

project safety matters

aps association
to project
safety

Autumn 2021

The voice of good practice in design & construction,
health & safety risk management

14

Brexit's impact on project safety

18

Designing for dementia

28

Mental health spotlight

Page 6

APS wants 'joined-up thinking'

Page 8

Bill timeline explained

Page 11

Principal designer
role changes

Building Safety Bill special





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.

We're Bluebeam. Built for today. Building for tomorrow.

bluebeam.com/uk/now

05	Welcome
06	Building Safety Bill overview
08	Building Safety Bill timeline
11	Opinion: Clare Price, BSI
13	Opinion: Paul Nash, CIOB
14	Brexit update
17	BSI on psychological health
18	Designing for dementia
20	Covid-19 update
22	Using AI to cut accidents on site
24	Training building safety managers
26	Duties of the new Fire Safety Act
28	HSE prosecutions + annual stats
30	Events: autumn CPD programme

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

Cover image:
the blow up/unsplash

Association for Project Safety
5 New Mart Place, Edinburgh EH14 1RW
Telephone: +44 (0)131 442 6600
www.aps.org.uk | info@aps.org.uk

Atom Media Partners
Project Safety Matters is published for the Association of Project Safety by Atom Media Partners.
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 Matters
Editor: Will Mann
will.mann@atompublishing.co.uk
Associate editor: Kristina Smith
kristina.smith@atompublishing.co.uk
Production editor: Sarah Cutforth
Art editor: Lee Osborne
Advertising manager: Dave Smith
dave@atompublishing.co.uk

Printing
Printed by Precision Colour

Copyright
The contents of this magazine are copyright. Reproduction in part or in full is forbidden without permission of the editor. The opinions expressed by writers of signed articles and letters appearing in the magazine are those of their respective authors, and neither the Association for Project Safety, Atom Media Partners or Project Safety Matters is responsible for these opinions or statements. The editor will give careful consideration to material submitted but does not undertake responsibility for damage or their safe return. All rights in the magazine, including copyright, content and design, are owned by the Association for Project Safety and/or Atom Media Partners.



Winvic uses AI to highlight potential hazards on site

Page 22



What to expect from the Building Safety Bill

Page 06



Covid-19 update

Page 20

Opinion

Page 13

Our industry needs to change if we are to ensure the buildings we create are fit and safe for those who occupy them, says the CIOB's Paul Nash





Fast Reliable Effortless

Wireless connectivity that just works.

As the leading provider to the construction industry, and experts in wireless connectivity, we are confident we can improve your site operations to help you build and sell homes quicker. **Get in touch today.**

Call **0333 900 1026** or visit
ukconnect.com



CEO's foreword

As the Building Safety Bill goes through parliament, it is a period of transformation for the industry. But change is about more than regulations, says **Lesley McLeod**



Lesley McLeod

Welcome to the autumn edition of *Project Safety Matters (PSM)* and to your new-look membership magazine. We hope you enjoy it and we are looking forward to hearing what you think.

The construction sector – in the continuing aftermath of Grenfell and the pandemic year we have had – is facing change much more radical than the look and feel of our magazine. Since we last spoke the long-awaited Building Safety Bill has finally made it onto the floor of the House of Commons and will shortly have more detailed scrutiny as the Bill reaches its first committee stage. You can be assured the Association for Project Safety (APS) will be following every twist and turn, suggesting ways to improve and amend the draft legislation as things progress.

You will find your 'cut-out-and-keep' guide to the legislation in this edition of *PSM* – and much more besides, because change is about more than just new rules and regulations. There

are calls for the industry to step up and put its own house in order. So APS will also be helping you maintain and develop your own skills, so you can all keep pace with new developments. We will be introducing some regular features taking in views from across the industry and news about the association itself, including upcoming education and training events you can access as part of your membership.

PSM aims to reflect developments in the construction industry generally and to focus on design risk management in particular. We hope to bring you stories that are both topical and thought provoking, hearing from the experts and sharing your thoughts on the subjects exercising the industry at all levels.


With this in mind, this edition brings you an inside look at how the new dutyholder roles are developing from the BSI's Clare Price. The Construction Products Association's Peter Caplehorn talks about Brexit's

///
We hope to bring you stories that are both topical and thought provoking, hearing from the experts and sharing your thoughts on the subjects exercising the industry

impact on product safety. And we have a great piece to get you thinking about quality in construction from Paul Nash, the past president of the Chartered Institute of Building and chair of its Construction Quality Commission.

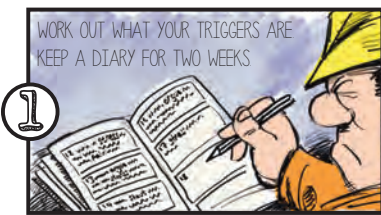
I am sorry there has been such a long gap since I last wrote to you. As I am sure you will have seen, the small APS headquarters' team has been working flat out right through the pandemic and the magazine took a bit of a back seat while we prioritised putting on events, conferences and webinars. But we are now back on track and you can again expect a magazine coming to you four times a year: spring, summer, autumn and winter.


Please remember that *PSM* is your magazine. We want to hear your views – what you like and what doesn't work so well for you. We will work with you to take your ideas on board and will try to bring you features that matter to you.

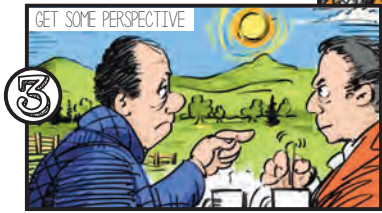


IF YOU ARE SUFFERING FROM STRESS AT WORK, YOU NEED TO MAKE CHANGES.

ON-SITE SALLY

- 

1 WORK OUT WHAT YOUR TRIGGERS ARE. KEEP A DIARY FOR TWO WEEKS
- 

2 TRY TO FIGURE OUT WHAT NEEDS TO CHANGE. TREAT IT LIKE A PROBLEM-SOLVING EXERCISE
- 

3 GET SOME PERSPECTIVE

SPEAK TO A FRIEND FROM ANOTHER INDUSTRY OR A TRUSTED MENTOR



APS urges 'joined up' approach to building safety

Association welcomes objectives of Building Safety Bill but raises concerns over fragmented principal designer responsibilities

The objectives of the Building Safety Bill should be supported but it is "a missed opportunity to slot all the safety pieces together".

That was the message from the Association for Project Safety (APS) as the Bill began its passage through parliament earlier in the summer.

Jonathan Moulam, president of the APS, said: "The association is pleased there is a better sense that responsibility for safety is expressly handed on from dutyholder to dutyholder throughout the lifespan of any project but the narrow focus on height, spread of fire and structural safety risks losing a sense of the whole picture by concentrating on individual pieces.



The Bill's drive to individualise is the wrong approach

Jonathan Moulam, president, APS



Many design consultancies will not want both PD roles on a project
Mark Snelling,
chair, APS
Regulation and
Policy Committee

consult with the other. Mark Snelling, chair of the APS Regulation and Policy Committee and managing director of Safetymark Consultancy Services, warned there may be limited appetite in the industry for the PD roles, with only those tolerant to risk willing to accept appointments.

“The ideal situation would be one organisation acting as a ‘combined PD’ on projects, taking on responsibility for both PD roles, but I fear that many design consultancies will not want to do that,” he said.

“So the likely reality is two different organisations will have responsibility for the two roles. But the draft regulations include no mechanism for them to work together. The two PDs are governed by different legislation.”

Both Snelling and Moulam believe the Bill should make health and safety design risk management a collective rather than an individual responsibility.

“A principal contractor (PC) has a health and safety manager who coordinates all the risks associated with different specialist contractor packages,” said Moulam. “Why should it be any

different for design? There needs to be a lead designer who brings together all the design packages for M&E, structural, civils and so on. In many respects, that’s what the current PD role should be doing: ensuring that coordination occurs across the whole design team.

“For me, the Bill’s drive to individualise is the wrong approach. The draft regulations require individuals to be named as PDs on projects and I don’t think on complex projects that will be possible.”

While the Bill puts heavy responsibility on clients, PCs, PDs and accountable persons – who in many cases will be residents management companies whose ‘lay directors’ are volunteers who own a flat in the building. Conversely, the new professional ‘building safety manager’ dutyholder – created by the Bill – has no legally binding duties. “There appear to be no offences for which they can be prosecuted,” said Moulam.

The APS president feels the Bill has missed the opportunity to “embed health and safety best practice into projects from day one”.

“There is no requirement for the early appointment of a health and safety design professional, no requirement for the principal designer to sign off the project at gateway one,” he said. “And it is in the early, preconstruction phases of projects that the design safety risk issues need addressing.”

“It is right that responsibility for building safety must be clear at all times, but complex projects need teams and joined-up working to deliver safety.”

Moulam argues that putting the legal burden for safety on the shoulders of individual named dutyholders means insurance costs will soar and many projects “may not get off the ground”.

The APS was also critical of the “decoupling” of the principal designer (PD) roles, which effectively creates two types of principal designer – one for health and safety and another responsible for adherence to the regulations – noting there is no requirement in the Bill for either to

Five positives from the Bill...

