



Knowledge Foundations

Inside This Issue

- 01 [UCEM News](#)
- 02 [Other News](#)
- 03 [Built Environment Research](#)
- 04 [Property & Construction Statistics](#)
- 05 [e-Journal Review](#)
- 06 [e-Book Review](#)
- 07 [UCEM e-Library](#)
- 08 [Student Career Service](#)
- 09 [UCEM's Sustainability Hub](#)
- 10 [Information Governance](#)

[A to Z of useful references and web-links](#)

What's in this month's issue

- **Latest UCEM News** incl. - Party atmosphere as first Class of 2022 cohort celebrate at Graduation.
- **Things you need to know this week** – Government Agency Homes England pilot fresh partnership approach to help drive place-based housing growth and regeneration.
- **Latest Research** from Savills, The Smith Institute, RICS, CBRE, Joseph Rowntree Foundation, and more.

Happy reading!

Issue 8 - August 2022

Welcome to UCEM's monthly *Knowledge Foundations* newsletter (formally the library e-bulletin), a compendium of news and views, research and resources relating to the educational sector and Built Environment.

The UCEM Library aims to disseminate information, promote current awareness, and share good practice, to assist in the continual professional development of all those working and aspiring to work within the Built Environment/Property and Construction industries.

“The mission of librarians is to improve society through facilitating knowledge creation in their communities”

(R. David Lankes)

The initial aim of this UCEM Library current awareness service was to help keep students and staff informed of the education sector and industry specific news, share current and best practice, highlight the latest research, and identify case studies that will support studying and supplement teaching and learning resources. However, over the years and upon request, the readership has now expanded.

We welcome news and information from readers to include in future editions - please [email us](#).

Supported Online Learning

The readership of *Knowledge Foundations* has expanded (to include Alumni) and is now promoted further afield, with the latest version appearing on the UCEM Website.

[Visit Supported Online Learning](#)

[Back to top](#)

UCEM News

Party atmosphere as first Class of 2022 cohort celebrate at Graduation

Glasses clinked, arms were raised aloft triumphantly, and guests cheers as more than 150 recent students graduated at Reading Town Hall.

Almost 500 graduates and guests were in attendance across the three ceremonies on Friday (24 June) and Saturday (25 June).

With it being the first UCEM Graduation held without COVID restrictions since 2019, a drinks reception returned to the event and joy was written across the faces of all attendees.

UCEM Vice Char of the Board of Trustees, Dr Stephen Jackson, led the introduction to the ceremony on Friday, with UCEM Chair, Amanda Clack, taking the role during Saturday's two ceremonies.

UCEM Principal, Ashley Wheaton, gave the address for all three ceremonies, congratulating the graduates, thanking Trustees and staff for their hard efforts and sharing news of the university's plan to launch a new academic programme as part of its efforts to become the world's most sustainable university.

Ashley implored the graduates to shape the built environment for the better as they progress to the next stage of their careers and cited the important role the new alumni have in combatting climate change. He closed with a quote from Robert Swan – the first person to walk both the North and South Pole and subsequently an environmental leader: "The greatest threat to our planet is the belief that someone else will save it."

UCEM Deputy Principal, Jane Fawkes, then called up the graduates to the stage to receive their certificates from Ashley.

This was followed by the guest speaker speech. On Friday, this fell to the Government Chief Property Officer, Dr Janet Young, who shared her story and conveyed the huge passion she has for the built environment and the exciting careers which exist within the sector.

On Saturday, UCEM alumnus, Honorary Fellow, Chartered Surveyor and RICS LionHeart Chair, Peter McCrea, reflected on this own career journey and shared the lessons he learnt along the way. Peter also encouraged the new graduates to become involved with RICS Matrics and look for opportunities with LionHeart and the Lands Tribunal if they so wish.

Dr Stephen Jackson and Amanda Clack, respectively, closed the ceremonies and, in a new tradition, the academic procession and staff gathered in two lines and gave a guard of honour to the new graduates as they left the Concert Hall.

[Back to top](#)

Access the article '[Party atmosphere as first Class of 2022 cohort celebrate at Graduation](#)' in full.

Other UCEM News



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CIOB and UCEM team up to deliver an apprenticeship with a route to chartered status

- The Chartered Institute of Building (CIOB) and UCEM have teamed up to offer a degree apprenticeship programme which is also a route to chartered status.

CIOB and UCEM have teamed up to offer a degree apprenticeship programme which is also a route to chartered status as a construction professional. Apprentices already on the Construction Site Management programme who are due to complete their end-point assessment in September 2022 will be part of the first cohort who can claim their apprenticeship certificate, degree and chartered member status with CIOB.

UCEM launched the Construction Site Management degree apprenticeship in 2020 and the timing of CIOB's acceptance onto the register of end-point assessment organisations in England means all apprentices on the programme will now be able to complete their end-point assessment with CIOB. The level 6 Apprenticeship standards with CIOB can now deliver end-point assessments for are:

- Construction Site Management
- Construction Quantity Surveyor
- Design and Construction Management

The partnership between UCEM and CIOB will support the first cohort of Level 6 Construction Site Management degree apprentices in 2022. As part of this partnership, CIOB is offering the option of becoming a chartered member, able to use the post-nominal of MCIOB, for all apprentices. The process has been designed to be relatively simple, focusing on mapping evidence of the on-programme journey towards membership requirement.

For more on the apprenticeship, and details of how to apply, head to [UCEM's 'apprenticeship programmes' webpage](#).

For more on CIOB's support for apprenticeships, head to [CIOB's 'end-point assessments' webpage](#).

[Back to top](#)

Access the article '[CIOB and UCEM team up to deliver an apprenticeship with a route to chartered status](#)' in full.

UCEM apprentice becomes Student Trustee and Lead Student Representative

UCEM Chartered Surveyor apprentice, Joe Orrell, is the institution's new Student Trustee and Lead Student Representative. Joe, who is studying on UCEM's BSc (Hons) Building Surveying programme, begins in the dual role in July after being successful in his application for the position.

Access the article '[UCEM apprentice becomes Student Trustee and Lead Student Representative](#)' in full.

UCEM alumni co-found development management business

A new development management company has entered the Dublin market after two UCEM alumni joined forces to co-found their business. Cillian Doyle and Steven Cronin, who graduated from UCEM's MSc Real Estate programme in 2020, are directors and co-founders of Kimberlite.

Access the article '[UCEM alumni co-found development management business](#)' in full.

#StandWithUkraine

UCEM



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The All-Party Parliamentary Group for Libraries, Information and Knowledge (APPG) noted the '[Statement of Solidarity with librarians, archivists and information professionals in Ukraine](#)', produced by the Chartered Institute of Library and Information Professionals (CILIP) with signatures from more than 800 leading national institutions, including the British Library, the National Library, Wales, National Library Scotland and [UCEM e-Library](#). In addition to the above statement CILIP have set up - **Support for Ukrainian information professionals & The Ukraine Crisis Hub** - Ukrainian librarians and information professionals displaced by the invasion who find themselves in the UK are able to join CILIP free of charge and to access professional support including: • Advice on finding work; • Access to job listings; A one-to-one conversation with a specialist recruiter; • Support from Specialist Interest Groups, and • Free access to professional registration and continuing professional development.

[Access further information on Ukraine Crisis Hub](#)

[Back to top](#)

Also:

[**Outstanding alumna becomes first recipient of ISCM scholarship**](#)

[**UCEM programme leader shares research at prestigious international historic building conference**](#)

[**UCEM programme leader wins seat on RICS Governing Council**](#)

[**UCEM boosts its accessibility credentials with launch of course for staff**](#)

[**UCEM passes first ever Ofsted inspection with flying colours**](#)

[**UCEM and DiverseCity Surveyors launch BAME mentoring scheme**](#)

[**UCEM joins campaign to drive better gender balance at board level**](#), and

- [**Access further information about the 30% Club**](#),
- [**Access more information on UCEM's diversity and inclusion objectives**](#)

[**https://www.ucem.ac.uk/whats-happening/news/new-research-calls-for-recognition-of-commercial-opportunity-over-obligation-in-delivering-goods-or-services-to-those-with-a-disability/UCEM reasserts its commitment to organisational excellence with Advance HE membership**](https://www.ucem.ac.uk/whats-happening/news/new-research-calls-for-recognition-of-commercial-opportunity-over-obligation-in-delivering-goods-or-services-to-those-with-a-disability/UCEM-reasserts-its-commitment-to-organisational-excellence-with-Advance-HE-membership), and

- [**Access further information on Advance HE**](#).
- [**For more on UCEM's ambitions, take a look at the Institution's *Vision and Strategy* brochure**](#)

COVID-19: UCEM Management response to COVID-19

Further information and the latest developments can be found via the [**UCEM Website**](#), & don't forget that the [**UCEM e-Library**](#) can be accessed 24/7 (via the VLE-Virtual Learning Environment) with a wealth of valuable resources to help 😊. If you have any further questions, please contact:

- Student enquiries – Student Central on our VLE
- Employer enquiries – [**businessdevelopment@ucem.ac.uk**](mailto:businessdevelopment@ucem.ac.uk)
- Other enquiries –

Email: [**reception@ucem.ac.uk**](mailto:reception@ucem.ac.uk), Tel: +44(0)118 467 2100

Note: [Keep abreast of the latest UCEM News and events**](#)**

– Read our blog to keep updated on Building Environment industry insights, student case studies, and thoughts from UCEM Principal: Ashley Wheaton.

[Back to top](#)

Other News

Things you need to know this week: Homes England trials partnership model with Greater Manchester

- Government agency pilot fresh partnership approach to help drive place-based housing growth and regeneration.

Homes England and Greater Manchester Combined Authority (GMCA) are piloting a new way of working between the government agency and local authorities. The strategic place partnership (SPP), which is also being trialled with the Association of South Essex Local Authorities (ASELA), is aimed at sub-regions with the most ambitious proposals. Peter Denton, chief executive of Homes England, said, "Together we can pool our resources to support place-based growth and regeneration, including the supply of well-designed new homes". Mayor of Greater Manchester Andy Burnham said, "This partnership will give a major boost to the work we're already doing across Greater Manchester to address the national housing crisis." The SPP pilot is one tool Homes England is exploring as part of broader efforts to reshape the way it works with places.

