS member for many years.

C&D Demolition is one of the few companies around the world that offers third-party explosive expertise for explosive demolition. And we also offer consultancy services for dealing with asbestos. We're not a huge company – seven engineers and one student engineer, plus three support staff. We're based in Liverpool and have another office in London. We've also recently opened an office in Qatar, as we've been working there quite extensively in the energy sector.

#### Tell us a bit more about what C&D does.

Demolition is reverse engineering, so we look at the way a structure has been constructed and advise on how it can be demolished safely. We also handle all the logistical constraints that go with demolition, particularly • Things are changing – and they have to if we don't want to stagnate Mike Kehoe, C&D Demolition Consultants in built-up areas. When we demolish a tall building in the centre of London, for example, we have to deal with London Underground or sometimes Network Rail and often the local road authorities when we're working in city centres.

We also carry out a lot of principal designer work in large asbestos removal and explosive demolition.

Our role is to act as a conduit between the client and the contractor. We make sure the client is getting the right advice. And, when we act as a principal designer, we ensure the client is giving the right information to the contractor to ensure the work gets done safely. Likewise, we ensure the contractor is giving the correct information back to the client.

#### How did you get into demolition?

I'm a third-generation demolition contractor. My grandfather started a demolition company and my father worked for him. We're now a fourthgeneration firm as my son has joined. He's just finished his construction degree at John Moores University.

I left school without any qualifications at 16 to work with my father, but at 17 he sent me back to school to do my O-levels. And, when I was working on site again, he sent me back to do my A-levels at night school. And then, when I'd got those, he said: "You need to go back and do a degree."

So I did a part-time degree for five years at John Moores University in Liverpool, which I can tell you was difficult! And I've recently completed a master's degree from the University of Wolverhampton in sustainable demolition. I was one of the first people in the world to get that qualification.

I think it's so important to keep learning, and dismantling building components as we embrace the circular economy will be key.

#### **6** It's important to keep learning as we embrace the circular economy Mike Kehoe, C&D Demolition Consultants

Talk us through some of the particularly challenging demolition jobs you've worked on.

One that comes quickly to mind took place in August 2016. An overloaded lorry hit a pedestrian bridge spanning the M20 close to Maidstone and near the junction with the M26, causing it to collapse on to the motorway. That closed the main route to the Channel Tunnel and Port of Dover.

It happened on a Saturday. I was appointed on the following Thursday and asked to design a methodology that would clear the collapsed bridge. We had 36 hours to demolish the bridge so that the M20 could be reopened and not delay traffic to the port. Despite the pressure, we managed it in 18 hours.

We've been lucky enough to win a World Demolition Award on three occasions. I'm pretty sure we're the only consultancy company to have done that. One of those awards was for our work on the demolition of a large structure in St Helier, the capital of Jersey. This was a cable car built in the 1960s which used to take the tourists and people off to a fort on the highest point of St Helier.

There were lots of houses underneath it, so we couldn't just knock it down in one go. It had to be disassembled bit by bit and the sections taken down individually through the floors of the fort.

Another job we're very proud of was demolishing a 32-floor tower block in central Glasgow, when we used a never-been-used-before method in the UK – a top-down system – in collaboration with an Italian demolition company.

The conventional demolition approach is to erect scaffolding around a building and then take it down by floor by floor. Instead, though, we created an enclosed structure with three floors and hydraulic legs. We could use it to move down one floor of the building at a time and keep all the demolished material inside the structure. So no scaffolding, no noise and no dust. It's now starting to be used all around the world.

#### That's very innovative. Are there any other developments you think could improve demolition?

I'm convinced that demolition could be made safer. There's one obvious way that could happen – appointing demolition contractors earlier in the project to allow more time to plan. Too often, demolition contractors are appointed on Friday and told to start on Monday – that is a recipe for disaster.

Early engagement was one of the key principles in the changes brought about when CDM [the Construction (Design and Management) Regulations] were amended in 2015. Generally speaking, that has had a massive impact on the demolition process. But even now contractors are not always given enough planning time.

#### Demolition's image was always very macho – is that still the case? And what's the reality?

The perception of demolition as a dirty industry with unsafe practices is completely out of date. This is now a fast-moving industry using advanced technology including robotics and remote control equipment.

We're often told that young people – the Xbox generation – can't work well. But from our point of view we want Xbox people to operate our machines because we use similar consoles to an Xbox. So we're trying to encourage young people, of all genders, to join the industry. I'm really keen to share all the knowledge I have – it's very important to me.