- Principle of the ‘golden thread’ handing over specific responsibility for safety information throughout the life cycle of a building.
- Greater statutory right for residents and flat leaseholders to be involved.
- Creation of the Building Safety Regulator and formation of HSE Competence Committee.
- Emphasis on approving and specifying the materials to be used in any project.
- Focus on improving the clarity of documentation, particularly the Safety Case Report.

...and five negatives

- Emphasis on individuals – rather than corporates – will put PI insurance beyond the reach of many design safety professionals.
- Reduced emphasis on team working and collective responsibility.
- Narrow focus on height, spread of fire and structural safety on in-scope buildings with less attention to wider project risks.
- Decoupling the principal designer role on all projects to which the building regulations apply – with two types of PD – risks causing confusion.
- ‘Lay’ directors of residents’ management companies and right-to-manage companies, with no professional background or competence, could be criminalised in the event of a disaster.

Building Safety Bill: What happens next?



Rebecca Rees and **John Forde** look at the government’s ambitious proposed timeline to implement the Bill and anticipate some of the likely topics for debate in parliament

The Building Safety Bill was published by the government earlier in the summer and the transition plan issued sets out an ambitious implementation timetable (see box).

Some key deadlines remain undefined. It’s unclear, for example, whether the new dutyholder regime will apply only to new higher-risk buildings constructed or refurbished after the Act becomes law, or whether existing projects will be caught by the requirements. The government has indicated that existing higher-risk buildings will need to be registered with the Building Safety Regulator and landlords must present a safety case with key documentation and as-built drawings in digital format – but again, it is unclear how long they will have to meet these requirements.

In the meantime, plenty in the Bill could be subject to amendment. Much of the detail of the design and construction obligations for the new regime – the dutyholder roles, competency requirements, gateway processes and

inspection regimes – has yet to be set out in secondary legislation and so is not likely to be debated by parliament as part of the passage of the main Bill.

Some of this draft guidance has already been issued: the draft *Building (Appointment of Persons, Industry Competence and Dutyholders) (England) Regulations*, published in draft alongside the Bill, set out competency and project management duties on all those commissioning and undertaking design and building works covered by the building regulations.

The issue most likely to prompt debate in parliament is whether leaseholders will shoulder the costs of remediation works for non-compliant buildings. The Housing, Communities and Local Government Select Committee, which reviewed an earlier draft, recommended that leaseholders shouldn’t have to pay.

However, the government’s response to the committee’s recommendations, and the wording of the 2021 Bill,

Even if the government meets its proposed implementation timetable, the amount of work required to implement the new regime will be immense

makes it clear that landlords will be able to recharge building safety works to leaseholders, provided that they first exhaust available funding options, insurance cover and pursue claims against contractors for defective work. This issue has the potential to become a political hot potato, especially if the House of Lords opposes the recharge provisions as currently drafted.

Another issue likely to cause debate is the proposed extension of limitation periods for claims for breaches of the Defective Premises Act, which will allow prospective and retrospective claims for up to 15 years.

This could be hugely problematic for a building industry in which most contracts have six or 12-year limitation periods and most professional indemnity insurance policies generally provide only 12 years’ coverage. However, even 15 years doesn’t seem to be enough for some: Conservative MPs Stephen McPartland and

Building Safety Bill timeline

<p>• Presentation to parliament</p> <p>The Building Safety Bill was presented to parliament on 29 June 2021 and published on 5 July, following a three-year consultation period.</p>	<p>• Commons readings</p> <p>The second of three readings took place in the House of Commons on 21 July 2021, in which MPs were able to debate the Bill and propose amendments.</p>	<p>• Public Bill Committee reading</p> <p>Next, the Bill is referred to a Public Bill Committee, which will discuss and vote on the proposed amendments, and take evidence from industry experts and interest groups outside parliament.</p>	<p>• Commons report stage</p> <p>Once the committee stage is finished, the Bill returns to the House of Commons for its report stage, where any amendments can be debated and further amendments proposed.</p>	<p>• Third Commons reading</p> <p>This will usually be followed immediately by the third reading of the Bill, where the House will vote on whether to approve the Bill.</p>
---	--	---	---	--

Royston Smith have already tabled an amendment to extend the limitation periods to 25 years.

Even if the government meets its proposed implementation timetable, the amount of work required to implement the new regime will be immense. While the regulator exists in shadow form, with Peter Baker appointed as the chief inspector of buildings, it has yet to set out in legislation key requirements for the dutyholder regime and the gateway processes for higher-risk buildings, appoint and train the required fleet of new building safety inspectors, define competency requirements for dutyholders in higher-risk buildings and establish appeals processes.

The building industry, too, will require significant upskilling to get to grips and comply with the new requirements and fulfil the various dutyholder roles anticipated by the new regime. For higher-risk buildings, accountable persons will need to be identified and building safety managers must be appointed. Substantial work will also be required to prepare safety cases so that buildings can meet registration and occupation requirements.

All of this will take significant time and money, supported by clear and timely guidance from the government and the regulator. With parliament only returning in September, we're unlikely to see much action on the Bill until the autumn. The government will need to get its skates on if the regime is to be up and running by the current timescale of 2024.

Rebecca Rees is a partner and John Forde is a managing associate at Trowers & Hamlin.



• **House of Lords reading**

The Bill is then passed to the House of Lords, which undertakes a similar three-stage reading and debate of the Bill's contents. Any amendments proposed by the House of Lords will be referred back to the House of Commons for consideration.

A Bill may 'ping-pong' between the two Houses for some time before both reach agreement. However, in certain circumstances, the House of Commons can use the Parliament Acts to pass the Bill without the consent of the Lords.

• **Royal Assent**

Once the Bill has been agreed by both Houses, or passed by the Commons without the Lords' consent, it is presented to the Queen for Royal Assent. Once signed, the Building Safety Act will become law on a prescribed day, and the obligations will take effect as set out.

The government expects the Bill to achieve Royal Assent within 9-12 months, so April to July 2022. (Certain obligations will come into force before Royal Assent, such as Gateway 1 requirements for higher-risk buildings, which took effect from 1 August this year.)

• **Implementation phase**

Implementation of the bulk of the new regime is anticipated within 12-18 months from the date of Royal Assent, estimated as July 2023 to January 2024.



DIGITAL CONSTRUCTION WEEK

EXCEL LONDON
24-25 NOVEMBER 2021



APPLY TO SPEAK AT DCW

Share your story to help shape
the future of the AECO industries
and drive positive change.

INNOVATION IN THE BUILT ENVIRONMENT



@DigiConWeek



Digital Construction Week



@DigiConWeek

www.digitalconstructionweek.com

Organised by
diversified
COMMUNICATIONS



Change is coming for principal designers



The Building Safety Bill plus new regulations and standards will have a significant impact on design risk professionals, writes BSI's **Clare Price**

The construction industry and the people who work in it are set for a period of considerable change, in terms of their roles and responsibilities. The Building Safety Bill and associated regulations and standards will introduce new duties on those who procure, plan, manage and undertake building work.

As part of this change, BSI has been working on a new national standards programme to help raise professional competence in the built environment sector. We will be publishing specific standards aimed at the competence requirements of three key roles: the dutyholder roles of principal designer (PD) and principal contractor (PC), plus the building safety manager (BSM), a new role whose duties are outlined in the Bill.

For any industry professionals who wish to carry out the principal designer role there will be an imperative to be able to demonstrate the levels of competence outlined

The PD standard (PAS 8671) is currently being drafted and we anticipate publication next spring. For any industry professionals who carry out the PD role, it is important to realise that there will be an imperative to be able to demonstrate the levels of competence outlined in the standard, as they will be subject to independent scrutiny. This will all mean significant change to working practices.

The standard will lay out what competences PDs will need to demonstrate to carry out the functions as set out in the Bill. This year, we published the BSI Flex 8670 standard, which provides core criteria for competence frameworks. Along with the PASs being developed, construction trade bodies and

professional institutions are expected to use BSI Flex to write their own competence frameworks.

BSI Flex includes details about behavioural competence and establishes core criteria for building safety competence including: fire safety, structural safety and public safety; managing building safety; knowledge management and communication; buildings as systems, building systems and construction products. It is a complex document which went through three iterations, with over 800 comments received on each. That reflects how much interest there is in this work and underlines the impact that it is expected to have.

The new standards will underpin the independent scrutiny and third-party certification of the roles. The independent scrutiny will be accredited by UKAS or the Engineering Council and we expect different professional bodies will put themselves forward to manage the competence certification schemes. And, of course, overseeing the Bill's implementation and rollout is the Building Safety Regulator.

It is worth mentioning the 'golden thread' of information, which all dutyholders including PDs will be expected to maintain under the new building safety regime. In July, the Building Regulations Advisory Committee published its report on the golden thread and how it will affect the industry. BSI is currently working on a new standard (BS 8644), which will cover the management, presentation and exchange of fire safety information using digital information management processes.

The Bill covers England and Wales, but BSI standards are applicable across the UK and the Scottish government sits on our technical committee. It is for Scotland to decide on whether to use our new standards, but they have taken huge interest in building safety, having experienced their own issues.

The Bill, the new regulations and standards and the scrutiny against those standards are all part of a co-dependent drive to improve the industry's safety performance. Design risk professionals are part of that change too.