Also, this month,

- Home England has agreed a £30 million loan to help deliver 189 homes as part of the continuing transformation of Middlewood Locks in Salford, Greater Manchester. The agreement with Middlewood Locks KLM, a partnership between Scarborough Group International and its joint venture partners Metro Holdings and Hualing Group, will help drive the third phase of development. The first two phases have seen 1,117 homes delivered, and the overall scheme is planned to have more than 2,000 homes plus commercial space.

- Manchester City Council is to acquire Whythenshawe shopping centre from owner St Modwen to consolidate its wider land ownership in the two centre and pave the way for regeneration. The council has been working on a long-term vision for the town centre's regeneration, which includes new housing, employment and cultural space, alongside investment in public realm.

- London mayor Sadiq Khan has launched a £4 million fund to help local authorities across the capital bring through sites for council housing. The Land for Council Homes Revenue Fund aims to help councils identify and unlock land for homes and boost the skills and capacity of boroughs' in-house housing, planning and regeneration teams. Councils can each bid for up to £400,000 from the new fund.

- Liverpool City Region Combined Authority is injecting £15.5

[Back to top](#)

million into the conversion of a former business campus in Huyton to a multi-let industrial estate. The campus was formerly home to distilling giant Halewood International, which closed its operations there in 2020.

- Private equity firm Partners Group and student accommodation specialist Host Student Housing have formed a £1 billion joint venture to provide student accommodation and co-living in the UK. The joint venture is seeded with two Host-owned operational purpose-built student accommodation (PBSA) assets in Leicester and Colchester, a PBSA development project in Bournemouth and a purpose-designed co-living development project in Guildford, Surrey.

- Developer Kier Property and social impact investor Housing Growth Partnership have entered a joint venture partnership that's aiming to deliver 2,000 new homes for sale and rent on brownfield sites in key towns.

- The UK government has launched its Help to Build equity loan scheme to support those wanting to access custom and self build homes.

- Developer Montreaux Homes has acquired a former industrial site in St Albans, Hertfordshire, where it plans to build 37 homes. Redevelopment of the former builders' yard site will also include open landscape space.

[Read the full 'Need to Know: Homes England trials partnership model with Greater Manchester' article.](#)

(Please note that you will need to register to access these stories in full, although you can 'Register free for limited access.' Visit the website, scroll to the base of the homepage, and note access route within 'Subscription and Registration').

Case Study: Redeveloping a city site into a net-zero workplace

- Developer Quadrum has set ultra-high sustainability targets for its redevelopment of a tired 1950s officer building in London's Victoria.

Recent years have seen a shift in occupiers' expectations of buildings they occupy, driven by growing awareness around the climate crisis and the need for urgent action to meet the UK's net zero targets by 2050. Workplaces are needing to align with environmental, social and governance (ESG) standards to attract and retain businesses and their employees, while the pandemic has resulted in greater emphasis being placed on buildings supporting occupier wellbeing, offering flexibility and promoting collaboration.

These factors informed plans by owner-developer Quadrum to

redevelop 11 Belgrave Road, in London's Victoria, turning a tired 1950s office building into a 150,000 sq. ft net zero workplace by late 2023.

The building is the UK's first to achieve a design-reviewed 5.5 Star target rating under the NABERS UK energy efficiency rating system. It features 108,000 sq. ft of Grade A office space with café and gym, 14,000 sq. ft of communal areas, 13,000 sq. ft of greenery, a private garden and a rooftop with views of the capital's skyline.

As well as achieving the 5.5 Star target rating under NABERS UK, the scheme sits in the top 1 per cent of BREEAM assessed buildings, having attained a design stage BREEAM Outstanding rating, as well as UKGBC Net Zero Carbon in both construction and operation. It has also achieved WELL Pre-certification and is targeting WELL Platinum certification upon completion and on-site testing.

Challenges

Working to several different targets at once presented some challenges, not least in adhering to strict criteria and managing a host of details from the earliest phase of the project. Every decision made at design stage needed to lead to a building that is net zero in construction and also in use.

This challenge was further compounded by the site's prominent location in the middle of a busy central London neighbourhood. The project team needed to minimise disruption, find ways to integrate ample green spaces, and combine beautiful architecture with net zero to give the best possible occupier experience. Achieving the first NABERS UK 5.5-star rating was a learning curve, with no existing UK example to follow.

Solution

Quadrum collaborated with a team comprising Eric Parry Architects, landscape architect Gillespies and construction company BAM. Engineering consultant Max Fordham led on the NABERS UK Design for Performance process, services consultant Delta Green advised on the BREEAM Outstanding rating, and consultant Ekkist supported on the WELL Platinum target.

A top priority was reducing embodied carbon and Max Fordham's modelling – based on the UKGBC net zero carbon buildings framework and RICS whole life carbon analysis – will achieve a whole life carbon level that surpasses the RIBA 2030 Challenge by 38 per cent. In all 35 per cent of the existing structure will be retained, with additional materials being prepared off-site, reducing disruption and waste.

The building is fully electric and high efficiency photovoltaic (PV)

[Back to top](#)

panels on the roof cut CO2 emissions by 35 per cent and supply renewable energy.

After handover

The project looks to set new standards for the workplace of the future, in its design, sustainability, futureproofing and focus on health and wellbeing and gives major consideration to how the building's operations can be designed. Quadrom will proactively share knowledge, information and tools so its occupiers can run their building sustainably after handover.

[Read the Case Study entitled, 'Redeveloping a city site into a net-zero workplace' in full.](#)

(Please note that you will need to register to access these stories in full, although you can 'Register free for limited access.' Visit the website, scroll to the base of the homepage, and note access route within 'Subscription and Registration').

Analysis: Impacts of government's drive for design quality

- An analysis of planning appeals has found the policy push for good design is making a difference, the author of this article reports.

Government's focus on design and beauty in planning policy is resulting in more local authorities being successfully advocated by the Place Alliance looked at planning appeals before and after policy change was implemented last year and found a notable reduction in the number of local authority refusals overturned by the Planning Inspectorate.

The study, **[Appealing design](#)**, looked at the impact of the updated National Planning Policy Framework (NPPF) introduced last July (2021), which stated that "Development that is not well designed should be refused". "This means the test is now the achievement of good design and not just the avoidance of bad design," said Matthew Carmona, chair of the Place Alliance, professor at The Bartlett School of Planning at University College London and co-author of the report with Valentina Giordano, a lecturer also at The Bartlett.

Carmona and Giordano scrutinised thirty-two planning appeals for major housing-led proposals in England over 2021 where design had been the grounds for the original refusal, comparing and contrasting twelve appeals pre-dating the introduction of the updated NPPF with twenty that followed it.

"It was immediately apparent that a marked shift in the likelihood of local authorities successfully defending design-based appeals had occurred," Carmona said. The study found the odds of local planning authority success on design grounds improved from 5:7

[Back to top](#)

against to 13:7 in favour, Carmona noted, “The shift was particularly apparent in the arguments used by Inspectors who, on the face of it, seemed to have been liberated to consider design on equal terms with other factors. In doing so, they regularly referenced the changed NPPF, as well as guidance in both the National Design Guide and National Model Design Code.”

These findings, said Carmona, put paid to some of the common perceptions that have underpinned reluctance to refuse poor and mediocre housing design and indicate that “Design quality seems no longer to be set aside as a sacrificial lamb for other factors, whether that’s housing numbers or viability concern.”

At the report’s launch, Joanna Averley, chief planner at the Department for Levelling Up, Housing and Communities (DLUHC), said the findings showed positive planning in action. “When we make national policy and when we strengthen that at a local level and apply good and solid decision-making to it, we get to really good outcomes,” she explained. That view was echoed by David Morgan, professional lead for planning appeals at the Planning Inspectorate, who called the study “a good shout-out effective policy” and said the Planning Inspectorate would look to build on it with its own research. RTPI president Timothy Crawshaw said the report’s findings were, “almost a eureka moment” and argued, “We now need to double down and ask for more.”

Developers already investing in design quality stand to be among the biggest beneficiaries of this shift, argued Justin Webber, senior building conservation officer at Leicester City Council, as poorer quality submissions should not be clogging up the planning system. “This report gives us some surprising answers and should give us hope that design is up on the agenda,” said Katja Stille, chair of the Urban Design Group, which along with Civic Voice, the RTPI, and Urban Design Learning supported the research.

[Further information and read the article, ‘Analysis: Impacts of government’s drive for design quality’ in full.](#)

(Please note that you will need to register to access these stories in full, although you can ‘Register free for limited access.’ Visit the website, scroll to the base of the homepage, and note access route within ‘Subscription and Registration’).

Review: Redevelopment of a city square

- The new look Exchange Square in the City of London has had its landscape softened with trees and shrubs but could have been more diverse in its planting and target audience, writes the author of this article.

Immediately north of Liverpool Street railway station, in the heart of the City of London’s central business district, sits the ‘new’ Exchange Square, a centre point to the redevelopment Broadgate quarter. Owned by developer British Land, the ‘square’ was

[Back to top](#)

redesigned by architect DSDHA and completed earlier this year (see publication date). It is being promoted as “London’s newest privately owned but publicly accessible green space” but, in fact, predominantly hard paved.

Sitting on a podium over the railway tracks, the 1.5-hectare site slopes gently south, naturally focusing attention on the panoramic view of the station train sheds with the City of London skyline as a backdrop. Framed by tall office buildings on the west, north and east sides, the space is simply organised around the primary walking route, which gently meanders from the south-west to the north-east corner. The northern edge is softened by a grove of very large semi-mature trees in raised planters with a rich and mixed understorey planting. The informal seating opportunities offered by the low flat planter walls is supplemented by a scattering of sprung steel armchairs and coffee tables and several curvy wooden benches.

Terrace and views

The centre piece of the space is a spectacularly white terrace, formed from what looks like polished concrete, incorporating a water cascade and pools. It provides a dramatic close-up view of the station’s interior with raised lawns and planters softening the foreground, with a small collection of timber recycling bins sitting centrally.

The terrace, and all the other ‘plan’ forms in the space, have edges that playfully meander, somewhat arbitrarily, but with the effect of softening the space and increasing the opportunities for secondary/informal seating.

To the west a ramp rises further to the roof top platform, offering views down into the station.

Several shortcomings

The recent transformation sees the space’s original components: terrace, lawns and water cascade, and so on, reinterpreted in a more generous and playful manner. The new space, however, still has several shortcomings similar to the original.

The primary shortcoming appears to be the narrowness of its target audience, which is 20-30-year-old office workers who will happily use the terrace and low walls to sit on.