Demolition has traditionally been known as a male industry but we're seeing more women now – including site managers. Just recently, a





C&D Demolition Consultants devised the strategy to clear the collapsed M20 bridge in Kent woman won the site manager of the year award. So, yes, things are changing – and they have to if we don't want to stagnate.

#### What do you do outside of work?

I've been a mad keen Everton supporter for 51 years and go regularly with my son. I play golf. And I enjoy reading thrillers – Michael Connelly is my favourite author. ● Mike Kehoe is leading the APS CPD events programme for autumn. More details can be found on p30.

#### **CV: Mike Kehoe**

• 2018 to present: Managing director, C&D Demolition Consultants

• 2012-18: Demolition consultant, C&D Demolition Consultants

• 2011-12: Demolition consultant, The Connell Group

• 2008-09: Heavy lift consultant, Techlift UK

• 2005-08: Managing director, Castlebridge Developments

• 1986-2005: Contracts director, Powell Demolition



## Why the Building Safety Act matters for everyone

The Building Safety Act and its secondary legislation can apply across all types of buildings, not just high-rise residential buildings, explain **Christian Charles** and **Ian Smith**, partner and senior associate with Fladgate

he Building Safety Act 2022 (BSA) received Royal Assent on 28 April 2022. Its provisions have been implemented and supplemented by a raft of secondary legislation over the past 15 months.

The stated aim of the BSA is to "secure the safety of people in or about buildings and to improve the standard of buildings" throughout the development stage from design and construction through to occupation.

Given that the BSA emerged from the Grenfell Tower tragedy in June 2017, and the subsequent review of the building regulations and fire safety in high-rise residential buildings, it is unsurprising that higher-risk buildings and leaseholder protections have received the most political and media attention.

However, the BSA applies more broadly, and to differing extents, to: • higher-risk buildings – multioccupancy residential buildings over 18m in height or at least seven storeys and containing at least two residential units (there are slightly different definitions for the design/construction phase and the occupation phase);

 relevant buildings – multi-occupancy residential buildings over 11m in height or at least five storeys; and
 all buildings, whether

residential or not.

This article considers some of the ways in which the BSA affects the construction and occupation of buildings which do not meet the definition of a higher-risk or relevant building.

#### Safety and performance standards

The BSA establishes a new Building Safety Regulator (the regulator) within the Health and Safety Executive (HSE). The regulator has extensive



Christian Charles Partner, Fladgate

**66** All dutyholders will need to comply with the BSA competence requirements for all construction projects new powers of regulation, inspection and enforcement.

The regulator has a more prominent role in the supervision and oversight of higher-risk buildings. However, it is also responsible for overseeing the safety and performance standards of all buildings and supervising the building control sector to ensure necessary building standards are achieved.

The BSA places responsibility on clients, designers and contractors to be competent in order to meet compliance with the building regulations for all buildings.

All dutyholders will need to comply with the BSA competence requirements for all construction projects.

In this context, it should be noted that 'principal designer' for the purposes of building regulations is not the same as 'principal designer'



under the Construction (Design and Management) Regulations 2015 (CDM).

While the same party could be appointed for both roles – and this may be the preferred option to avoid confusion and have one point of responsibility – a principal designer for the purposes of the BSA should be part of the design team and have the ability to coordinate that team. This may not be the case for existing 'principal designers' under CDM.

#### **Extended limitation periods**

The BSA significantly extends the limitation period for claims brought under the Defective Premises Act 1972 and section 38 of the Building Act 1984.

The Defective Premises Act applies to all residential buildings regardless of height, where the defect in question renders the dwelling or dwellings unfit for habitation.

The government actually has yet to bring into force section 38 of the Building Act 1984, allowing a claim to be made. When in force, individuals will have the right to claim damages where they suffer loss due to building work failing to meet the required standards under building regulations.

That right is not limited to residential properties of high-rise buildings: it applies to all buildings.

#### **Construction products**

The BSA also includes provisions so that all construction products marketed in the UK will fall under a regulatory framework.



lan Smith Senior associate, Fladgate

**66** The BSA includes provisions so that all construction products marketed in the UK will fall under a regulatory framework This is intended to permit products to be withdrawn from the UK market (or other requirement imposed) if they are discovered to present a risk to the health or safety of persons.

In regulating construction products used in the UK market and in all buildings, the BSA creates the following two classes of product: • products with designated standards – products regulated by EU harmonised standards or international standards; and • safety-critical products – products that the government can place on a statutory list and regulate separately.