Clare Price is built environment sector lead at BSI and will be speaking at the APS annual conference in September.



UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

No. 1

provider of online
surveying degree
apprenticeships

BUILT FOR TALENT

- Improve retention
- Increase diversity
- Attract new employees
- Utilise levy-funding

Chartered Surveyor

undergraduate and postgraduate routes available

Building Control

Construction Site Management

ucem.ac.uk/employer-apprenticeships

businessdevelopment@ucem.ac.uk

Building safety and quality: time for change



Addressing industry culture is key if we are to construct buildings that are fit and safe for those who occupy them, says **Paul Nash**

The Building Safety Bill has been described as the biggest change facing the construction industry in a generation and will generate much discussion as it passes through parliament. But what is not in question is the need to act to ensure that people are safe, and feel safe, in their homes. The truth is that even before Grenfell there were signs that our industry was failing consistently to deliver the right levels of quality and that this was making buildings unsafe for those who occupied them.

In February 2017, four months before the Grenfell Tower fire, I attended a round table to discuss the findings of a report into the collapse of a wall at Oxfangs Primary School in Edinburgh. It was led by Professor John Cole, author of the subsequent report on building standards compliance and enforcement in Scotland. It concluded that “the fact that no injuries or fatalities to children resulted from the collapse... was a matter of timing and luck”.

It was a stark reminder of the potential consequences of poor quality and led the CIOB to undertake its own investigation into the issue of quality and how to improve it. Central to our findings was industry culture.

The independent review led by Dame Judith Hackitt identified that a culture of ignorance and indifference, combined with a lack of clarity on roles and responsibilities and inadequate regulatory oversight, had created “a race to the bottom” where there was “insufficient focus on delivering the best quality building possible, to ensure that residents are safe, and feel safe”.

The Bill now before parliament seeks to address these failings by introducing new statutory duties for those who design, construct and manage higher risk buildings. There will be gateway approvals during design and construction and a safety case in occupation, all overseen by a new regulator with powers of enforcement and sanctions.



Our industry needs to change if we are to ensure the buildings we create are fit and safe for those who occupy them. It is no longer acceptable to turn a blind eye to poor quality

Although the Bill provides a clear picture of what the new regulatory framework will look like when enacted, a lot of the detail will be defined in secondary legislation and will therefore take longer to come into effect.

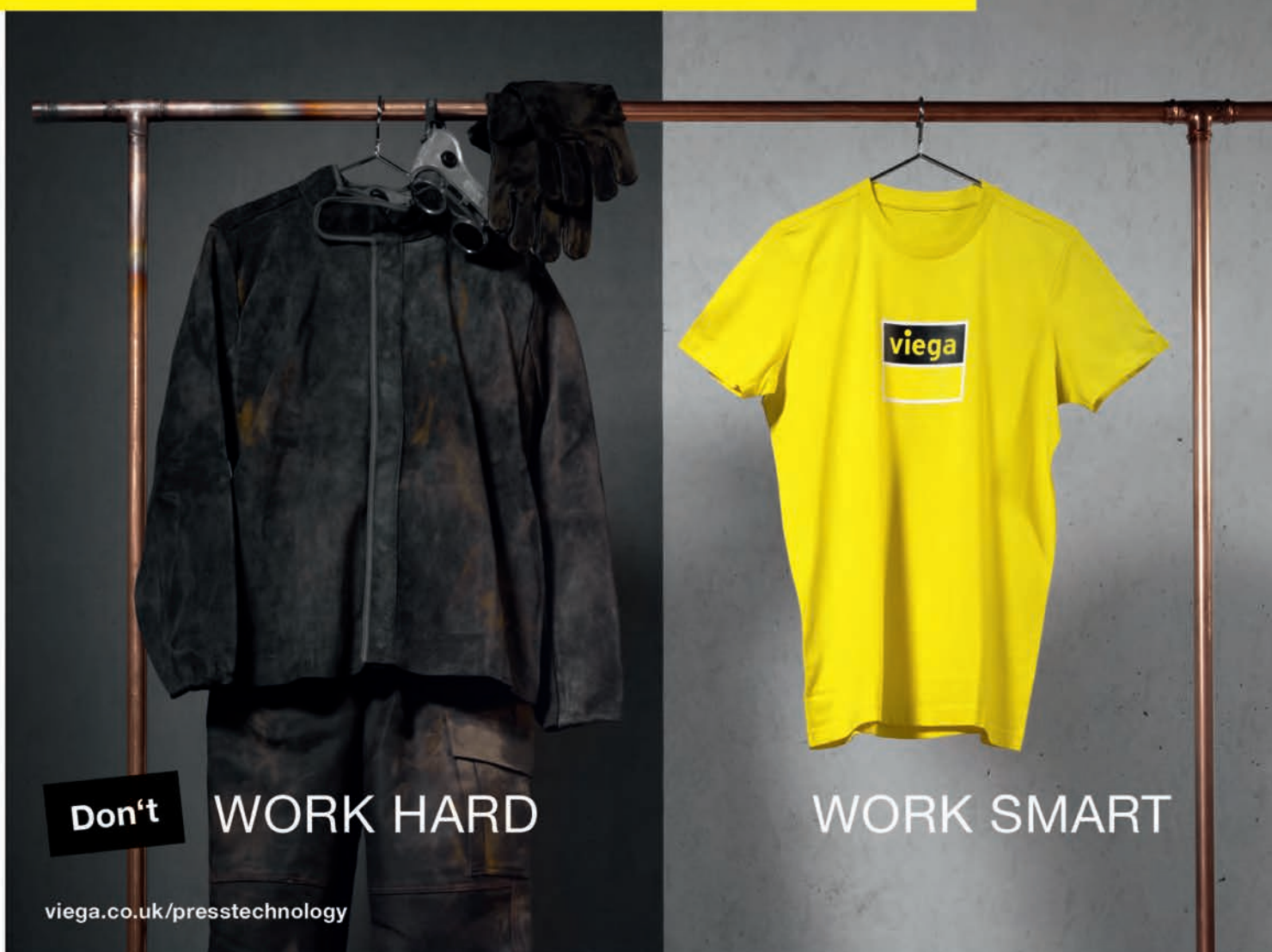
Meanwhile the concerns surrounding the standards of quality and building safety remain, with too many people still living in buildings with unsafe cladding or with underlying defects that continue to blight their lives. These are the unseen consequences of poor quality and a reminder that the built environment is central to people's physical and mental wellbeing.

The message is clear. Our industry needs to change if we are to ensure the buildings we create are fit and safe for those who occupy them. It is no longer acceptable to turn a blind eye to poor quality or to tell ourselves that it is somebody else's responsibility.

And we should not wait for legislation to do what is right, particularly when we consider the impact on people's lives and livelihoods.

Paul Nash is past president of the Chartered Institute of Building and chair of its Construction Quality Commission.

Viega cold-press technology
Makes piping smarter.



Don't **WORK HARD**

WORK SMART

viega.co.uk/presstechnology



Work smart – discover the Viega advantage

No need for heavy machinery or hot-works measures: connect pipes much safer and faster. With 100 % efficiency, 0 % fire risk and just a Viega Pressgun in your hands. **Viega. Connected in quality.**

viega



Psychological risk

The first ever international guidance on psychological health and safety has just been released. BSI's lead standards development manager, **Sally Swingewood**, explains

What does BS ISO 45003 say?

It's a road map for identifying risks to psychosocial health, safety and wellbeing at work, what can cause them and possible actions that organisations can take. The guidance includes lots of examples of hazards and what negative impacts can look like. There's a lot of emphasis on visible leadership commitment and including workers at all levels in decision-making.

There's also a strong emphasis on creating a culture of trust where people can speak out without fear of stigma or reprisals. It really focuses on making organisational change rather than depending on personal resilience. We want organisations to work back to find the root cause of any issues, rather than just providing personal

interventions like counselling, or implementing wellbeing supplements such as exercise classes or fresh fruit.

Any elements that are particularly important for construction?

The standard is completely generic, but a lot of time was taken to ensure that there were examples that different sectors and industries could relate to. It was very much written with smaller organisations in mind – like those in construction supply chains – that don't generally employ psychologists or occupational health experts. We made the language as simple as we could, so that it can be read by non-experts.

It is important for construction clients, tier 1 contractors and those advising them to understand that the way a

project is planned can impact on psychological health and safety. For instance, setting unreasonable deadlines can lead to psychological ill health which in turn can lead to mistakes and impact on safety, productivity and possibly the quality and safety of the final product.

In an industry like construction, where there may be migrant workers, there could be additional risks due to different languages, cultures or literacy levels. It is important to adapt approaches to the diversity of the workforce, talk to people and, even more important, really to listen to what people are saying and act on it.

How does BS ISO 45003 work alongside BS ISO 45001?

BS ISO 45001 sets out the general occupational health and safety management system requirements. It does include mental health, but we know the focus of organisations is often on physical health and safety because it may seem easier to manage. BS ISO 45003 follows the same format and can be integrated into the overall health and safety system as BS ISO 45001. It can be used independently and still deliver benefits.

Why should companies be interested in it?

Many people don't realise the extent of psychological health and safety issues in construction (see infographic, page 28). That's even without including the cost of presenteeism – people coming into work when they are psychologically unwell – so that they don't perform properly and may not perform safely.