Further information and read the article, ‘Review: Redevelopment of a city square’ in full.

(Please note that you will need to register to access these stories in full, although you can ‘Register free for limited access.’ Visit the website, scroll to the base of the homepage, and note access route within ‘Subscription and Registration’).

[Back to top](#)

Education Latest [July 2022]

[Access the latest Education news](#)

The UK technology sector has a talent shortage which could “stifle growth,” an industry body was warned.

There were more than two million UK job vacancies in tech last year, more than any other labour area, but an industry coalition says nearly 12 million workers lack essential digital skills.

Data cited in the latest UK jobs report from professional service network KPMG and the Recruitment and Employment Confederation showed candidate numbers for job vacancies has been falling. The report said this is because of: a generally low UK unemployment rate, concerns over job security, and increased economic uncertainty, which made people wary about moving jobs.

BBC Latest – Climate [July 2022]

[Access the BBC News, Latest Climate reality check](#)

[National emergency declared after red heat warning](#)

- A national emergency has been declared after a red extreme heat warning was issued for the first time, as temperatures could hit 40C (104F) (see publication date)

Downing Street said the Met Office alert was being treated as a national emergency, with officials continuing to meet to discuss the responses. It is the first time a red heat warning has been issued for parts of the UK, although the extreme heat warning system was only introduced in 2021.

Also:

- [A really simple guide to climate change](#)
- [How do we know climate change is caused by humans?](#)

Also: Please visit the '[Sustainability Hub](#)' within *Knowledge Foundations* for further information and related articles.

BBC Latest - Coronavirus – latest developments [July 2022]

Coronavirus pandemic

- One in 18 has Covid in the UK,
- Covid: Sore throat and cough top symptoms,
- India starts giving free Covid booster jabs,
- 3m adults in England still have no Covid vaccine,
- Macau shuts down casinos following Covid outbreak,
- Covid infections hit 2.6 million in the UK,
- Zero holds danger for China's Xi,
- UK Covid-19 infections falling across most of UK.

[Access the BBC News, Latest Coronavirus pandemic news](#)

[Back to top](#)

Related Link(s): Coronavirus: Why some people want to keep working from home –

[Access the BBC News article entitled, ‘Coronavirus: Why some people want to keep working from home,’ in full.](#)

Also:

[Living with Covid plan to restore our freedom - PM](#)

[What are the UK’s ‘Living with Covid’ plans?](#)

The evolution of building surveying education during COVID-19

- In January and February 2020, as the pandemic was starting to gain momentum and spreading around the globe, universities in the UK were beginning to consider how to react. As a sector, UK higher education is relatively familiar with web-based methods of communication, teaching, and learning.

In fact, the University College of Estate Management (formerly the College of Estate Management) and the traditional home of RICS correspondence courses, operates their business totally online.

A lot of universities operate a Virtual Learning Environment (VLE) which allows them to communicate with their students and provides the opportunity to interact with them in terms of online courses and assessments, and as a depository for learning materials.

This is allowing the students to revisit the materials to embed or reinforce their learning or to catch up if a session was missed. Common VLE’s include Blackboard, WebCT, and Moodle. Their functionality and features are all relatively similar.

Although the physical libraries were closed, universities operate electronic libraries which offer access to a large number of electronic databases, and a growing number of books and journals, ensuring that the students and staff, can continue to access the majority of relevant information for their studies and research.

[Further information and access to the article ‘The evolution of building surveying education during COVID-19’, in full.](#)

[Access further information about UCEM’s Supported Online Learning > e-Library.](#)

Will COVID-19 accelerate construction’s digital transformation?

- With many industry professionals forced to work remotely, is now the perfect time for construction to get up to speed with all

[Back to top](#)

things BIM and digital? *Construction Manager* magazine finds out if the coronavirus will change the way we work forever.

David Philp – Global BIM/MIC consultancy director, AECOM says, **“It’s an opportunity to rethink how we can use technology and innovate.” (Philp 2020)**

Mark Boyle – Global design direct, Robert Bird says, **‘Our digital processes lend themselves to remote working.’ (Boyle 2020)**, and Gary Fannon – Technology director, Turner and Townsend says, **‘Early digital adopters will be reaping the rewards.’ (Fannon 2020)**

Andrew Gamblen – Digital manager, Willmott Dixon says, **‘People will become more comfortable collaborating remotely.’ (Gamblen 2020)**

Richard Saxon – CBE Chairman of JCT, client adviser at Deploi BIM Strategies says, **“Wartime scenarios” will push the digital agenda.’ (Saxon 2020)**

[Read the *Construction Management* \(formerly *Construction Manager*\) article ‘Will Covid-19 accelerate construction’s digital transformation’, in full.](#)

Related links:

What will the post-pandemic office look like? - With remote working seemingly here to stay, anecdotal evidence suggests that firms are looking to cut office space by up to 40%. How is the workplace having to evolve to remain relevant?

[Read the *Construction Management* article, ‘What will the post-pandemic office look like?’ in full.](#)

‘Generation Work from Home’ – the impact of default flexible working - The UK government has announced proposals to make flexible working a ‘day one’ right for employees, as part of reforms to the Flexible Working Regulation 2014.

[Read the Shoosmiths article, ‘Generation Work from Home’ – the impact of default flexible working’ in full.](#)

Free content related to Coronavirus, the management of epidemics and the wider impact on society



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Emerald Publishing, one of the UCEM e-Library subscription services, have brought together a number of research

[Back to top](#)

resources related to the Coronavirus group of viruses, and epidemics more broadly.

Emerald collated research and the management of epidemics and made it freely available to assist practitioners and researchers who are working to tackle the current situation and likely consequences. Whilst these materials do not only relate to the current clinical challenges of Novel Coronavirus, but they may also provide relevant context to how the world reacted to other previous Coronavirus outbreaks (notably SARS) and epidemics.

[Access Emerald Publishing's 'Coronavirus, the management of epidemics and the wider impact on society'](#)

Covid-19 and the impact on business

HSTalks

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HS Talks - Interviews with academics and experts from the business community, on the impact of the Covid-19 pandemic, are now available in the HS Talks 'Business & Management' collection that UCEM subscribes to.

1. [The impact of Covid-19 on organisations](#)
2. [The impact of Covid-19 on psychological safety in the workplace](#)
3. [The impact of Covid-19 on cybersecurity and data privacy](#)

[Latest News: *Construction Management \(CM\)* \(formerly *Construction Manager*\) \[July 2022\] Are contractors obliged to stop work during heatwaves?](#)

- With temperatures climbing above 30 degrees again later this week (see publication date), do construction companies have an obligation to stop work when temperatures become too hot? The authors of this article explain how contractors should protect their workers during heatwaves.

The Health and Safety at Work Act 1974 (HSWA) requires employers to provide their employees with a safe and healthy working environment, which, in particularly hot and dry weather conditions, will require them to assess and control risks arising from working in hot temperatures, possibly with increased exposure to the sun. While there is not set maximum temperature for working outdoors in the UK, the Workplace (Health, Safety and Welfare) Regulations 1992 require employers to provide a "reasonable" temperature in the workplace.

'Suitable assessment' – Construction companies therefore need to undertake an adequate risk assessment to ensure that employees working in hot temperatures or exposed to the sun do not suffer from dehydration, heatstroke, sun burn, heat rash or

[Back to top](#)

similar conditions.

At high temperatures, defined as 24 degrees centigrade and above according to the Trades Union Congress, employees may become drowsy and less aware of dangers.

Access and read the article in full, Stubbs A and Balogun T (2022) '[Are contractors obliged to stop work during heatwaves](https://constructionmanagement.co.uk/are-contractors-obliged-stop-work-during-heatwaves/)', *Construction Management* [online], 23 July . Available at: <https://constructionmanagement.co.uk/are-contractors-obliged-stop-work-during-heatwaves/> [accessed 15 July 2022]

Latest News: Global Construction Review (GCR) **[July 2022]**

Aedas unveils its design for international retail complex in Hangzhou

- London-based architect Aedas has revealed its masterplan for a retail complex in the Chinese city of Hangzhou in Jiangnan Province, about 50km southwest of Shanghai.

The Hangzhou Yun He Wan International Tourism and Leisure Complex will be located in the city's Grand Canal New Town on the northern outskirts of the city and will be the first phase of a larger urban development scheme. The 87,000 sq. m masterplan aims to make the most of the site's artificial river and canals, and the remains of a former industrial pier. It will have "fast streets, slow lanes and a wander garden." These are organised around four plazas, each named for a season of the year, which draw on traditional Jiangnan courtyard layouts. The client for the scheme is the Hangzhou Canal Comprehensive Protection and Development Construction Group, and it aims to complete the first phase next year (see publication date).

Access and read the article in full, Rogers D (2022) '[Aedas unveils its design for international retail complex in Hangzhou](http://www.globalconstructionreview.com/aedas-unveils-its-design-for-international-retail-complex-in-hangzhou/)', *Global Construction Review* [online], 15 July. Available at: www.globalconstructionreview.com/aedas-unveils-its-design-for-international-retail-complex-in-hangzhou/ [accessed 15 July 2022]

Shoosmiths UK law firm Insights and Articles

- Read the latest insights, articles, and commentary from Shoosmiths UK law firm or explore their content library, or listen to the latest podcasts **[July 2022]** surrounding sectors such as **Real Estate** that include:

2022 predictions: what's on the horizon for construction?

- As the pandemic persists and the disruption of the previous two years continues to impact projects, the construction industry faces a continued period of uncertainty in 2022.

Also: [The top five planning law cases you need to know](#)

[Back to top](#)

How developers can prepare now for the Building Safety Act series:

How developers can prepare now for the Building Safety Act: Part 1 of 3

The Building Safety Act received Royal Assent on 28 April 2022. With aspect of the new regime unclear, this series of articles looks at what steps developers can take now.

How developers can prepare now for the Building Safety Act: Part 2 of 3

In Part 2, Shoosmiths discuss the dutyholder regime and look at the steps developers can take now to prepare.

How developers can prepare now for the Building Safety Act: Part 3 of 3

In this final part of this series, Shoosmiths take a look at the new gateway regime for higher risk buildings.