Safety-critical products should not fall into the category of having designated standards and the secretary of state must have the view that any failure of the product would risk causing death or serious injury to any person.

The BSA intends a new enforcement regime with new enforcement powers to be created in relation to construction products. The eventual intention is for there to be a national regulator for construction products.

Breach of construction product regulations would have civil penalties and the potential of being a criminal offence.

#### What's next?

The timetable for implementation of the provisions of the BSA is still ongoing. Most notably, registration with the regulator of existing higher-risk buildings must have taken place by October 2023. In a press release dated 23 February 2023, the HSE made it clear:

"The registration process is a crucial stage in setting up the new building safety regime. Registering buildings in scope will be a legal requirement and owners and managers who fail to comply by October 2023 will be investigated and may face prosecution."

On 17 July 2023, the regulator announced that the Building Safety Competence Foundation and the Chartered Association of Building Engineers were the first organisations to become independent competence assessors for all building control surveyors in England.

The assessment is necessary for building control professionals to become registered building inspectors. They will need to be assessed and certified by April 2024.

Without assessment and certification, they will not be able to work in building control across the whole built environment in England.

This area is fast moving, with frequent new announcements and secondary legislation still to come. It is therefore vital that construction professionals continue to monitor the BSA and its secondary legislation given the impact and implications for numerous parties and all types of buildings – not just high-rise residential buildings. ●

#### Note on the BSA's jurisdiction

• The Regulator does not have oversight of the Building Control sector in Scotland, Wales, or Northern Ireland. However, this situation may change in future.

• The Defective Premises Act 1972 does not apply in Scotland or Northern Ireland.

• Some sections of the Act relating to construction products do not apply in Northern Ireland.

• The registration of HRBs with the Regulator currently applies only in England.

• The Act's explanatory notes include a table at Annex A that sets out the jurisdictional scope of each provision of the Act.

• If required, legal advice should be obtained as to applicability in different jurisdictions.

## Fire regulations for commercial roofing

In this CPD, Garland UK explains which fire regulations you should be aware of in regard to commercial roofing



CPD

Left: Garland UK refurbished the flat roof of the Midland Hotel, Manchester



In association with

n May 2018, *Building a Safer Future*, the final report of the Independent Review of Building Regulations and Fire Safety, more commonly known as the Hackitt review, was published. It laid out more than 50 recommendations to create a more robust regulatory framework for the building industry as a whole, with particular focus on fire safety.

The government began conducting consultations within the industry to work out how to implement these effectively. This has led to incremental updates to the building regulations by introducing new legislation, such as the Fire Safety Act 2021 and the Building Safety Act 2022.

These have significantly changed the regulatory rules and responsibilities for fire safety in a relatively short time. The latest amendments to Approved Document B were released on 1 December 2022 with a six-month transition period which ended on 1 June 2023. It is essential to get up to speed with current fire regulations and how they apply to commercial roofing.

#### **Approved Document B**

Approved Document B (ADB) explains how to fulfil the requirements for fire safety in the building regulations. It is divided into ADB Volume 1 (Dwellings) and Volume 2 (Buildings other than Dwellings). Requirement B3: Internal Fire Spread (Structure) and Requirement B4: External Fire Spread dictate the requirements that apply to the building envelope, external walls and roofing.

ADB's last full update was in 2019 in an attempt to make the document easier to understand and to introduce the new Regulation 7(2) of the building regulations. This banned combustible materials in or on external walls of the newly defined 'relevant buildings'.

In most cases, combustible materials should also not be used on the newly defined 'specified attachments', which include elements In most cases, combustible materials should not be used on 'specified attachments', which include elements attached to external walls, most notably balconies attached to the external walls of a building, most notably balconies. The Liquid Roofing and

Waterproofing Association (LRWA), National Federation of Roofing Contractors (NFRC) and Single Ply Roofing Association (SPRA) have produced a useful guidance document (*Changes in regulations and Approved Documents relating to fire safety for flat roofs on 'relevant buildings' in England*) to clarify the changes. It was amended in 2020 and, again, in December 2022.

#### **Relevant building**

A 'relevant building' is any building that is 18m above ground level and contains one or more dwellings, an institution or a room for residential purposes. It now also includes student accommodation, care homes, sheltered housing, hospitals, dormitories in boarding schools, hotels, hostels and boarding houses.

In fact, for all intents and purposes, no residential building above 11m from ground level can now use any combustible materials in or on external walls.