What advice would you give to APS members?

Read the guidance. It is free to read on the ISO website and BSI is offering free downloads for smaller organisations. And start now – don't put it off. Not tackling psychological health and wellbeing is going to affect your performance and starting to take action can quickly bring benefits.

APS members can help their customers build systems for managing psychological health and safety into their plans from the early phases of a project. These should then be checked regularly and improved if they are not working.

Sally Swingewood is lead standards development manager, BSI.

There's a strong emphasis on creating a culture of trust where people can speak out without fear of stigma or reprisals



Beware product safety short-cuts



With Brexit and a raft of other factors influencing the supply of construction products, APS members must keep their fingers on the pulse, says **Peter Caplehorn**

It is difficult to remember a time when there were so many factors impacting on construction product supply chains. The many effects of the Covid-19 pandemic, increasing demand from global superpowers China and the US, a domestic DIY boom and the looming impacts of new Brexit-related changes are all converging to create a 'perfect storm'.

Timber, cement, roofing materials and PVC materials are all in short supply. Containerised products such as fixings and ironmongery have been stranded at ports around the globe, thanks to shipping problems and the blocking of the Suez Canal. Products including passive fire protection, glue and sealants, high-specification glass and radiators can currently not achieve the new CA markings required post Brexit, since the UK does not have the necessary testing and certification capacity in place yet.

Where these factors impact on projects, there are difficult decisions to be made by those running them. At a time when team members may be out of action due to the 'pingdemic' or having caught Covid, project teams must find workable solutions within the time and cost constraints imposed on them.

The answer to shortages is invariably to substitute other materials or products. But there will be knock-on safety impacts which may not be immediately obvious, from handling, logistics and

installation to the quality, operation and maintenance of the end product.

APS members must keep abreast of these multiple and volatile situations, not least because the new Building Safety Act sets out clearly the retrospective responsibility that those designing and delivering buildings will have for them. While tier 1 contractors are very much aware of the implications, smaller organisations may need support and advice to protect themselves from future repercussions.

Help at hand

It is vital that decision-making is informed by the right information, which is available when needed and allows products to be properly compared. At the Construction Products Association we have been aware for a long time of the benefits that digitalisation will bring and have been working with others on projects that will improve the quality and availability of product information.

LEXiCON, developed jointly with the Construction Innovation Hub, aims to provide a product data template for groups of products so that information is machine readable. BSI Identity, which we are working on with the British Standards Institute (BSI), will give every product a unique identifier with details stored in the cloud and readable using a smartphone or other device.

These developments should help prevent problems due to poor product substitutions in the future and help



There will be knock-on safety impacts due to product substitutions which may not be immediately obvious

preserve the 'golden thread' of information and accountability throughout an asset's life. In the meantime, I would urge APS members to keep abreast of changes; as well as government and Construction Leadership Council (CLC) websites, look to the Fire Industry Association (FIA) and the Association for Specialist Fire Protection (ASFP) – both of which we have been working with on the CA marking-related issues.

Peter Caplehorn is chief executive of the Construction Products Association.



architectural acoustic finishes

SonaSpray K-13 in world famous film studios

Over 100,000m² of SonaSpray K-13 black applied directly to profiled steel soffit throughout a world famous visitor attraction and international film studios. SonaSpray absorbs sound energy instead of reflecting it, reducing reverberation times to an optimal level for filming, whilst the black finish provides ideal conditions for lighting control.

We are Britain's leading provider of fire rated architectural acoustic finishes for the control of noise reverberation in buildings. Having the most extensive range, enables us to offer a product for every project, design and budget.



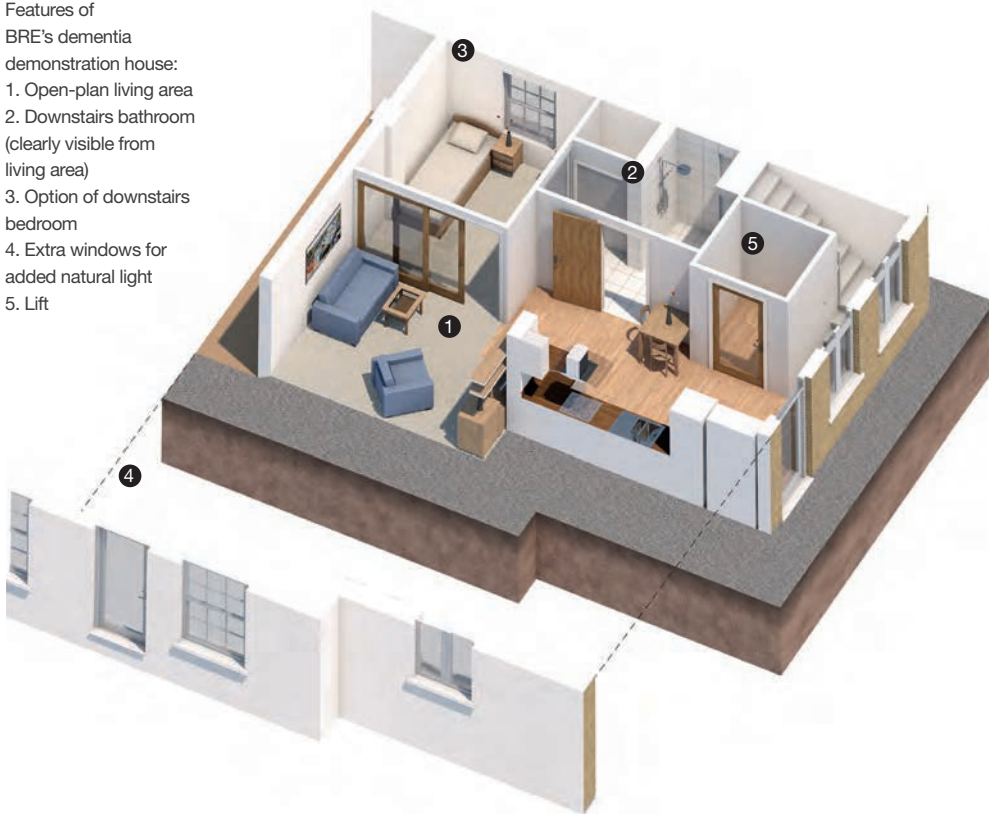
OSCAR
acoustics

Features of

BRE's dementia

demonstration house:

1. Open-plan living area
2. Downstairs bathroom (clearly visible from living area)
3. Option of downstairs bedroom
4. Extra windows for added natural light
5. Lift



Designing for dementia

As World Alzheimer's Day on 21 September approaches, we take a look at the UK's urgent need to adapt the built environment for dementia sufferers

Dementia is a problem which is not going away. By 2025, there will be one million people with dementia in the UK, a figure that will rise to two million by 2050, according to Alzheimer's Research UK. Over 60% of dementia cases are caused by Alzheimer's.

Yet our built environment has not been designed accordingly. There's a terrible mismatch between a social care strategy which strives to look after people in their own homes and housing stock which makes it difficult for people with dementia to survive, let alone thrive. This inevitably leads to accidents and injury; around 25%

of beds in hospital are occupied by people with dementia, says Alzheimer's Research UK.

Currently, housing units for people age 65+ make up less than 3% of the UK housing stock, according to Knight Frank's *Seniors Housing Development Update 2021*. Dementia-friendly housing barely exists.

Designing for people with dementia requires specialist knowledge, says Fiona Walsh, principal architect at DDS Architects. She became aware of this when her father's cognitive ability was damaged by a brain tumour.



Kindness isn't enough. We need to adapt our environments
Fiona Walsh,
DDS Architects

"I realised his relationship with the environment was different to anything I had learned about or experienced," says Walsh, who was at that point already an inclusive design specialist. "Eight years on, I am still trying to source information that will help us make environments accessible to people in the same situation. There is a body of information in the medical and social care fields but this has not translated into the built environment."

Walsh prefers to talk about 'dementia-inclusive' rather than 'dementia-friendly' design. "There's a perception that we can support people with dementia through human kindness, but that isn't enough," she explains. "We need to adapt our environments to support people as well."

Growing awareness

The good news is that there is a growing appetite for information about what dementia-inclusive design looks like. There are guides from various organisations, national and international, that look at design principles and good practice in varying levels of depth and complexity (see box).

In the UK, the BRE has built a dementia demonstration house – to mimic the conversion of an existing terraced property – to investigate how design and technology can help adapt our housing stock for people with dementia and their carers. The house is based on design principles previously developed by Bill Hallsall, of the Halsall Lloyd Partnership, and Dr Rob MacDonald from Liverpool John Moores University. Among its features are clean lines of sight, colour-coded paths, increased natural lighting, noise reduction measures, simple switches and controls and safety sensors.

Walsh signposts Alzheimer's Disease International's September 2020 report *Design, Dignity, Dementia: Dementia-related design and the built environment*, which looks beyond homes to the broader environment. Its 10 design principles include the need to provide links to the community and opportunities for social interaction and activities. The report also served to ramp up awareness globally of this growing issue, says Walsh.