Keywords – Real estate, ESG, New How Perspectives, New How,

The future of build-to-rent market Real Estate Podcast series Podcast – Government policy BTR (Build to Rent)

The future of the BTR market from Shoosmiths' Living team:

Podcast series #1 – The future of BTR (Build to Rent)

Issues discussed in this podcast include: Performance of the sector; Rent collection rates; Challenges of lockdown restrictions; How buildings and amenity space will change as a result of the pandemic; and where the market is going.

Podcast series #2 – The future of BTR (Build to Rent)

Issues discussed in this podcast include: Ongoing attractiveness of the sector; Top three things to look for in a BTR scheme; Future challenges for BTR; The role of technology, and BTR housing.

Podcast series #3 – The future of BTR (Build-to-Rent)

In this podcast, the last in this series, issues discussed include: Planning reforms; Permitted development rights; Rise of residential in the high street; Fire Safety; and Rent controls / regulations.

The Pathway to Lifelong Education: Reforming the UK's Skills System

- The UK has a longstanding skills problems which is impacting on economic growth. Adult participation in learning has declined, particularly among part-time students, while fewer people in work are taking up training to reskill or upskill. More

[Back to top](#)

generally, there is a shortfall in vocation and higher technical qualifications.

In this first report, with Ashley Wheaton, Principal, University College of Estate Management acknowledged as one of the contributing experts, the Lifelong Education Commission seeks to recommend how the barriers to adult learning can be removed; what future investment is needed to support this; and what change is needed to ensure the maximum flexibility that will benefit learners and deliver on the promise of a whole system change for lifelong education.

The Report makes a series of recommendations for reform, including:

- A single source of careers advice, to 'professionalise' and regulate careers information, advice and guidance
- Means-tested Maintenance Grants for learners over and above the Lifelong Loan Entitlement, in order to subsidise costs and encourage uptake, particularly among those for whom debt is a barrier
- The abolition of the Equivalent or Lower Qualification (ELQ) rules, to support retraining at higher levels
- Extending the Apprenticeship Levy to cover a wide range of high-quality training, including short modular courses, in order to provide additional flexibility and incentivise employer investment in skills training
- Stronger HE-FE partnerships to provide integrated pathways to higher-level skills; and alignment with industry and online providers to enable better coordination between schools, colleges, universities, and employers.
- Reform of the regulatory framework to simplify the jurisdiction between multiple qualification bodies;
- Learning lessons from Scotland, where 'articulation agreements' offer clear routes between FE and HE allowing students with Higher National Certificates and Diplomas to access the second or third years of degree programmes.

[Access the summary and report, 'The Pathway to Lifelong Education: Reforming the UK's Skills System' in full.](#)

Related Links:

FE news.co.uk (2021) '[Reforming the UK's Skills System – First Report from the Lifelong Education Commission](#)' [online]. Available at: www.fenews.co.uk [accessed 8 October 2021]

Learning and teaching reimagined - Exploring the 2020 experience as well as the changing aspirations of the nature and shape of learning and teaching for the future.

[Back to top](#)

Maguire D, Dale L, and Pauli M (2020) *[Learning and teaching reimagined: a new dawn for higher education?](#)* Bristol: JISC

New guidance from CIRIA - Construction Industry Research and Information Association

CIRIA is pleased to announce [[July 2022](#)] new [free CIRIA practice guidance](#) and publications that include:

[Code of practice for property flood resilience \(C790\)](#) –

This guidance provides confidence on the use of the standards within the code of practice that provides a benchmark for those procuring and delivering property flood resilience (PFR).

[The Management of advanced numerical modelling in geotechnical modelling \(C791\)](#) -

This guide provides a framework for those who oversee the process, provide the information needed for this task and use the results of the numerical modelling.

[Methodology for quantifying the benefits of offsite construction \(C792\)](#) -

This guidance proposes a framework for comparing construction approaches, making it possible to keep consistent records across projects and identify all the possible benefits available.

Other guides include:

[Retrofitting ground gas protection measure \(C795\)](#)

[Grouted anchors and soil nails \(C794\)](#)

Grenfell Tower Inquiry – latest developments

- The Grenfell Tower Inquiry was created to examine the circumstances leading up to and surrounding the fire at Grenfell Tower on the night of 14 June 2017.

[Latest update \[July 2022\]](#)

[Phase 2 hearings](#) – Inquiry hearings will resume on Tuesday 19th July at 10:00.

A timetable of the week is available via the [Grenfell Tower Inquiry website](#).

June 2022 newsletter – The Inquiry has published an update on its work.

Phase 1 Report – The Inquiry has published its report on Phase 1 of its investigations.

Also: Latest from the Inquiry

Latest update from the Inquiry [July 2022] – The Inquiry has published an update on its next community drop-in session.

This update provides a digest of:

[Back to top](#)

- **June 2022 Newsletter** – The Inquiry has published an update on its work.
- **Update from the Inquiry** – The Inquiry has published an update on the Inquiry Secretary.
- **Fifth anniversary statement from the Panel** – The Inquiry Panel has made a statement regarding the fifth anniversary of the fire at Grenfell Tower.

This update contains information about:

- Module 6 hearings;
- Attendance at hearings,
- Monthly community drop-in sessions,
- Disclosure,
- Core Participant numbers,
- Arrangements for support during hearings, and
- Contact information.

[Read further information from the 'Grenfell Tower Inquiry' website.](#)

Related Links:

Cladding: Panels failed fire tests 13 years before Grenfell -

Leaked test results suggest the government and construction industry had early evidence of the dangers posed by cladding, 13 years before the Grenfell Tower fire.

Panels, commonly used on buildings in the UK, failed fire tests carried out in 2004 at the Inquiry venue at 13 Bishop's Bridge Road, London, W2 6BU. The results marked "Commercial in confidence," were circulated within an industry advisory group.

They were recently passed to the BBC (see publication date) and, until now, never made public.

Hundreds of thousands of flat owners are now threatened with large bills because of construction materials which pose a risk in fires.

The 2004 results were among the first from a British test of full-scale building systems, developed in the late 1990s when there were growing concerns in Parliament about the risks of cladding.

The tests were part of research commissioned by the then Labour government to determine what standards building systems should have to meet.

Symonds T (2021) '[Cladding: Panels failed fire tests 13 years before Grenfell](#)', *BBC News* [online], 16 September. Available at: www.bbc.co.uk/news/uk-58584348 [accessed 23 February 2022]

Related Topics

-  [Construction industry](#)
-  [UK fire safety](#)
-  [Grenfell Tower fire](#)
-  [Grenfell Tower Inquiry](#)

[Back to top](#)

Government details fire safety-related changes to planning system

- The government has released details of new requirements in the planning system to bolster fire safety in high-rise residential buildings, in response to the Grenfell Tower Fire.

The changes come in the Ministry for Housing, Communities and Local Government's (MHCLG) plans to introduce '[planning gateway one](#)', which it said would deliver on one of Dame Judith Hackitt's recommendations following her independent review of Building Regulations and fire safety.

The new requirements aim to ensure fire safety matters as they relate to land use planning are incorporated at the planning stage for schemes that involve high-rise residential buildings.

The changes, which come into effect from **1 August 2021** will:

- involve the Health and Safety Executive (HSE) becoming a statutory consultee before permission is granted for development which involves or is likely to involve a high-rise residential building.
- require relevant applications for planning permission to include a fire statement to ensure applicants have considered fire safety issues as they relate to land use planning matters such as layout and access.
- help inform effective decision-making by local planning authorities or the secretary of state so that those decisions reflect and respond to the needs of the local community.

The new requirements will be introduced by making amendments to the Town and Country Planning (Development Management Procedure) (England) Order 2015.

As announced in the Queen's Speech (11 May), the Building Safety Bill is also expected to be introduced this year, which will establish a new building safety regime in England.

[Further information and access to the *Construction Manager* article, 'Government details fire safety-related changes to planning system,' in full.](#)

[RIBA Stirling Prize 2021](#)

The RIBA Stirling Prize is the UK's most prestigious architecture award. The award is given to the architect of the building thought to be the most significant of the year for the evolution of architecture and the built environment.

RIBA Stirling Prize shortlist 2021 included: (i) [15 Clerkenwell Close](#), (ii) [Cambridge Central Mosque](#), (iii) [Key Work Housing, Eddington, Cambridge](#), (iv) [Tintagel Castle Footbridge](#), and (v) [Windermere Jetty](#), and the **WINNER**,

[Back to top](#)

announced on 14th October 2021 was (vi) [Kingston University London – Town House](#),- essentially a library, but designed as a building for the whole community with cafés, an outdoor reading room roof terrace and a performance space. @KingstonUniLib by @graftonarchs

Skills Agenda: Concerns for Skills Shortages in the 21st Century: A Review into the Construction Industry, Australia

This research paper addresses the underlying, influential factors concerning skills shortages in the Australian construction industry. The influential factors addressed include funding, training statistics, employer expectations, financial limitations, Industrial Relations and immigration.



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[Read the full research report 'Concerns for Skills Shortages in the 21st Century](#).

Tomorrow's Engineers



© EngineeringUK 2021

Tomorrow's Engineers brings together resources and evidence to support the engineering community in getting the most out of their engagement activity. It includes information and guidance on a range of topics curated from across the STEM community. Developed by EngineeringUK, the website is for anyone who funds or delivers engineering engagement activities and is designed to help improve the engineering community's collective impact.

[Access the Tomorrow's Engineers website](#)

Women in construction: building a career in a challenging environment

Twelve case studies of women working in the construction industry and their experiences.

[Access Women in construction: building a career in a challenging environment](#)

Also: Access - RICS President Clement Lau's article, entitled, ['Women are not equally represented in our sector'](#), RICS *Modus* [online].

[Back to top](#)

RICS Market surveys – leading indicators in the real estate industry

Market surveys from the Royal Institution of Chartered Surveyors (RICS) include:

- **UK Residential Market Survey** – Used by government and key institutions, the Resi. Market Survey is a key indicator of conditions in UK residential sales and lettings.

- **Hong Kong Residential Market Survey** – The Hong Kong Residential Market Survey is a leading sentiment indicator of conditions in the Hong Kong residential sales and lettings markets.

- **UK & Global Construction Monitor** – The leading sentiment indicator of the construction markets.

- **UK Facilities Management Survey** – The UK Facilities Management survey is a quarterly indicator of activity and sentiment across the facilities management industry.

- **UK & Global Commercial Market Survey** – The global commercial property monitors are leading indicators of conditions in commercial property occupier and investor markets around the world.

- **UK Economy and Property Market Update** – The Economy and Property Market Update is a new quarterly assessment of key macro, real estate and construction trends.