#### **Specified attachments**

<sup>1</sup>Specified attachments' is a new term that has caused a great deal of confusion: what should be considered a flat roof and what should be considered a balcony? It appears to contradict the European Commission Directive 2000/553/EC and Regulation 7(3) if the definition of a balcony is deemed to include an insulated roof. The flat roofing industry, working with other relevant bodies, has come to a common understanding, which is now also mirrored in BS 8579:2020 Guide to the Design of Balconies and Terraces.

Attached balconies are differentiated from roof terraces in that they are not habited and conditioned spaces. They are usually bolted to or cantilevered from the external wall. Also included are most inset balconies. For the purposes of ADB, balconies are not deemed to be roofs unless designated to provide means of escape.

For areas that are correctly deemed to be balconies, that is, 'specified attachments' on 'relevant buildings', non-combustible material must be used. However, there is an exception made by Regulation 7(3) that excludes the waterproofing membrane from this requirement.

#### Termination of roofing materials

This exception has caused another serious area of confusion: how do you safely terminate a roof or balcony where it abuts a wall. Again, the LRWA, NFRC and SPRA guidance document has resolved this issue.

Insulation used as a thermal break on the face of a wall or abutment is exempt from the non-combustible ban provided it is no thicker than 60mm and does not go higher than 150mm above the finished roof level or walking surface. If, for any reason, the thermal break goes higher than this, or crosses an internal fire compartment line, non-combustible insulation must be used. ►

CPD	)
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Table 10.1 Reaction to fire performance of external surface of walls (simplified)					
Building type	Building height	Less than 1,000mm from the relevant boundary	1,000mm or more from the relevant boundary		
'Relevant buildings'		Class A2-s1, d0 or better	Class A2-s1, d0 or better		
All 'residential' purpose groups	More than 11m	Class A2-s1, d0 or better	Class A2-s1, d0 or better		
	11m or less	Class B-s3, d2 or better	No provisions		
Assembly and recreation	More than 18m	Class B-s3, d2 or better	From ground level to 18m: class C-s3, d2 or better		
			From 18m in height and above: class B-s3, d2 or better		
	18m or less	Class B-s3, d2 or better	Up to 10m above ground level: class C-s3, d2 or better		
			Up to 10m above a roof or any part of the building to which the public have access: class C-s3, d2 or better		
			From 10m in height and above: no minimum performance		
Any other building	More than 18m	Class B-s3, d2 or better	From ground level to 18m: class C-s3, d2 or better		
			From 18m in height and above: class B-s3, d2 or better		
	18m or less	Class B-s3, d2 or better	No provisions		

#### **Requirement B3**

Fire compartmentation is used internally to stop fire spread throughout a building. This basically entails separating the building into compartments using fire-resistant walls, floors and doors so that the fire is contained within a single compartment in the event of a fire.

When a fire compartment wall forms a junction with the roof structure, the roof covering must be classified to BROOF(t4) and extend 1,500mm on either side of the wall. The roofing substrate or deck must be classed A2-s3 d2 or better.

In buildings under 15m high from ground level and purpose groups 1, 2, 3 or 5, other than 2(a), a substrate of B-s3 d2 or worse can be used. In all cases, fire-stopping is to be carried up to the underside of the roof covering.

#### **Requirement B4**

B4 sets out the requirements to prevent the external spread of fire for external walls and roofs. It states that: • the external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the building's height, use and position; • the roof of the building shall adequately resist the spread of fire over the roof and from one building to another, regarding the use and position of the building.

The outermost material used for external walls must meet the combustibility requirements in

#### BS EN 13501-5 fire classification

BROOF(t4)
 No penetration of the roof system within one hour.
 In a preliminary test, after the withdrawal of the test

- flame, specimens burn for less than five minutes. In the preliminary test, the flame spread less than 0.38m across the region of burning. CROOF(t4) • No penetration of the roof system within 30 minutes. In the preliminary test, specimens burn for less than five minutes after the test flame withdrawal. In the preliminary test, the flame spread less than 0.38m across the region of burning. DROOF(t4) • Roof system is penetrated within 30 min but not in the preliminary test. In the preliminary test, specimens burn for less than five minutes after the test flame withdrawal. In the preliminary test, the flame spread less than 0.38m across the region of burning. EROOF(t4) Roof system is penetrated within 30 min but not in the preliminary test.
  - Flame spread is not controlled.
- FROOF(t4) No performance determined.

Table 10.1 (see simplified version at the top of this page). The distance to the boundary of the property, its height and use dictate materials that can be used.