A review of global practice suggests that some societies and countries are far ahead of the UK when it comes to dementia-inclusive design. In Ireland, the National Disability Authority has created *Universal Design Guidelines: Dementia friendly dwellings for people with dementia, their families and*



Open-plan lounge in the BRE's dementia demonstration house

carers; Walsh worked on a dementia audit in Athboy, County Meath, which has led to grant funding for public realm improvements (see box). In Sweden, Ikea and Skanska are pioneering dementia-friendly versions of their modular brand BoKlok (see box).

In the UK, most demand for dementia-inclusive design comes from the care home sector. Although there is interest from the seniors' housing sector, this has yet to translate into developments on the ground. However, one force for change driven by government funding aimed to regenerate town centres and 'level up' could be the growing trend among local authorities to self-develop housing. In this sector, there is the need and the will to provide housing for a diverse range of demographics, to match actual local housing needs and to futureproof housing developments.

Legislation needed

Guidance, good practice and the odd development will not take us far enough though, says Walsh. "We need a set of legislation that will impact on design for cognitive and sensory impairment," she says. "Every designer needs to understand these key principles and apply them; they should become part of our everyday toolkit."

While many of the arguments about inclusive design and accessibility are financial – reducing the burden on social care and on the NHS – at the most basic level, the lack of accessible housing amounts to an abuse of people's human rights, points out Walsh.

"The UN convention on the rights of people with disabilities, in articles 9 and 19, says that people should have access to services and transport and the right to live in the place of their choice," she says. "We do not do this for cognitive or sensory-impaired people because we don't have the housing stock. There is a huge void."

Ireland: Age Friendly Athboy

A pilot project in Athboy, County Meath, made use of a walkability audit of the town to assess how the built environment feels and functions from the perspective of someone with dementia. The idea is to identify the difficulties that people may have in navigating a town and using its facilities and then to propose interventions.

The audit looked at elements such as footpaths, street furniture, traffic, transport, signage and parks, identifying what worked well and what improvements could be made. The resulting report contains recommendations and tips that other towns could use. It also led to a grant award to Meath County Council from the Rural Regeneration and Development Fund of 600,000 euros for streetscaping and public realm works.

Organised by the Meath Age Friendly Programme, Prosper Meath, Dementia: Understand Together, Age Friendly Ireland, and Meath County Council, the audit was carried out with input from local organisations and professional consultants including Fiona Walsh, principal architect at DDS Architects.

Resources for dementia-friendly design

- The Halsall Lloyd Partnership: *Design for Dementia Volume 1 – A Guide*
- World Alzheimer Report 2020: *Design, Dignity, Dementia: Dementia-related design and the built environment*
- National Disability Authority (Ireland): *Universal Design Guidelines: Dementia friendly dwellings for people with dementia, their families and carers*
- Alzheimer's Society: *Dementia-friendly Housing Guide*
- Dementia: Understand Together and Health Service Executive: *Dublin Dementia Inclusive Community Guide from a Universal Design Approach*

Sweden: the contractor, the retailer and the queen

A collaboration between Skanska, Ikea and the Queen of Sweden, through her Silviahemmet dementia foundation, has led to dementia-friendly housing developments in Sweden. Made from the prefabricated timber units created by Skanska and Ikea's BoKlok modular housing business, the developments feature shared social facilities and layouts aimed to help people with dementia live independently for longer. A SilviaBo home has around 50 slight changes when compared to a conventional one, according to Skanska, which include bright-coloured shower railings and doors, no mirrors, and old-fashioned knobs on kitchen appliances. The first six apartments were completed on a site near Stockholm in 2019.





10 ways Covid-19 has changed health and safety

Working practices both on site and off are unlikely to be the same after the coronavirus pandemic – and that should mean a safer, healthier construction industry

Throughout the Covid-19 pandemic, the Construction Leadership Council lived up to its name, publishing and updating its *Site Operating Procedures* as government guidance and information changed. From the first easing of restrictions on 19 July 2021, the procedures became guidance only; those leading projects are expected to

make their own risk assessments and decide on the measures necessary.

In the short term, most projects decided to err on the side of caution, reports Ray Bone (inset), president elect of the Association for Project Safety and managing director of Abbey Construction Consultants. “When the

restrictions were lifted, we advised all our clients to continue with the Covid-related practices they already had in place,” says Bone. “They all agreed.” In the longer term, it seems that changes brought on by Covid will lead to new ways of working that impact positively on health, safety and wellbeing risk management.



1 More thorough design reviews

The need to attend design review meetings virtually rather than in person has had two positive impacts. First, they have been held more frequently, with time that would have been spent on travelling to and from a physical location instead spent on review. And second, more people have been involved. "Because we have been able to have more people attending, there have been some great discussions," reports Bone. "We have been able to look at the designs more often when things changed, go into things in greater detail and identify more conflicts."



Welfare facilities have dramatically improved



2 Better welfare

"Welfare facilities have dramatically improved during Covid," says Bone. Aside from measures such as more intense and frequent cleaning cycles and the addition of hand sanitisation stations, there have also been some novel approaches to keeping people safe. For instance, a card system for canteens, where a card placed red side up indicated a table has been used and not yet cleaned, whereas green side up means it is clean and ready to be used.

3 Working choices

For some home working has been a blessing, for others a curse. For those roles and organisations where people don't have to be in the office every day, the options for a hybrid system, with some days at home and some in the office, will offer wellbeing advantages for some. Parents – or those caring for family members – who previously struggled to convince their managers that a hybrid approach could work, now have more flexible work choices.

4 Broader risk assessments

Most health and safety professionals on projects will now be familiar with Covid risk assessments. That approach could be maintained, and expanded, to cover other pathogens, suggests Bone. Equally, companies will be better placed to implement risk mitigation measures, whether mask wearing, social distancing or checking temperatures.

5 Morning safety meetings

Some morning safety briefings have been held via smartphones, PCs or other mobile devices to avoid contact between different trades or bubbles. This has worked well, says Bone. "I think it's worked better because more people have been attending and more people feel that they can speak openly over their phone compared to in a face-to-face situation," he says. "It's also safer, because the site supervisors don't have to spend time away from their work areas."

6 Information dissemination

The Covid pandemic has compelled health and safety professionals from all backgrounds to keep abreast with current and changing information. And it has also encouraged organisations to think differently about how they disseminate information. The APS, for instance, created more webinars to communicate with its members – and opened the webinars up to non-members during the pandemic.

7 Building in circulation and ventilation

There are many ways in which office buildings will be used differently post Covid. Those considering office design from a safety perspective need to think differently too, says Bone. Ensuring sufficient levels of ventilation and filtration is an obvious requirement. Circulation, too, must be considered, with elements such as corridor width, access and egress routes and the number of lifts under the spotlight.

8 Building for safe construction

Though this should always be a consideration under the CDM Regulations, designers and those advising them may now need to think about how the design of a building will impact on its assembly in terms of worker density. Sequencing that requires huge numbers of trades in one location may be a thing of the past. Instead, opportunities to modularise elements of the work, or programme them differently will help reduce the risk of pathogen transmission.

9 Technology

The pandemic has hastened the adoption of digital technology in several areas. From the necessity to work with 3D and 4D visualisations to the use of tags on site to monitor safe distancing, this unexpected situation has provided the chance to trial technologies, with those found useful in identifying and reducing health and safety risks becoming part of the industry toolkit.

10 Transformation

Some projects have had to make huge changes to the way they do almost everything – and many have done that very successfully. The construction industry, which is often accused of being traditional and slow to accept change, has demonstrated that it can transform itself quickly, when needed. Lessons learned about the right way to lead such changes could help steer further changes in health and safety practice and culture – and elsewhere.

In conclusion, despite the hardships and the negative impacts that Covid has brought, there are positives that the industry can build on. Strong leadership around health and safety risk management, the involvement of more stakeholders during design, faster technology adoption and the opportunity for a cultural reset around the way we think about and manage health and safety are some of these.

Using AI to cut accidents on site

Researchers, HSEQ professionals and constructor Winvic are working together on a new system which uses artificial intelligence to flag up potential safety hazards on site

On a warehouse scheme in north-west Leicestershire, a video camera is watching over one of the plots, sending images back to researchers at the University of West of England (UWE) in Bristol. This is part of a two-year R&D programme called Computer-Vision-SMART, involving contractor Winvic, UWE's Big Data Enterprise and Artificial Intelligence Lab (Big-DEAL) and video technology specialist One Big Circle.

"The aim is to build an AI-based health and safety camera device that can predict and prevent accidents," explains Winvic's digital engineering manager Morgan Hambling.

Funded to the tune of £600,000 by Innovate UK, the Computer-Vision-SMART programme will adapt One Big Circle's AIVR (Automated Intelligent Video Review) technology so that it can be used on construction sites. Currently AIVR is being used by Network Rail and Transport for Wales to review the condition of rail tracks. However, the non-linear and varying views and hazards on a construction site present a whole new set of challenges.