- **RICS/RAU Rural Land Market Survey & Land Prices** – The RICS/RAU Rural Land Market Survey is the leading survey on demand, supply and prices in the farmland market.

Note: Further updates are provided within the ‘Latest Property and Construction Statistics’ section of *Knowledge Foundations*.

RICS – The Future of Surveying

- We know the challenges facing the built environment and the surveying profession – now it’s time to act. We know the challenges facing the built environment and the surveying profession – now it’s time to tackle them.

For over 150 years, RICS has led our profession through change, enabling our members to take advantage of the opportunities and manage the risks it presents. This change is now happening faster than ever, requiring us to think strategically about how we deploy our expertise and resource. To continue to provide leadership, we are constantly assessing our role as a standard setter, regulator, educator, and global professional body – to deliver confidence to governments, markets, and the public.

RICS Futures Report 2020 is our action agenda to keep up in a changing world.

[Back to top](#)

Access and download the Futures report to read RICS' full agenda for effecting change and responding to the biggest issues facing the natural and built environment, in full.

[Read the article, 'Future of Surveying' and gain access to the Futures report in full.](#)

GOV.UK, National Statistics - UK House Price Index [Last updated August 2021]

- The UK House Price Index is a National Statistic that shows changes in the value of residential properties in England, Scotland, Wales, and Northern Ireland.

The UK House Price Index (UK HPI) captures changes in the value of residential properties.

The UK HPI uses sales data collected on residential housing transactions, whether for cash or with a mortgage.

Properties have been included:

- In England and Wales since January 1995
- In Scotland since January 2004
- In Northern Ireland since January 2005

Data is available at a national and regional level, as well as counties, local authorities, and London boroughs.

The summary report contains:

- Headline statistics
- The economic statement
- Price changes
- Sales volumes
- The property status
- The buyer status for Great Britain (excludes Northern Ireland)
- The funding status for Great Britain (excludes Northern Ireland)
- Housing transactions distributions

[Read the GOV.UK, National Statistics: 'House Price Index summary: June 2021', Published 18 August 2021' in full.](#)

Also:

[Access Collection - UK House Price Index: reports 2021](#)

Related Content:

- UK House Price Index summary: August 2021
- UK House Price Index summary: March 2021
- UK House Price Index England: March 2021
- UK House Price Index Wales: May 2021
- UK House Price Index England: June 2021

[Back to top](#)

Tackling mental health and wellbeing within the construction industry



© MHFA England

The construction industry reports some of the highest levels of workplace mental ill health.

Over the last three years (see publication date) Mental Health First Aid (MHFA) England has been working with Building Mental Health, the Construction Industry Training Board (CITB) and the Lighthouse Club Construction Industry Charity to create a freely available, industry-wide framework and charter to tackle the mental health crisis in the construction industry.

[Find out more about the social value of the programme](#)

Related Links:

UCEM launches mental health strategy

UCEM published its first mental health strategy on 10 May 2021.

The strategy is designed to benefit both UCEM students and staff, having been written with input from both stakeholder groups.

At the core of the document is the vision which states: 'UCEM will take a whole institution approach to develop one community that enables students of all levels along with staff to prioritise mental health and wellbeing.'

'The UCEM community will be an open, supportive, healthy, and well-informed environment. It will work to tackle stigma, promote positive mental health, and provide appropriate, timely and easily accessible support to those who need it.'

There are five strategic aims supporting this vision which are:

1. to create a supportive whole university community that promotes positive mental health, and ensures mental health is a key strategic priority.
2. to ensure the UCEM community is informed and aware of the importance of good mental health and works to tackle the stigma surrounding mental health.
3. to ensure appropriate and timely support is provided to those who need it.

[Back to top](#)

4. to develop links with external support services and stakeholders
5. to use data to evaluate and monitor the effectiveness of mental health interventions and inform future strategic development.

For more details, take a look at [UCEM's mental health strategy document](#).

Access the article '[UCEM launches mental health strategy](#)' in full.

Understanding Mental Health in the Built Environment

In May 2020, the CIOB published their report on Understanding Mental Health in the Built Environment. The report, which surveyed people across the globe, presented harrowing statistics of high numbers of workers experiencing extreme levels of stress over a prolonged period, with many people reporting that they had considered taking their own life in 2019.

The report calls on professional bodies to do more to encourage mental health and wellbeing awareness among members, to develop globally applicable mental health resources that will increase understanding and reduce stigma within the construction industry.

Access the CIOB's latest report *Understanding Mental Health in the Built Environment*, including the results from the CIOB survey of over 2,000 professionals. [Access CIOB online Policy Portal, & 'CIOB surveys the sector to gather data on mental health & stress'](#)

How can buildings have positive impact on wellbeing?

BSRIA's Henry Lawson discusses the importance of designing buildings that promote 'Wellbeing.' The theory sounds compelling but in practice, creating such building is complex.

[Access and read 'How can buildings have positive impact on wellbeing' in full.](#)

[Read the *Construction Manager* article entitled, 'Samaritans to work with roofers on mental health' in full.](#)

Coronavirus and your wellbeing

You might be worried about coronavirus (also known as COVID-19) and how it could affect your life. This information is here to help. **Where to access further information support: BBC Action Line** [online]. Available at: bbc.co.uk/actionline. Telephone: 0800 066 066

[Access MIND's article, entitled 'Coronavirus and your wellbeing'.](#)

Sustainable outcomes for buildings

The Royal Institute of British Architects (RIBA) has published

[Back to top](#)

guidance on targeting, designing, and evaluating sustainable outcomes for buildings, defining concise measurable set of eight sustainable outcomes that correspond to key UN Sustainable Development Goals and can be delivered on building projects of all scales.

Access the RIBA Sustainable Outcomes Guide

National Trust planning principles

National Trust (NT), a charity that works to preserve and protect historic places and spaces – for ever for everyone.

The National Trust protect historic houses, gardens, mills, coastline, forests, woods, fens, beaches, farmland, moorland, islands, archaeological remains, nature reserves, villages, and pubs. While they are very passionate about open spaces and historic places, they also work hard in other areas too, including the environment, food, farming, transport, and heritage – to name but a few.

Most of the work they do though is affected by much wider global issues, which is why their interests extend far beyond just bricks and mortar.

Access the National Trust website

National Trust (NT) – “Our planning principles”

The National Trust principles are used to guide them in their decision-making on the way land is developed and managed and include:

Seeking to influence – The NT seek to influence the Planning system at local, regional, and national levels,

Supporting spatial planning – The NT support spatial planning which takes a holistic approach to its environment and its resources,

Sensible management – The NT promotes the wise management of the natural environment and built and cultural heritage,

Protecting our environment – The NT will seek to protect wild and remote landscapes from built development or urbanisation.

Using property management plans – In managing its land through management plans, the NT will support and help to achieve objectives,

Objecting to proposals, where appropriate – When proposing development on their land to meet justified needs, the NT will use a sustainable construction approach. This will include:

- Minimising resource use and generation of waste,
- Being energy efficient,

[Back to top](#)

- Minimising or preventing all types of pollution and risk of flooding,
- Safeguarding important wildlife, landscape, and historic interests,
- Respecting local/regional distinctiveness, supporting local sources for goods and services where practical, and - Encouraging community involvement and access.

[Read the National Trust Planning Principles](#)

The National Trusts' planning procedure

The National Trust have developed the following criteria to ensure online suitable projects proceed:

- Adhere to the policies in the relevant local plan,
- Deliver energy efficiency and reduce carbon dioxide emissions,
- Build in harmony with the local environment, built and natural,
- Involve the local community throughout the process.

Case studies are provided.

[Read how the National Trust engage in planning: The NTs' role as a developer.](#)

Foster + Partners Projects

Foster + Partners Projects – one of the most innovative architecture and integrated design practices in the world. Over the past four decades the practice has pioneered a sustainable approach to architecture through a strikingly wide range of work, from urban masterplans, public infrastructure, airports, civil and cultural buildings, offices and workplaces to private houses and product design. By visiting their website, you can gain further information about their current and past work, upcoming projects, and gain access to their-

- Image gallery,
- Sketches and drawings,
- Construction, - Facts and Figures, and
- Project downloads.

[Access Foster + Partners Projects](#)

New RIBA Plan of work 2020

RIBA Plan of Work 2020. This blog takes a look at the new RIBA Plan of Work 2020.

What is the RIBA Plan of Work? The Royal Institute of British Architects (RIBA) first published the RIBA Plan of Work.

[Back to top](#)

in 1963. It originally provided a matrix to show the roles of participants in the design and construction processes.

It has since been updated in several editions, most recently in 2020. This has allowed it to adapt to the complexity of modern projects, industry demands and legislative and regulatory requirements.

What changed in 2020? In 2020, key changes were made to reflect the importance of sustainability and Building Information Modelling (BIM) in construction. The Plan of Work now also incorporates issues such as digitisation of the industry, Modern Methods of Construction, ethical issues, the value of aftercare and timing relating to planning applications and procurement.

This has included restructuring and renaming of the work stages from the 2013 Plan of Work:

0 – Strategic definition – no change

1 – Preparation and briefing – brief amended to briefing

2 – Concept design – no change

3 – Spatial coordination – formerly Developed design

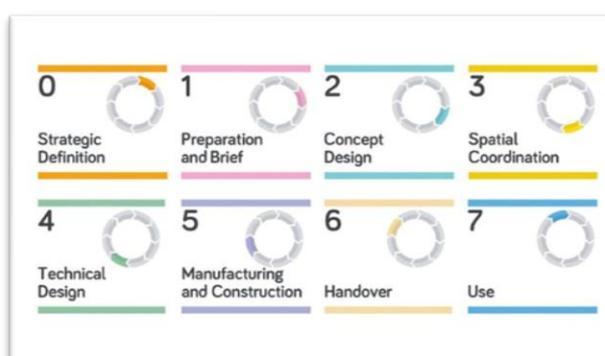
4 – Technical design – no change

5 – Manufacturing and construction – formerly Construction

6 – Handover – formerly Handover and close out

7 – Use – formerly in use

RIBA Plan of Work 2020:



© RIBA 2020

Source: Royal Institute of British Architects (2020) 'RIBA Plan of Work'

Note: The author of this blog, Jen Lemen-Hogarth is an Associate Tutor – UCEM and Partner – Property Elite.