For roofs, Requirement B4 sets out in Table 12.1 the required classification that the roof covering must achieve. The distance to the boundary of the property determines this. Only the highest classification BROOF(t4) can be used unrestricted on any building.

#### Fire testing classifications

CEN/TS 1187:2012 Test methods for external fire exposure to roofs dictates four test methods to determine a roof's resistance to external fire exposure. When a fire compartment wall forms a junction with the roof structure, the roof covering must be classified to BROOF(t4) and extend 1,500mm on either side of the wall

Test methods 1-3 are widely used across Europe, with only the UK using method 4, which incorporates twostage testing and is more rigorous.

#### BS EN 13501-5

BS EN 13501-5: Fire classification of construction products and building elements. Classification using data from external fire exposure to roof tests sets out the required performance that the roofing system must attain to get its classification, with BROOF(t4) being the best and FROOF(t4) the worst performance, as shown in the table on the left.

#### **Fire Safety Order**

The Regulatory Reform (Fire Safety) Order 2005 (also known as the Fire Safety Order) is a UK law that sets out the fire safety responsibilities of building owners and managers and the steps they must take to reduce the risk of fire and protect people in the event of a fire.

The Fire Safety Order applies to most non-domestic buildings in England and Wales, including:

• workplaces, such as offices, factories, and warehouses;

 public buildings, such as schools, hospitals, cinemas and museums;

 residential buildings, such as flats, hotels, hostels, boarding houses;
 assembly and leisure buildings,

such as places of worship, community halls and sports stadiums;

shops and retail premises; and

mixed-use buildings.

Single-family homes are not covered, although it does apply to multi-occupancy houses in multiple occupations (HMOs). The Fire Safety Order places responsibility for fire safety in buildings on the 'responsible person'. Depending on the circumstances, this can be the building's owner, manager or occupier.

The responsible person is responsible for:

• ensuring that the premises reach the required standards;

providing employees or

occupants with adequate fire



safety training, which would include: • induction training on fire awareness; • periodic refresher or extra training where the level of fire risk increases as a result of changes in operations; • training to support people in meeting their fire safety duties – for example, keeping 'responsible people' up to date; and • training to build appropriate skills

 training to build appropriate skins such as fire risk assessment, fire warden or using fire extinguishers;
 conducting a regular fire risk

assessment to:

- identify the fire hazards;
- identify people at risk;

evaluate, remove or reduce the risks;
record findings, prepare an emergency plan and provide training; and
review and update the fire risk assessment regularly. It's important to note that these are general responsibilities and specific requirements can vary. More information is available from the government's *Fire Safety in the Workplace* site.

#### How can roofing be upgraded?

If, while conducting a fire risk assessment, you discover that your roof is not up to standard, a number of potential solutions are available.

Cold-applied liquid roofing systems can be applied to most roofing surfaces without needing a full roof replacement. They can be installed quickly and will immediately reclass your roof to a BROOF(t4) standard.

If there are issues relating to the fire compartmentation where it joins the roof, then internal works would need to occur. ●



Above: Garland UK standing seam metal roofing project for the education sector

#### **CPD** Questions

1) How many metres above ground level does a building need to be to receive 'relevant building' classification?

- a) 18m
- b) 19m
- c) 20m

2) Which Approved Document provides guidance on ways to meet fire safety Building Regulations?a) Approved Document A

- b) Approved Document B
- c) Approved Document C

3) What is fire compartmentation?
a) Fire compartmentation is used externally to stop fire spread throughout a building
b) Fire compartmentation is used internally to stop fire spread in the roof of a building
c) Fire compartmentation is used internally to stop fire spread throughout a building

4) Which BS EN 13501-5 roof system classification is provided when there is no penetration of the roof system within 60 minutes?
a) BROOF(t4)
b) CROOF(t4)
c) DROOF(t4)

To test yourself on the questions and collect CPD points, go to: projectsafetyjournal.com

# HSE data shows increase in construction deaths

Out of the 135 workers killed across all industries in 2022/3, 45 worked in the construction industry



Britain's construction sector recorded 45 fatal injuries during 2022/23, up from 29 the previous year, the latest Health and Safety Executive (HSE) data shows. The five-year average for fatal injuries in the construction sector is 37.

One-hundred and thirty-five workers were killed in total across all industries in the country covering the period from April 2022 to March 2023.

Construction remains the industry with the highest number of fatalities, followed by agriculture, forestry and fishing (21), manufacturing (15), transport and storage (15), and wholesale, retail and motor repair (15). The three most common causes of fatal injuries across all industries were falls from height, being struck by a moving object and being struck by a moving vehicle.