The goal is for the system to 'see' hazard situations, such as someone walking under the boom of a crane during a lift or failing to wear a hard hat, and send an alert. Initially, the plan had been to warn operatives directly via a wearable device, but Winvic and its partners had second thoughts, explains Hambling:



We are developing a whole new technology here. Computer vision hasn't been used for safety monitoring on construction sites

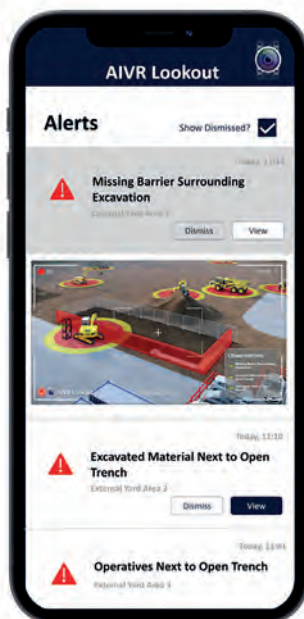
**Morgan Hambling,
Winvic**

"When we thought about it, we were concerned that an alert on a device could take someone's concentration away from the task that they were doing and create another potential safety risk," he says. "Now we are thinking that the system could alert the site manager who could relay the information safely to the operative on site."

With a delay between the system noticing a potential hazard and the person in danger finding out about it, would this still be as effective? Hambling points out that the idea is to recognise early warning signs. "If it's just about to happen, it may well be too late anyway," he says.

One Big Circle has developed a desktop application for the new system, which is in its beta stage. The first step is to be able to calibrate the video camera – tell it what it is looking at – by giving it reference points in a construction landscape that is ever changing.

The AI will eventually 'know' what different pieces of plant look like and what their exclusion zones should be



Safety reporting app takes off

In June 2020, Winvic started on a cultural change programme 'Doing It Right'. Part of that initiative saw the introduction of a mobile phone app which workers could use to report health or safety failings – or good practice.

After a few months of bedding in, use of the app started ramping up, Hambling says. And from April 2021, Winvic has been receiving 1,000 observations a month, both good and bad, via the app.

"The positive observations mean that we can highlight our best-practice subcontractors," he adds. "Some of the sites have digital boards which show which of our subcontractors are doing it right."

Winvic has been using observations via the app to help decide what areas it should focus on each quarter. To date it has targeted plant and equipment and general housekeeping. This generates more observations linked to these categories, allowing best-practice data to be shared between sites.



Winvic is working with UWE to help train the system to spot hazards. Its internal review team involves Hambling, technical director Tim Reeve, site staff and HSEQ advisers.

Machine learning works by ‘seeing’ many different views of the same thing. The first step was to teach it what types of plant look like. The team has now moved on to show it people with and without PPE. “They may be able to use synthetic data sets,” says Hambling. “They can use a computer to automatically generate different scenarios that it can learn from.”

Ultimately, the goal is to create a commercial product, AIVR Lookout. But there is a long way to go. “We are developing a whole new technology here,” says Hambling. “Computer

vision has been used previously but it hasn’t been used for safety monitoring on construction sites.”

There could be issues around how the workforce responds, says Hambling. “The system will bring big change,” he says. “It will be interesting to see how behavioural aspects influence the site team. We have to show people that we are doing all this because we want to keep them safe, not to be intrusive.” Winvic has a positive track record with tech and safety. In May 2021, it introduced a mobile phone app for workers to report issues (see box).

In the meantime, the video camera will soon be moving site, as Winvic nears completion of the warehouse, on DSV’s Mercia Park. But it won’t go far: to another on the same scheme.

Below: Winvic and its partners are training AI on warehouse projects for DSV on Mercia Park

In the longer term, Winvic hopes that data gathered through AIVR Lookout can feed back into design and planning, says Hambling: “If we know something is risky, we can plan it out.”



Building safety managers: the race to upskill

The new role of building safety manager, set down by the Building Safety Bill, is a complex and important one. Where will they all come from?

How many construction safety professionals can say that they are well versed in all the following areas: fire safety legislation; fire safety management; building safety management; health, safety and wellbeing; technology and structures for building safety; and Building Regulations? Yet this is exactly what is expected from the new breed of building safety manager.

A building safety manager – a role that was set out in the new Building Safety Bill, which was published in July 2020 – will take on the day-to-day responsibilities for looking after fire and structural safety for buildings over 18m, or six storeys, high (see box).

It's a challenging role, requiring competencies across a wide range of subjects, as outlined above. And we're going to need thousands of building safety managers. Fortunately, some organisations are already on the ball. A training programme triggered by the concerns of a housing association and developed by training provider Housing LMS in conjunction with the Chartered Institute of Building (CIOB) already has 100 people in training or signed up with more courses on the way.

"It's a very unusual course in that there is very diverse content, which has to be delivered by several different tutors, who are specialists not generalists," explains Roger Gillespie, managing director of Housing LMS. "It's not like anything I have ever seen before."

The CIOB-approved training course leads to a Level 6 Diploma in Building Safety Management, equivalent to a bachelor's degree,



We partnered with a lot of industry leaders to make sure that we are teaching our candidates what they need to know

Roger Gillespie, managing director, Housing LMS

should all six modules be completed successfully. Candidates can also take individual modules. The first two units on fire safety legislation for construction and fire safety management for construction would lead to a certificate in fire safety for construction.

Creating the diploma

It was Trafford Housing Trust that triggered the creation of the diploma. Responsible for managing around 9,000 homes, the trust set up a new building safety team after Dame Judith Hackitt's Independent Review of Building Regulations that followed the Grenfell fire. Its team includes two building safety managers and, through conversations between the trust and the CIOB about how these managers could be chartered, the diploma was born.

The pilot began in February 2021, with Housing LMS delivering it to a group from Clarion Housing. Clarion provides regular feedback on the course content, tutors and delivery that allows Housing LMS to fine-tune the various modules. "We are on our sixth start and the course has changed every single time," explains Gillespie. "We are constantly learning ourselves and taking on board the feedback, within the constraints of the syllabus."

other courses, almost everything in the building safety module is new," says Gillespie. "We partnered with a lot of industry leaders to make sure that we are teaching our candidates what they need to know."

Candidates come from a wide range of backgrounds, says Gillespie, from housing associations, construction management consultancies, service providers to the public and private housing sectors, and general health and safety specialists. Each module is assessed, with candidates submitting work that is marked and – if necessary – reworked if they have not shown the required depth of understanding.

"The candidates are very diverse in experience," says Gillespie. "Depending on the topic, you can have people who are viewed as experts and some who will have never seen the topic before. Nobody is coming to the course 100% in their comfort zone, although if you have a construction, health and safety or fire safety background some elements of the course will not be new to you."

Until September 2021, Housing LMS was the only organisation providing the training. From September, the CIOB will also provide its version of the diploma.

Experts meet

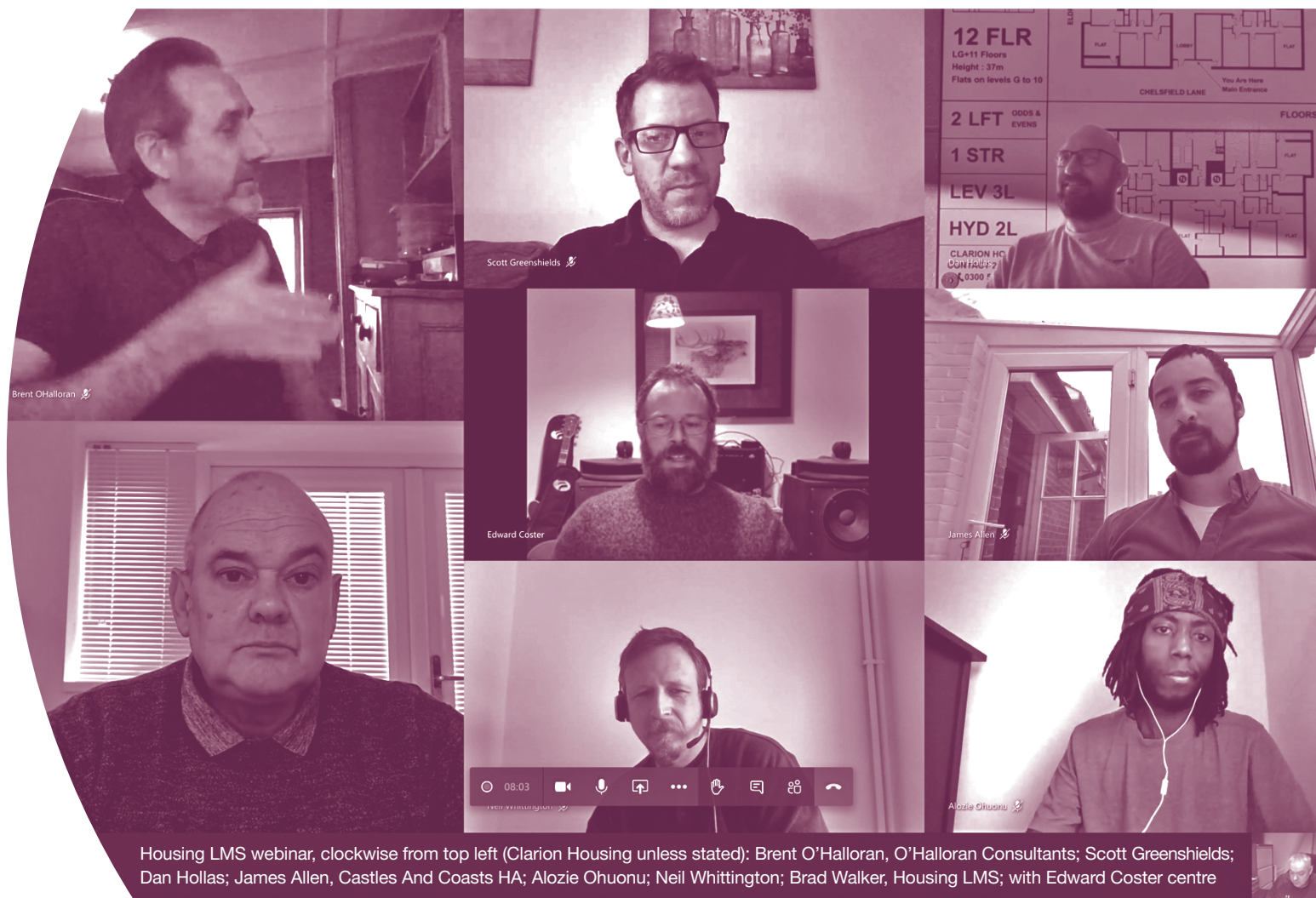
Restrictions due to the Covid-19 pandemic have meant that all courses to date have been delivered virtually. This has both pros and cons, says Gillespie. The positives are that candidates and experts can be linked up wherever they are in the country. The cons can be that it is difficult for tutors to spot if candidates are struggling – hence the importance of marked assessments and feedback.