[Access Property Elite's, Building Better Property Professionals, 'New RIBA Plan of Work 2020' \[Blog\], in full](#)

[Back to top](#)

Autodesk and CIOB map the digital construction journey

Autodesk and the Chartered Institute of Building (CIOB) have prepared an infographic to help construction businesses visualise their position on the digital journey.

[Access more information, view the infographic and read the article, entitled 'Autodesk and CIOB map the digital construction journey' in full.](#)

[Access further information from CIOB 'Digital Construction'](#)

- Digital technologies are now an integral part of our built environment. The choice is not when or if built assets will use technology, but rather how much will be used.

Building Information Modelling (BIM)

[UK BIM Framework – BIM Standards, Guides and Resources](#) - the overarching approach to implementing BIM in the UK, brought together by UK BIM Alliance, BSI and CDBB. The guidance is structured as indicated below:

Guidance Part 1 and **Guidance Parts A-F** support the implementation of the overall published ISO 19650 series. **Guidance Part 2 and 3** pick up on content specific to ISO 19650-2 and ISO 19650-3 respectively. Additional **guidance** is also available as part of the **UK BIM Framework** to support the transition to ISO 19650 and Government Soft Landings

[Access UK BIM Framework - Resources](#)

[Latest BIM+ News and Projects](#)

[July 2022] –

- **Projects – Maber uses Archicad to aid collaboration on medical research facility, 8 July 2022.**

- Maber used Archicad to engage with the client and to collaborate effectively with the supply chain on the development of a medical research facility at Nottingham Trent University.

Client: Nottingham Trent University; **Architect:** Maber; **Main Contractor:** GF Tomlinson; **M&E consultant:** CPW.

Maber was tasked with deigning a new Medical Technologies Innovation Facility (MTIF) Development Centre for Nottingham Trent University, located on the Boots Enterprise Zone (BEZ) site. GF was the main contractor.

The MTIF forms part of the university's £23m dual-site project, which is providing new research facilities to enable academia and industry to work together on research projects for medical technologies and innovation in the global health sector.

[Back to top](#)

The MTIF Development Centre provides laboratory space, engineering bays and cleanrooms (rated Good Manufacturing Practice Grade C), as well as space for the technology required for processing and prototype development.

The project was fully modelled in Archicad from start to finish. During the design phase, Maber used Archicad plug-in Twin motion to generate VR visualisations.

Sensitive approach to adjacent buildings – One challenge Maber faced in the design was that the site is adjacent to Grade I and II listed buildings such as the D34 Fire Station, which is of national architectural significance. To keep in line with the design and appearance of these buildings, the form of the MTIF centre was kept simple, functional and modern.

Careful coordination for laboratory research – The mechanical and electrical requirements for the development centre were complex as it is much more heavily serviced than a typical commercial building.

With GMP Grade C cleanrooms on site, Maber worked with a specialist consultant and specialist contractors to complete the fit-out. Each room needed to be compliant to meet European cleanroom standards and the consultant advised on the technical details to ensure this was achieved.

While the facility was handed over to the client in September 2020 (with minimal disruption from the pandemic), further enhancements to the laboratories have been made and the building is now expected to be operational this autumn (see publication date).

Gain access to further information and full access to the project case study article, entitled '[Maber uses Archicad to aid collaboration on medical research facility](#)', BIM+ Projects.

Other BIM+ Projects include:

- **Projects – [Communicating and solving design changes with technology](#), 17 May 2022.**
 - 80 Goodhall Street is a mixed-use development in west London. Architect airc.design had to respond to some challenging design changes that affected the project in RIBA stages 3 to 5, so it leaned on Archicad to help communicate the changes.
- **Projects – [BIM crucial to redevelopment of Bristol's historic print works](#), 29 April 2022.**
 - The £35m mixed-use redevelopment of the iconic Everard's

[Back to top](#)

Printing Works in the historic quarter of Bristol into a four-star, 255-bedroom hotel, alongside new apartments and commercial premises, came with many conditions and considerations. BIM was the only option for the scheme's architect, Edinburgh-based AMA Studio.

- **Projects - Case Study: How a Northern Ireland motorway became a BIM pioneer, 27 January 2022.**

- Applying the new BIM ISO 19650-3 standard to digitise asset information about a design-build-finance-operate (DBFO) road built 15 years earlier is paying dividends for the Amey Road NI team.

- **Project: 3D visibility key on Piccadilly Lights project, 17th February 2022.**

- Accuracy and 3D coordination were essential for Swanton Consulting when it was chosen to design the temporary works for a £250m development project that features London's iconic Piccadilly Lights at its core.

Client: Landsec; **Architect:** Fletcher Priest; **Principal contractor:** Wates; **Temporary works designer:** Swanton Consulting.

- **Project: Going digital drives East London brownfield development, 8 February 2022.**

- Taking a digital approach for the first time helped architecture practice Waugh Thistleton to play a significant part in the successful delivery of a brownfield development near East London's Olympic Park.

Client: Vastint; **Architect:** Waugh Thistleton; **Main contractors:** Henrys Construction and then Copper Projects; **Structural engineer:** eHRW; **Timber engineer:** Euban; **Mechanical engineers:** Peter Brett Associates (design stage).

GBE (construction); **Planning consultant:** GL Hearn; **Groundworks & civils (construction):** John F Hunt; **Landscape architects:** Planit-IE.

- **Project: Overcoming the engineering challenge of Grand Designs' Hux Shard, 15 December 2021.**

- The Hux Shard – the star of the most recent series of **Channel 4's Grand Designs** – is inspired by large sculptures in the countryside and the rocky outcrops of nearby Dartmoor. Its striking, geometric appearance not only generated debate, but also provided structural engineer, TWP Consulting Engineers, with a significant challenge.

Client: Joe Priday; **Architect:** Squirrel Design; **Structural Engineer:** TWP Consulting Engineers

[Back to top](#)

BIM in action: 2020's top five projects

22 December 2020

- Hospitals, housing, hotels: BIM+ covered case studies of BIM in action in all sorts of construction projects across the world. Given what happened in 2020, it's not surprising that three of the most read case studies focus on hospitals.

2020's top five projects (and all covered within this and previous issues of *Knowledge Foundations*) incl.

1. [Sisk reap rewards of high-tech approach at Wembley](#)
2. [Finland's Hospital Nova uses VR to involve staff in building](#)
3. [NHS Nightingale Hospital, East London – how BIM played its part](#)
4. [Mace uses AI tech on Mayfair project to meet covid-19 safety challenges.](#)
5. [AI tracks work quality at Norway's Stavenger Hospital.](#)

[Access BIM+ that include project entitled, 'BIM in action: 2020's top five projects' available in full.](#)

Related BIM+ Projects

- **(1) Project: [John Sisk relies on BIM best practice to deliver Malmo data centre](#), 2nd November 2020.**

- John Sisk & Son is nearing completion on a data centre project in Malmo, Sweden. Adopting BIM best practice has been crucial to keep construction on programme given a fast-tracked programme amid the Covid-19 pandemic.

The John Sisk & Son team has nearly 40 years of experience in data centre construction and has brought a digital project delivery approach to the Malmo project.

Sisk highlights some significant outcomes:

- The Sisk team-built dashboards that stored live clash trend reports to track progress weekly, resulting in a 50% efficiency increase in the BIM management process compared to traditional, manual methods of construction coordination without the automating power of the cloud.
- The tight integration between BIM 360 Docs, Microsoft Power BI, and Sisk's own "Design Changes Control" dashboards provided the commercial teams with a faster way to visualise the cost and/or schedule impacts, reducing the overall take-off by a potential 40%
- By using BIM 360, the project continued uninterrupted as construction continued in Sweden during the Covid-19 pandemic.

[Back to top](#)

- **(2) Project: [Finland's Hospital Nova uses VR to involve staff in building](#), 28th April 2020.
Lead Contractor: The Central Finland Health Care District
BIM Tools: Tridify

- Innovative processes have been used in the co-design of Finland's new Hospital Nova using BIM models and involving more than 350 staff.**
- **(3) Project: [NHS Nightingale Hospital, East London – how BIM played its part](#), 5th May 2020.

Client: Barts Health NHS Trust, Royal Free London NHS Foundation Trust
Lead Contractor: Lead Designer: BDF
BIM Tools: Autodesk Revit

- The UK's newest (see publication date) and largest hospital, based at the ExCel conference centre in London's Docklands, is designed to care for up to 4,000 people affected by Covid-19. The hospital is now in standby mode and will be used should cases in the London area rise again.**
- **(4) Project: [Mace use AI tech on Mayfair project to meet Covid-19 safety challenges](#), 1st October 2020

- Work was already underway on Lodha's No 1 Grosvenor Square flagship project when the lockdown and then social distancing added to the normal construction challenges.

Client: Lodha; Main contractor: Mace

Balancing the many requirements of a building project – cash flow, cost, quality, and timelines – is always a significant challenge for project leadership. The Covid-19 pandemic made the balancing act even more intense, costing projects valuable time at the start of lockdown and requiring adjustments to ensure the health and safety of all personnel on site as production restarted.**
- **(5) Project: [AI tracks work quality at Norway's Stavanger Hospital](#), 21st June 2020.

Client: Stavanger University Hospital
BIM Tools: 100% International open standards, compatible with Revit, ArchiCAD, Solibri and others

- Oslo-based BIM developer Imerso has been given responsibility to monitor work progress in one of the biggest public construction projects in Scandinavia.**

[Access the Chartered Institute of Building's \(CIOB\), BIM+ articles, projects, case studies and more, in full.](#)

Latest BIM news – 10th annual BIM report 2020 available

NBS 10th National BIM Report 2020 - The 2020 annual BIM report marks the 10th year of recording over 1,000 industry professional's view about BIM. It illustrates how usage and perceptions of BIM have changed since 2011, progress made as an industry, and anticipated changes in the next decade.

Construction Information Service (CIS) Insights

The latest edition [**July 2022**] of NBS CIS *Insights* focuses on – **Moving from linear to circular: incorporating circular economy thinking into the built environment**, and covers:

- What is a circular economy?
- Moving from linear to circular thinking, and
- Issues, challenges, and where do you fit in?.

[Back to top](#)



Property and Construction Statistics

Latest Property and Construction Statistics from RICS:

- Input from RICS Professionals ensure RICS surveys are leading indicators in the real estate industry.

Latest: Market Surveys - RICS [July 2022]

UK Economy and Property Market Update, May 2022

- Recession fears grow as interest rates rise to combat accelerating inflation.