Thirty-three of the total deaths recorded in this period were workers aged 60 and over, 99 were workers aged 16 to 59, and three of age unknown.

The rate of fatal injury in construction, which measures the rate of injury per 100,000 workers, has gone up to 2.10 in 2022/23 compared to an average of 1.72 from 2018/19 to 2022/23. The rate of fatal injury in construction, while around four times

**6** The three most common causes of fatal injuries across all industries were falls from height, being struck by a moving object and being struck by a moving vehicle

as high as the average rate across all industries, is considerably less than the rate in agriculture, forestry and fishing despite accounting for a greater number of cases, where the rate was 7.87 in 2022/23 and 8.60 in the previous period.

In June, a freedom of information request made by trade union Unite found that unannounced inspections by the HSE in the construction sector had fallen by nearly a third (32%) over the last decade.

During 2022/23, the safety watchdog carried out 7,647 spot checks – a 2% decline on the previous year when there were 7,793 inspections. In 2013/14, the safety watchdog made 11,303 proactive (unannounced) inspections.

Across all groups, a further 68 members of the public were killed following a work-related incident in 2022/23. This is a decrease of 20 from last year.

HSE has also published the annual figures for mesothelioma, a cancer caused by past exposure to asbestos fibres. The figures show 2,268 people died from the disease in 2021. This is a fall of 302 compared with the 2,570 deaths in 2020 and substantially lower than the average of 2,520 deaths per year over the period 2012-2019.

Men who worked in the building industry when asbestos was used extensively in the past continue to be most at risk of mesothelioma. •



Fatal injuries by employment status



Rate of fatal injuries by selected main industry group (per 100,000 workers), 2022/23p

and annual average for 2018/19-2022/23p



#### In the dock

Recent prosecutions for health and safety breaches

#### Tata Steel UK fined after worker suffers brain damage

Tata Steel UK has been fined £120,000 after a worker suffered serious head injuries when he was hit in the face with a scaffold pole which was being used to open a jammed mixer door. This caused him to fall backwards.

Gavin Rowlands, an employee at Monolithic Refractories, sustained permanent brain damage as a result of the incident in Port Talbot, Wales, on 3 April 2017.

An HSE investigation found Tata Steel UK provided an unguarded mixer for Monolithic's employees to use and that the mixer's door regularly jammed.

Tata Steel UK also failed to ensure that there was a safe system of work in place to release the mixer's door.

Tata Steel UK pleaded guilty to breaching Section 2(1) and 3(1) of the Health and Safety at Work etc Act 1974.

#### Henry Construction fined £234,000 after fall from platform

A building company has been fined £234,000 after a demolition worker suffered serious injuries when he fell from a platform. Ovidiu Dobra was working for Henry Construction Projects at a building site on Kensington High Street, London, when the incident happened on 2 March 2021.

Dobra was working on the 3m high platform when it collapsed. He sustained serious injuries to both legs which left him with long-term difficulties with movement, basic functions and ability to work.

An HSE investigation found Henry Construction Projects failed to take appropriate precautions to ensure the safety of persons working at height. The Hounslowbased company pleaded guilty to breaching Regulation 6(3) of the Work at Height Regulations 2005.

#### London joinery firm fined £20,000 for failing to control wood dust A joinery firm in south-east London has been fined £20,000 for failing to control

£20,000 for failing to control its employees' exposure to wood dust.

F&E Joinery, in Herne Hill, was inspected in May 2022 as part of a Health and Safety Executive (HSE) campaign targeting woodworking businesses.

F&E Joinery pleaded guilty to breaching Regulation 7(1) of the Control of Substances Hazardous to Health (as amended) Regulations 2002 and was fined £20,000 and ordered to pay costs of £1,500.

#### Construction firm fined after worker fractures skull

A construction company has been fined £12,000 after a bricklayer fell through a stairwell opening and fractured his skull.

Scott Ife, from Bridgnorth, Shropshire, was working for 2 Counties Construction (Midlands) when the incident happened on 8 June 2020.

The company had been hired as the principal contractor overseeing the refurbishment of agricultural barns into houses on Humber Lane in Telford.

Ife was laying the blocks to form the gable walls for a twostorey extension alongside another employee. While leaning over to point up the blocks in the gable walls, Ife lost his balance before falling onto unsupported Youngman boards and through the stairwell opening.