To get the most from online delivery, LMS Housing limits the number of people attending each course to 20. All sessions are delivered live via a



The fire safety and building safety modules were the most demanding to create, says Gillespie. Given that the trigger for the creation of the building safety manager role was the Grenfell tragedy, the fire safety unit had to be very carefully thought out and designed.

The building safety unit was equally challenging. "Whereas the other modules had elements of content from



Housing LMS webinar, clockwise from top left (Clarion Housing unless stated): Brent O'Halloran, O'Halloran Consultants; Scott Greenshields; Dan Hollas; James Allen, Castles And Coasts HA; Afolaze Oluwalanmi; Neil Whittington; Brad Walker, Housing LMS; with Edward Coster centre

webinar, one each week for around 40 weeks, with sessions recorded so that they can be viewed by candidates afterwards. A 10-minute networking session beforehand and a Q and A session afterwards aids learning.

"With experts among the candidates, it has been really important for us to track down tutors who are specialists in each field," says Gillespie. "And where we know there are experts in the audience for that particular topic, the tutor involves them, so that their knowledge can be shared with the others in the group."

At £2,500 + VAT, this is one of Housing LMS's most expensive courses. However, demand is strong, with five groups of 20 already signed up. Another course starting in October was filling up when we spoke to Housing LMS in August. Considering that candidates are leaving the course with a degree-level qualification, perhaps this is rather a reasonable price to pay.

What is a building safety manager?

The Building Safety Bill, published in July 2021, creates the new role of building safety manager. The building safety manager must report to the 'accountable person' – the dutyholder for a building when it is under occupation. This is often the building's owner or landlord. The Bill applies to high-rise blocks over 18m or six storeys high.

The building safety manager will hold day-to-day responsibility for ensuring the fire safety and structural safety of a building. This is a multi-faceted role, with tasks that include:

- Ensuring the building meets health and safety legislation and Building Regulations
- Recording and checking any works that take place on the building
- Coordinating a compliance programme for elements such as fire equipment, portable appliances and alarms testing
- Overseeing a fire risk management system including fire evacuation and security plans
- Managing risk assessments
- Contributing to internal policies and procedures.

Building safety managers must be certified and listed on a publicly held register. Independent not-for-profit organisation the Building Safety Alliance, launched in July 2021, will be responsible for certification and registration.

The Fire Safety Act 2021 (FSA) is a short piece of legislation which, in essence, amends and clarifies the scope of the Regulatory Reform (Fire Safety) Order 2005. This order broadly applied to non-domestic premises.

The FSA is part of a series of legislative changes brought in by the UK government to try and reinforce fire safety measures for multi-occupied buildings.

The FSA received Royal Assent on 29 April 2021 and enacts recommendations made in the Grenfell Tower Inquiry report.

How does it change things?

The responsible person (RP) – generally the person in control of the premises, or the owner – for multi-occupied residential buildings must manage and reduce the risk of fire.

The FSA clarifies that such duties apply to buildings that contain two

Fire alarm



The new Fire Safety Act brings new duties and challenges, says **Hattie Jordan**

or more sets of domestic premises, and that RPs are responsible for the following elements of multi-occupied residential buildings: structure and external walls (including doors or windows and anything attached to the exterior of those walls, to include balconies and cladding); and any common parts, including flat entrance doors.

This clarification will empower fire and rescue services to take enforcement action and hold building owners to account if they are not compliant.



The Fire Safety Act is not yet fully in force but it will have far-reaching consequences

The FSA also incorporates a futureproof power for ministers under the order. They will be able to issue secondary legislation to further change or clarify the type of premises that fall within its scope.

Alongside these changes, the FSA introduces a risk-based approach to compliance. To take such an approach, RPs must follow risk-based guidance issued by the secretary of state to comply with their duties under the order.

If RPs follow such guidance, then this will be evidence that RPs have complied with their duties and, should they fail to do so, any evidence of such failure may be relied on as proof of contravention of the order.

How does it affect us?

The FSA is not yet fully in force, but it will have far-reaching consequences, such that external walls, including anything attached to those walls – such as cladding – and

flat entrance doors of multi-occupied residential buildings of any height, fall within the scope of that order. With this in mind, RPs will need to review and update their current fire assessments, particularly to determine whether the assessment covers areas such as external walls, doors, windows and balconies.

If the assessment does not comply, then RPs are legally required to rectify this by instructing a suitably qualified expert to carry out a full investigation and to determine if any remedial works are needed.

It is a criminal offence not to comply with the order. Failure to comply with the duties under the order could lead to serious consequences, including prosecution.

What are the immediate challenges brought about by the FSA?

The secretary of state is yet to publish the risk-based guidance under the FSA. RPs will have

It is essential that responsible persons keep abreast of relevant developments so that they don't unintentionally fall short

to wait to see the detail of such guidance. However, once published, RPs must comply and therefore it is essential RPs keep abreast of relevant developments so they don't unintentionally fall short.

It may be that fire risk assessors have to employ external engineers to deal with any parts of the assessment they cannot undertake. There is, however, the issue of a shortage of engineers who are qualified to undertake the external assessments as is required under the FSA.

It is understood that a considerable number of external system assessors are being trained to deal with the new requirements – the need to assess the external walls and fire doors – but no one knows if this will be sufficient.

The introduction of the FSA is also likely to cause challenges for insurers trying to navigate the legislative changes in this area. In addition, those seeking

to obtain insurance for multi-occupied residential buildings may struggle to do so. This includes surveyors who will need sufficient professional indemnity insurance to undertake external assessments under the order.

Unfortunately, the FSA does not deal with the costs required to undertake remediation works. Therefore, any cost implications will need to be dealt with in accordance with lease and service charge obligations.

The FSA is a short, but significant, piece of legislation that is intended to complement the Building Safety Bill when that is passed into law over the coming years. The effects of the FSA are far reaching for the reasons discussed and several unknowns and uncertainties remain about how it will work in practice.

Hattie Jordan is an associate with Fladgate LLP.

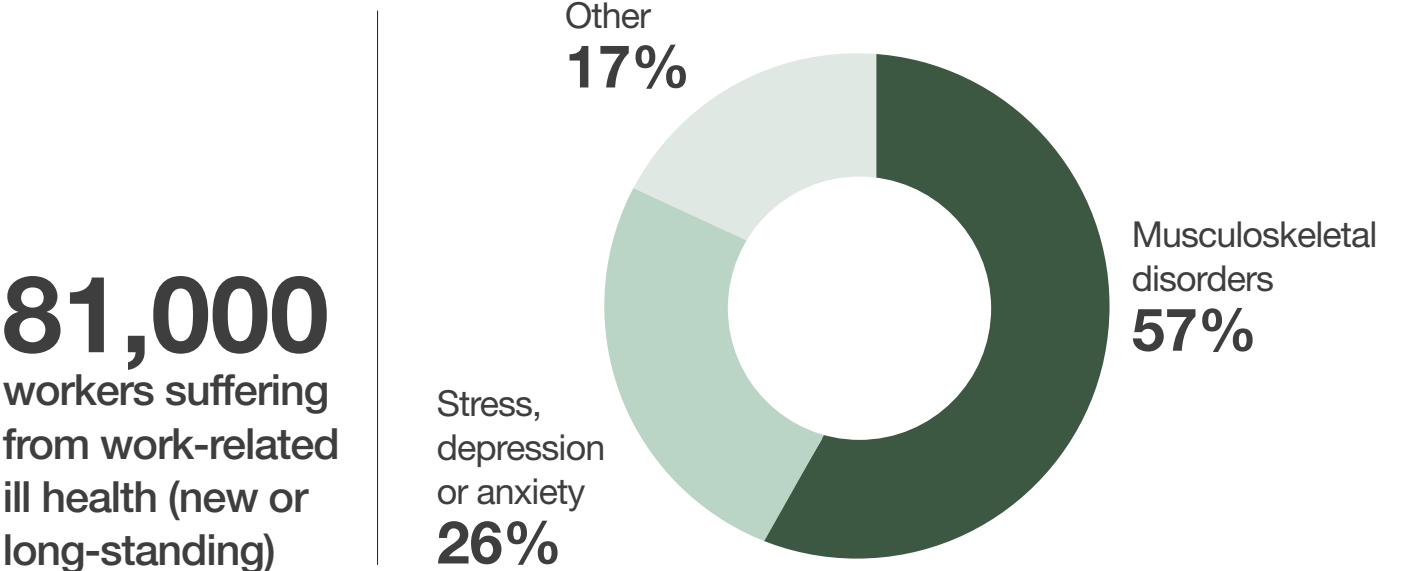
Stress in the spotlight: mental health in construction

Mental ill health is a growing problem in the built environment sector as studies by the HSE and CIOB demonstrate

As the first ever standard on managing psychological health and safety risks is launched (see page 17), here's a recap of what we know about mental ill health from HSE figures.