Summary: A further worsening in the inflation environment is increasing pressure on the Bank of England to tighten monetary policy. This is leading to a downgrading of growth expectations with the economy widely anticipated to flirt with outright recession over the next eighteen months. For now, both the real estate sector and construction appear to be displaying a considerable degree of resilience but some shift in tone would not be a surprise as the macro newsflash continues to deteriorate.

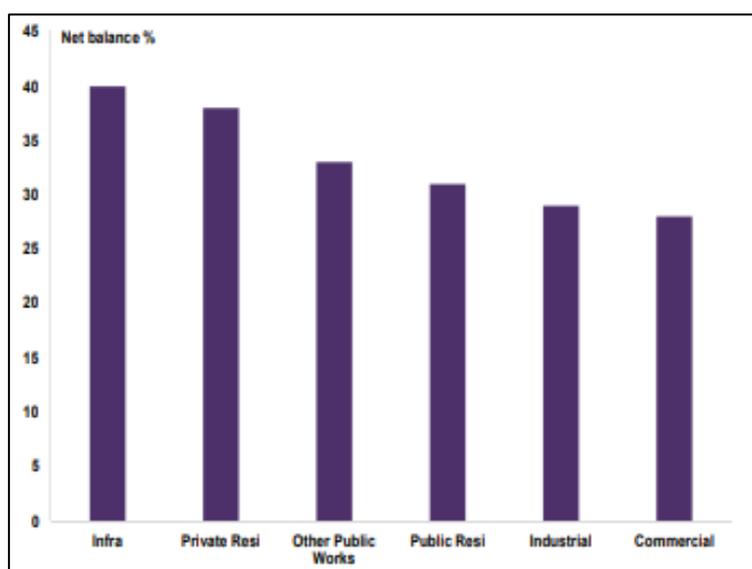
Construction Sector – Official data tracking construction output shows healthy gains through the first quarter of the year with the volume of activity now almost 4% above its pre-pandemic level (February 2020). This is also reflected in RICS current workloads data (measured in net balance terms and show in Chart 10). What is particularly striking about the latter is the broad-based nature of the growth. While sentiment is particularly positive about infrastructure unsurprisingly, it is evident that the mood around development in the commercial space has gained some momentum in recent quarters. Significantly, this is also reflected in the forward-looking metrics for workloads with strongly positive

[Back to top](#)

expectations in the feedback around both residential and non-residential activity.

The generally upbeat tone is also reflected in the monthly S&P Global/ CIPS PMI for the construction sector with the headline result for activity coming in at 58.2 (well above the flat trend signalled by a read of 50). The expectations series from this survey also remains positive suggesting that for now at least, the sector doesn't appear unduly concerned by the interest rate hikes sanctioned or some of the downbeat macro commentary

Chart 10: The RICS Q4 Construction Monitor shows a broad-based growth in workloads.



© RICS 2022

Source: RICS Economics Research: *RICS UK Economy and Property Market Update* (May 2022), London: RICS, p5 - Chart 10.

[Read the full piece of research 'RICS UK Economy and Property Market Update, May 2022](#)

Also: [UK Economy and Property Market Chart Book, Q4 2020](#)

- Agreed sales rise over the month with expectations modestly positive regarding the near-term outlook

UK Residential Market Survey: June 2022

- Demand and sales continue to cool although pricing trends remain relatively firm at this stage.

- New buyer enquiries indicator moves further into negative territory,
- New instructions remain more or less flat while sales soften slightly, and
- House prices still rising across all parts of the UK, albeit the pace of growth appears to be easing somewhat.

The June 2022 *RICS UK Residential Survey* results again point to a softening in demand at the headline level. Nevertheless, with new instructions remaining generally flat over recent months, tight

[Back to top](#)

supply conditions are still underpinning house prices. Indeed, for the time being at least, respondents continue to cite an increase in house prices across all parts of the UK, even if the pace of growth looks to be easing to a certain degree.

At the national level, the latest net balance for new buyer enquiries slipped to -27%, down from a reading of -9% previously. As such, this marks the second consecutive month in which the survey's headline measure of demand has been in negative territory. Interestingly, the feedback on buyer enquiries is a little more resilient in London compared most other parts of the UK, with the capital exhibiting a net balance of +7% in June.

Meanwhile, the volume of sales agreed over the month dipped slightly at the UK-wide level, evidenced by a net balance of -13% being returned in June (a little softer than a figure of -5% posted in the previous iteration of the survey). Looking ahead, near-term sales expectations are now marginally negative, with a net balance of -9% of respondents anticipating a fall in transactions over the coming three months (see publication date). Further out, twelve-month sales expectations are also negative, delivering a net balance of -21% (albeit this is broadly in-line with last month's reading of -24%).

Looking at the feedback around new instructions, the latest net balance of -1% remains consistent with a more or less flat trend across the UK in aggregate. Moreover, survey participants are also reporting market appraisals to be broadly unchanged relative to the picture twelve months ago, suggesting the tight supply backdrop is unlikely to shift drastically in the immediate future.

With available stock on the market still limited, house prices continue to drift higher despite the recent cooling in demand. In aggregate, a net balance of +65% of respondents noted an increase in house prices over the latest survey period. Although this is down slightly on a recent high of +79% back in April, the latest reading is still indicative of a solid pace of house price inflation and comfortably above the long-run average of +13%.

[Read the latest RICS UK Residential Market Survey: June 2022 in full.](#)

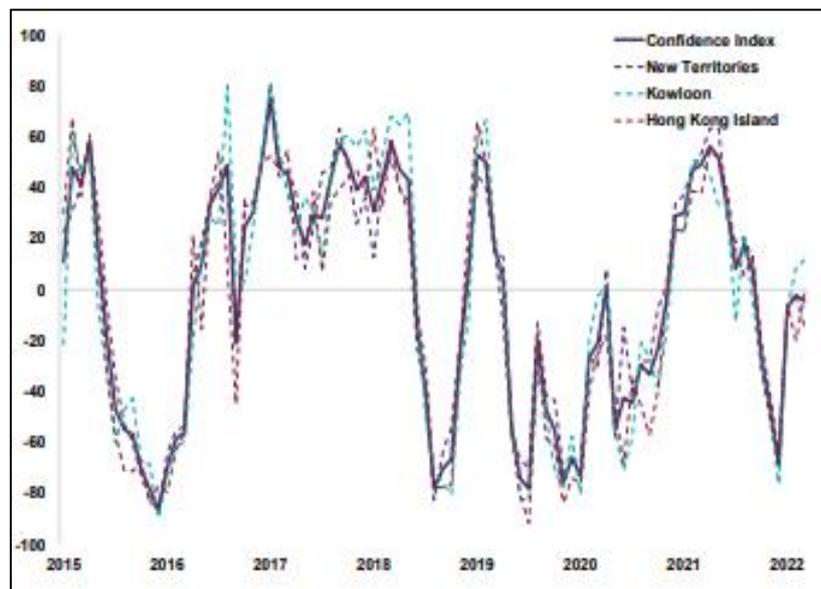
RICS - SPACIOUS 千居 Hong Kong Residential Monitor / Market Survey: [May 2022](#)

- Near-term outlook for sales market activity remains largely stable.

- Confidence Index sees little change in May, remaining in neutral territory,
- Headline price indicator slightly negative, although twelve-month expectations signal a turnaround ahead, and
- Kowloon reportedly leading the way in terms of a recovery in both sales and prices.

[Back to top](#)

Chart 1: Confidence Index*:



© RICS 2022

Source: RICS Economics Research: *RICS Hong Kong Residential Monitor – May 2022*, London: RICS, p1 - Chart 1.

* The Confidence Index is a composite measure capturing overall market momentum, encompassing variables on short-term price and sales expectations. The Home Price Perceptions Index measures the perceived monthly change in home prices as reported by survey participants, where March 2015=100. The Rent Perceptions Index measures the perceived monthly change in rents as reported by survey respondents, where March 2019=100.

The May 2022 *RICS-Spacious Hong Kong Residential Property Monitor* results continue to portray a generally stable outlook for sales market activity in the near-term, following a significant disruption caused by the pandemic a few months prior. In keeping with this, the headline confidence index was virtually unchanged in May, returning a reading of -4 compared to -2 last time.

[Read the latest RICS HK Residential Monitor: May 2022 in full.](#)

- *RICS-Spacious HK Residential Monitor* is a monthly guide to the trends in HK's housing market. The report is available from the [RICS website](#) along with other surveys covering global housing, commercial and land markets, as well as construction industry.

Global Commercial Property Monitors, Q1 2022

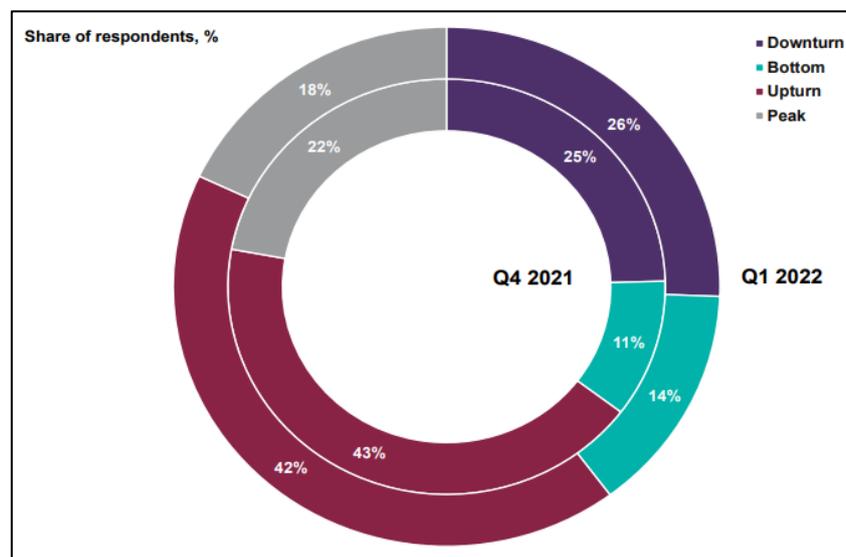
- Real estate sentiment continues to improve in most markets.

- Headline Global Property Sentiment Index (CPSI) strengthens to best level since Q4 2019,
- Occupier metrics gain momentum after a period of lagging the recovery in investor sentiment,
- Industrials, data centres and multifamily remain popular but

[Back to top](#)

some appetite for offices and retail returning.