2 Counties Construction (Midlands) of Broomhall, Worcester, pleaded guilty to breaching Regulation 13(1) of the Construction (Design and Management) Regulations 2015. It was fined £12,000 and ordered to pay £4,139 in costs at Cannock Magistrates' Court on 21 July 2023.



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### View from the regions

**Project Safety Journal** begins a new regular feature spotlighting the activities of the six new APS regions. We start off with an overview of the aims of the new regional structure and get an update from England North

#### Overview of the new regions

Last summer far-reaching changes were recommended to members by the council and the APS Board. These aim to improve the organisation's governance and to give APS members more say in what the association does, by setting out clearly what is expected and providing easier ways to contribute to its work.

One of the changes consolidated the APS regional structure from 16 regions to six. Each region returns two representatives to the National Members Representative Group (NMRG), which has a dedicated seat on the APS Board. These members take soundings from their regions and raise any professional issues, which are relayed to the Board.

Peter Taylor, a regional representative of England South and deputy chair of the NMRG, says that it is possible for the former regional committees to continue as branches within one of the new regions.

The new structure will also make it easier for new branches – perhaps in a single workplace or online – to be set up, should members want that.

"It's very easy, because all you need is five people who want to set up a branch to then go to a regional representative and get that person to sponsor them," says Taylor.

"The 'branches' are no longer geographically fixed – but might

be more a special interest group. For example, the previous London Committee has formed the London and South branch and we have a member from Cornwall."

Taylor, a partner at Leslie Clark who takes a leading role in the provision of CDM consultancy services, says members are encouraged to meet up face to face or online to share ideas. If they need help from the central administration they must go via their original sponsor.

If a number of people are trying to form the same branches, that is where their sponsor comes in, says Taylor. "They may suggest they get together with existing branches."

#### **England North**

"The real crux of England North region is to encourage members to set up local branches at the moment, which can facilitate more local networking. The ex-members of the North West regional committee are our first regional branch," explains England North regional representative Derek Bradshaw.

Bradshaw, who is head of professional services at Keelagher Okey Klein (KOK), says: "I work in an organisation with 13 different people that are doing principal designer and CDM adviser roles. So there isn't a day that goes past where I'm not speaking to at least three of them. All you need is five people who want to set up a branch to then go to a regional representative and get that person to sponsor them Peter Taylor, National Members Representative Group "But many members are sole practitioners who do not have that facility of talking shop with people. I think it is important for the industry, and individuals, to become more rounded by having those debates," he adds.

Bradshaw says he'll use his new position to gauge the strength of feelings across the region.

The number one talking point is inevitably the Building Safety Act, which is causing confusion among members who are not clear what it means in practice. Its impact on professional indemnity insurance, has become "an equally big minefield", he says.

"And then day-to-day stuff of how we comply with CDM. The fact that the Building Safety Act has flown in from one side and attached itself like an alien to the CDM Regulations is mindblowing for a lot of people," he adds.

#### The regions and their representatives

• England North: Includes previous regions, Northern England, Yorkshire, North West England and Isle of Man Representatives: Derek Bradshaw and Richard Wilks • England Central: Includes previous regions, East Midlands, Midlands, East Anglia and South Central England Representatives: Allan Binns and Fran Watkins-White • England South: Includes previous regions London, South East England and South West England Representatives: Peter Taylor and Peter Waxman Scotland: Includes previous regions Scotland East, Scotland North, Scotland West Representatives: Callum Bunce and Ken Hannah • Wales: Representatives: Jason Williams and Alan Vowler • Northern Ireland:

Representatives: Paul Cheyne and John Murray

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### Dates for this autumn

APS is hosting a range of events to kick off the new season, starting with our Annual Conference in September

Here the autumn/winter events lineup.

#### **APS Annual Conference**

Mark your calendars for Wednesday 6 September 2023, as the programme kicks off with the highly anticipated APS Annual Conference. If you haven't secured your spot yet, don't worry – there's still time to book your place.

This year, the conference will revolve around the theme of 'Challenges and Opportunities Facing the Industry Today'.

The morning session will delve into key challenges such as recruitment, mental health, competence, legislation and regulations. Industry experts will share their insights, shedding light on the implications of these for our industry.

The afternoon session will explore sustainable working practices and the application of artificial intelligence (AI) for enhanced safety. Stimulating case studies, industry experts and a dynamic panel discussion will showcase the industry's potential for growth and innovation.

You can choose to attend for the full day or opt for either the morning or afternoon session, based on what suits your schedule.

Book your tickets now at **www.aps.org. uk/events** and secure your place among industry leaders and innovators.