The most recent numbers available (for the year to March 2020) show that 26% of ill health experienced in construction is due to stress, depression or anxiety. Updated figures for the year to March 2021 are due in December this year.

Work-related ill health in construction, Great Britain, 2020 (source: HSE)



Causes of stress in construction, 2019 (source: CIOB)



Unrealistic programming and resourcing can cause stress and other forms of mental ill health. The Chartered Institute of Building's (CIOB's) May 2020 report, *Understanding Mental Health in the Built Environment*,

revealed some of the negative impacts of poor project planning on stress levels on site. Although there is rising awareness about the impacts of poor mental health in construction, the new standard, BS ISO 45003

Occupational Health and Safety Management — Psychological health and safety at work — Guidelines for managing psychosocial risks, makes it clear that employers need to do more. It is not enough to recognise

that stress is a problem or even provide people with treatment or training to help cope with it. Instead, efforts should be made to get to the root causes of stress in the workplace and how to alleviate them.

Sources: www.hse.gov.uk/statistics/industry/construction.pdf www.ciob.org/industry/politics-government/campaigns/mental-health-construction

Health & Safety Executive – prosecutions round-up

Here are the most severe fines meted out by courts to construction companies for health and safety failings in June, July and August 2021.

Failure to segregate leads to dumper truck death

BAM Nuttall was fined £700,000 following the death of John Cameron on the Blackhillock Substation project in Keith. On 28 October 2016, Cameron was changing the blade on a piece of equipment when he was run over by a six-tonne dumper truck. He sustained serious pelvic injuries and died as a result. An HSE investigation found that BAM Nuttall had failed adequately to assess risks to employees while repairing or replacing equipment. And there were no systems for creating a safe place to carry out such work segregated from vehicles.

Poor planning causes electrical accident

A scaffolder was unloading poles at a site near Willerby, Hull, in December 2018, when one of the scaffold poles touched an overhead power cable. He suffered burns to his legs and was hospitalised. Beverley Magistrates' Court fined the principal contractor Cambridge Glasshouse Company £333,333 and ordered it to pay costs of £1,235. HSE investigators found that the site was very muddy, which meant that the scaffolders could not park their vehicle close to the works and instead had to park further away.

Late action leads to late-stage HAVS

Building materials manufacturer Etex (Exteriors) UK was warned that an employee had symptoms of Hand Arm Vibration Syndrome (HAVS) in 2012 but failed to refer him to a doctor for detailed



An HSE investigation found that BAM Nuttall had failed adequately to assess risks to employees while repairing or replacing equipment

medical examination until 2016. By that point, he had late stage 2 HAVS, which is irreversible. The employee had been using a jet pressure washer, pneumatic chisels and a Kango hammer to clean down a machine used to form cement sheets. A second employee of the same company sustained electrical burns in 2017 when working on switchgear. Peterborough Magistrates Court fined Etex £282,100 for the two breaches and ordered it to pay costs of £12,294.

Repeated failings incur £50k fine

When an HSE inspector visited Urban Living Constructions' site in London SW11 in August 2019, they found numerous health and safety breaches including a lack of edge protection and a plank over a basement extension used as access. This followed on from two earlier visits to Urban Living Constructions sites in 2015 and 2019 when two prohibition notices had been served linked to work at height and a further one due to unsafe excavation. Westminster Magistrates Court fined the contractor £50,000 and awarded full costs of £6,578.84.

Worker loses leg due to excavator attachment

Contractor Hovington was fined £34,000 and ordered to pay £1,935.84 in costs when a hydraulic breaker, attached by a quick hitch to an excavator, became detached and landed on a worker's foot, narrowly missing one of his colleagues. The injuries sustained meant that the man had to have his leg amputated below the knee. The HSE investigation found no safe working systems to cover work in close vicinity to an excavator or a segregated area for changing excavator attachments.

Rising to the training challenge

As the regulatory backdrop changes, APS is providing its members with an enhanced CPD programme

There is an increasing emphasis across the construction sector on education and training, with government and regulators looking to membership associations to step up and provide access to more and better learning experiences for their members.

The Association for Project Safety (APS) is well placed to rise to the challenge, as it has long been considered expert at ensuring members can easily access continuing professional development. APS is also looking at developing a core curriculum for members, so people can develop their skills.

We are always keen to hear from members about subjects they would like to see the association tackle. If you have any ideas for training or topical webinars – or recommendations for brilliant speakers – please get in touch and let us know.

Continuing professional development

In years gone by APS took its continuing professional development (CPD) show on the road, visiting each of the association's regions twice a year. But, with the need to pivot activities to allow for greater social distancing, APS will now be hosting two tranches of CPD online every year. We will run each session six times to allow you to get the most out of an interactive experience.

We are currently planning the next season. Our fellows have suggested fire safety, building design generally, or integrated design and how risk management can be integrated into the design, construction and post-construction phases of every project more specifically.

Look out for your chance to vote on the subject you want us to put on this autumn.

Start each week with APS

From the start of the Covid-19 outbreak, APS has worked to bring you topical and informative webinars. APS has always aimed to address current issues and help members across the country keep up to date with new ideas, skills and the latest thinking.

Now that life is returning to the 'new normal', the association is putting its webinar programme onto a more formal footing so members can plan ahead.

We will be putting on three 10-week blocks of webinars – one in autumn, winter and spring each year. The autumn programme will start in the coming weeks with a series which includes climate change and the environmental challenges facing the construction industry, safety on site in hot weather, fire mitigation and plenty more (further details in the box below).

The APS autumn webinar programme

1. Tackling climate change – an overview
2. Flood mitigation
3. Safety on site – working in hotter and wetter weather
4. Managing risk – dealing with 1:100-year events
5. The smart meters revolution
6. Green energy and the farewell to fossil fuels
7. Cancer risks associated with working outdoors
8. Retrofitting our homes and offices for greater energy efficiency
9. The green materials revolution
10. Fire mitigation

You can check out upcoming events at www.aps.org.uk/events or on the APS pages on LinkedIn – just search 'Association for Project Safety'.

Depending on speaker availability we will try to host each webinar on Mondays. They will last around an hour and we aim to start at 1pm. Members who cannot attend live will be able to view the session online in our webinar archive. Unless otherwise stated attendance at each webinar will attract one CPD point.

Around the regions

APS was set up to help professionals in construction design risk management share knowledge and experience with colleagues throughout the United Kingdom. Over the years peer-to-peer learning has become one of the strengths of the association and an integral part of how we reach out to our community. Please look out on the website for events being brought to you by our regional committees.



BBRS.TM

Business Banking
Resolution Service

Unresolved business banking complaint?

We can help settle disputes dating back to December 2001.

The BBRS is a free, independent service helping SMEs settle unresolved banking complaints.

See if our dispute resolution specialists can help you.

thebbrs.org/property



OFFSITE EXPO

21-22 SEP 2021

COVENTRY BUILDING SOCIETY ARENA
CONSTRUCTION | TECHNOLOGY | INNOVATION

FAST & EFFICIENT
ACCESS TO A WEALTH
OF KNOWLEDGE &
**OFFSITE TECHNOLOGY
INNOVATION**



**1 OFFSITE
BUYERS FORUM**
Over 100 VIP BUYERS



2 DAYS
21 & 22 SEPTEMBER
2021



**>3000
VISITORS**
targeted

**>100
EXHIBITORS**



**800+ SEMINAR
SESSION ATTENDEES**
professional development



**£0
COST
TO VISIT**
FREE admission



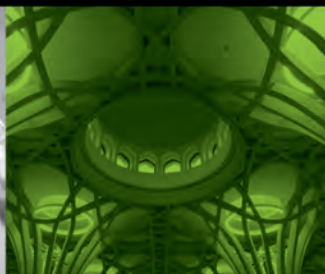
Situated in the heart of England,
the Ricoh Arena is within
**TWO HOURS' DRIVE OF
75% OF THE POPULATION**



**3 MASTERCLASS
THEATRES**



**30+ HOURS OF
OFFSITE FOCUS
SEMINAR SESSIONS**



**REGISTER YOUR FOC TICKET
TO THE OFFSITE EVENT OF THE YEAR...**

WWW.OFFSITE-EXPO.CO.UK/BOOK