#### Autumn webinar series

The autumn webinar series, which starts at the end of September, is a treasure trove of topics requested by members.

An impressive range of webinars will cover essential subjects such as lead and other dusts, legal updates, temporary works, air quality, zoonosis, whistleblowing, slip and trips, fire safety and so much more.

Don't miss out on these valuable learning opportunities. Visit **www.aps.org.uk/events** to access the full list and secure your spot.

#### Autumn CPD series

The association is ending the year with a bang when it welcomes back Mike Kehoe from C&D Demolition. Mike will be responding to requests for a deeper dive into demolition and building on the resounding success of his recent webinar.

Choose from three dates, each offering the same valuable content. Select the event that aligns best with your schedule and expand your knowledge in this critical area.

The autumn CPD dates are: Tuesday 14 November 2023 9am-12pm Wednesday 22 November 2023 10am-1pm Thursday 30 November 2023 2pm-5pm

#### Save the dates for our highly popular Building Safety Act sessions

Our informative Building Safety Act update sessions have become an invaluable resource for industry professionals. Each session builds on the previous one, and looks closely at the Act to decipher its implications, examine its impact and discuss the necessary steps moving forward.

The upcoming sessions are:Wednesday13 September 2023Wednesday25 October 2023Thursday7 December 2023

#### Where to catch up

Can't attend a session live? No problem. You can always catch up at a later date. Simply log in and access the recorded sessions at:

www.aps.org.uk/category/webinars

#### Are you interested in speaking at one of our events?

We are always on the lookout for knowledgeable speakers to present webinars or host sessions at various events. If you have a topic you are passionate about and would like to share with our audience, please get in touch with us at **info@aps.org.uk**.

Don't miss out on these incredible opportunities to grow, learn and connect within the industry. Join APS at our upcoming events and be part of the dynamic community driving progress and innovation.



### BUILT FOR THIS MOMENT

On the ground and in the sky, the building goes on. The air is buzzing. The team's all here – still digging, lifting; still sawing and shouting. But this time, it's different. Now the teamwork – and the fist bumps – mean a little bit more. Now you're working together like never before. On beams and girders, in hoists and trailers, you're building our future – right now. And we're here to help you do it.

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Synergie Training specialises in the **APS Accredited Principal Designer** course which we provide as both onsite closed company courses and as public courses throughout the UK. We have successfully accredited over 2,000 individual Principal Designers with a 95% pass rate. We now also provide the **APS CDM Awareness, APS Accredited CDM Client** and **APS Accredited CDM Principal Contractor** courses along with CDM Overview, Domestic Client, Construction Safety through Design and customised CDM training.

#### VIRTUAL TRAINING

We are currently still running the majority of our CDM courses virtually via live trainers. These courses have been a great success having trained over 1000 delegates on our virtual APS CDM PD course. **Upcoming Dates include:** 

12 Sep	*VIRTUAL* - APS Accredited - CDM 2015 for Principal Contractors	Online - Remote	£250
19 Sep - 20 Sep	APS Accredited - The role of the Principal Designer under CDM 2015 (2 Day)	London	£595
27 Sep - 28 Sep	*VIRTUAL* - APS Accredited - The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
9 Oct - 10 Oct	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
10 Oct	*VIRTUAL* – APS Accredited – CDM Awareness	Online - Remote	£250
18 Oct - 19 Oct	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
24 Oct - 25 Oct	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	London	£595
26 Oct	*VIRTUAL* – APS Accredited – CDM Client	Online - Remote	£295
30 Oct - 31 Oct	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Nottingham	£595
7 Nov - 8 Nov	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Edinburgh	£595
7 Nov	*VIRTUAL* – CDM 2015 Overview	Online - Remote	£195
8 Nov - 9 Nov	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
8 Nov	*VIRTUAL* - APS Accredited - CDM 2015 for Principal Contractors	Online - Remote	£250
14 Nov - 15 Nov	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	London	£595
20 Nov - 21 Nov	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
30 Nov	*VIRTUAL* – Building & Fire Safety Act Overview – 1 Day	Online - Remote	£295

Please quote APS-SEPT for a 10% discount on any of the above public courses.

Please visit: www.synergietraining.co.uk/course-schedule to view additional public course dates.

Synergie Training is an approved APS, CITB & IEMA Accredited Training Centre and holds ISO: 9001, ISO: 14001 and ISO: 45001 quality standard accreditations. Website:www.synergietraining.co.E-Mail:enquiries@synergietraininTel:01463 227580