Chart 6: Perceptions on Phase of the Cycle:



© RICS 2022

Source: RICS Economics Research: *RICS Global Commercial Property Monitor*, Q1 2022, London: RICS, p3 - Chart 6

The results from the Q1 2022 RICS Global Commercial Property Monitor (GCPM) suggest that, on balance, sentiment amongst professionals working in the real estate sector continued to improve through the early part of this year (2022). This generally positive read comes in the face of ongoing challenges around Covid, albeit these have eased in some parts of the world, and emerging macro threats posed by an upsurge in inflation and the related response from central banks. In addition, war in Ukraine has provided an added layer of uncertainty and not just because of the impact on energy supply.

Monetary tightening not seen as posing immediate risk

There is no sense that credit conditions for commercial real estate have shifted materially. In response to the question on credit conditions included in the GCPM, less than a quarter of respondents suggested the picture was worsening at the current time. And it is noteworthy that responses from the US, where there has been much discussion about the turnaround in Federal Reserve policy, are broadly similar. The other series that can shed a light on this issue is the question around respondents' perception as to where their market is in the real estate cycle. The global results for this are captured in Chart 6 (shown above) and show the proportion of contributors seeing real estate in an upturn phase was little changed from the previous quarters at just over 40%.

[Read the latest RICS Global Commercial Property Monitor, Q1 2022 in full.](#)

[Back to top](#)

Latest Statistics from the Office for National Statistics (ONS)

[UK economy latest](#) – A roundup of the latest data and analysis on the UK economy, business and jobs following Brexit and during the coronavirus (COVID-19) pandemic.

[Construction Industry highlights include – Construction output in Great Britain: May 2022](#)

- Short-term measures of output by the construction industry.

What's covered in the latest bulletin?

- Monthly construction output increased by 1.5% in volume terms in May 2022; this is the seventh consecutive monthly growth following the upwardly revised increase to 0.3% in April 2022; May 2022 is a record high in monthly-level terms (£15,053 million) since records began in January 2010.

- The increase in monthly construction output in May 2022 came solely from an increase in new work (2.8%) as repair and maintenance saw a slight decline, decreasing 0.4% on the month.

- As the sector level, the main contributors to the increase seen in May 2022 were private commercial new work and private new housing, which increased by 12.1% and 7.2% respectively.

[Read the full statistical bulletin, 'Construction output in Great Britain: May 2022.'](#)

Also: [Construction statistics, Great Britain: 2020](#) - A wide range of statistics that are current available on the construction industry including the value of output, new orders by sector, number of firms and total employment, insolvencies and construction output price indices.

Latest Statistics from HSE – Health and Safety Executive

Latest Key figures for Great Britain (2020/21)

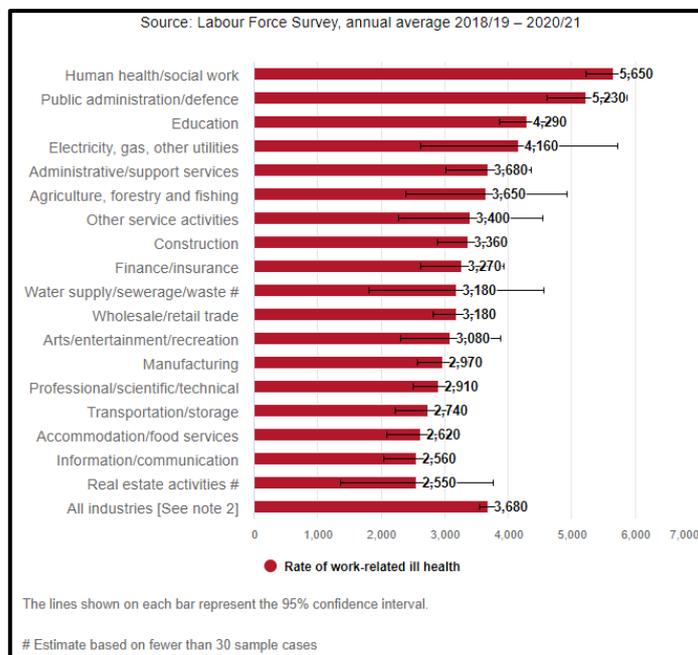
In 2020/21 an estimated 1.7 million workers were suffering from an illness they believed was caused or made worse by their work and 441,000 workers sustained a non-fatal injury at work. [Source: Self-reports from the Labour Force Survey]. However, the risk of injury and work-related ill health varies across industry, being more likely in some industries than others.

The chart overleaf shows how the overall rates of self-reported work-related ill health and workplace injury vary between industry groups. While the chart shows the overall picture for each industry group, this may be masking differences at more detailed levels (for example, illness type or more detailed industry sub-groups).

[Back to top](#)

From the Health and Safety Executive (HSE), ‘Self-reported work-related ill health’, and covering ‘Construction’:

Rate of self-reported work-related health by industry for people working in the last 12 months (per 100,000 workers) [Note 1], [Note 3]



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Note 1: Industry groupings based on the section level of the 2007 Standard Industrial Classification (SIC) & **Note 3:** These estimates are based on results from a survey and are subject to sampling error.

Source: HSE (2022) ‘Self-reported work-related ill health’, Bootle: HSE [online]. Available at: www.gov.uk/statistics/industry [accessed 11 March 2022]

Access further information on health and safety statistics from HSE – Health and Safety Executive.

[Back to top](#)



Built Environment Research

Latest Policy and Research from:

1) Savills Market Trends – Four trends shaping global retail real estate

- Market Trends: Savills.com, May 2022

From creative experiences to emerging markets, the author of this article examines four global trends that will shape the future of prime retail destination cities.

The pandemic undoubtedly created major challenges for prim retail spots in cities all over the world. Grappling with a series of domestic lockdowns and international travel bans, many

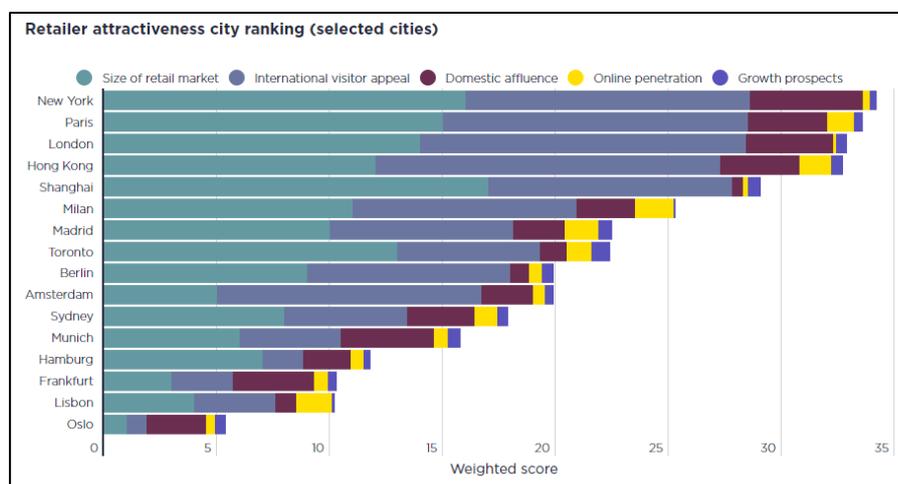
[Back to top](#)

destination cities struggled to sustain demand throughout 2020 and 2021. Footfall fell. Retailers took a close look at existing store networks. And rising vacancies led landlords to reconsider rental terms in some markets.

But with 2022 being the year that the world seems to be reopening (see publication date), as restrictions lift and tourists return, how might we see these prime retail destinations recover?

As our retailer attractiveness city ranking illustrates both the pace and shape of how destination cities recover is deeply nuanced. Those destination cities that benefit from a strong domestic market, such as New York and Shanghai, have already demonstrated far higher levels of resilience in the past 18 months, and look set for a far quicker bounce back.

Retailer attractiveness city ranking (selected cities)



Source: Savills (2022) *Market Trends: Four trends shaping global retail real estate* [online]. Available at: www.savills.com/impacts/market-trends/four-trends-shaping-global-retail-real-estate.html [accessed 15 July 2022]

Take New York, where the combination of the scale of its retail market and the affluence of its domestic consumers have pushed it to the top of the ranking, narrowly ahead of Paris and London.

In contrast, those cities dependent on a steady stream of inbound tourism have faced sharper declines, and are likely to face a longer road to recovery. In Hong Kong, for example, where tourism forms a key pillar of the city’s economy, rents fell steeply from Q4 2019 to Q3 2021.

By sparking this mixed recovery among key destination cities, the pandemic has highlighted a number of emerging markets that present exciting opportunities for retailers in the years ahead, primarily across the Middle East and China.

Despite the migration to e-commerce in many markets, the resilience of many of these destination cities serves to illustrate a broader point: that physical retail remains a key tool for both

[Back to top](#)

brands and retailers when it comes to reconnecting with their consumers, enhancing exposure and ultimately driving retail sales.

Yes, Covid-19 created inevitable challenges. But rather than result in a material shift in prime retail areas, it served more to accelerate previous trends – the rationalisation of store footprints by mass-market fashion brands, the emergence of experiential brand spaces, and a refocusing on key streets and city centres – rather than diminish the critical role played by physical retail.

Here are the four global trends that Savills predict will shape the future outlook of key retail destination cities:

- **Trend 1: Prime global cities will retain their status** – Though all major global cities faced challenges as a result of the pandemic, the key fundamentals of a successful prime retail destination don't look set to change.

- **Trend 2: Key emerging markets set to create expansion opportunities for retailers** – For those retailers looking to expand their global footprints, the new normal also looks set to elevate some key emerging markets up the ranking,

- **Trend 3: Retailers that sustained growth during the pandemic will fuel future demand** – While those retail sectors that struggled during the pandemic will likely use the next year to recalibrate and reconsider store expansion strategies, those that sustained or even grew sales during the same period look set to accelerate store expansion, benefiting from a rebasing in rents in some markets, and

- **Trend 4: From transactional to experiential stores** – A trend prior to the pandemic – and one set to continue – is the evolution of physical retail from a transactional space into an experimental, brand-building one.

[Read the Market Trends – 'Four trends shaping global retail real estate', in full.](#)

Also: [Read the Market Trends – 'The total value of global real estate', in full.](#)

Read Savills Investment tips and trends by region -

- [Read more EMEA tips](#), ○ [Read more Asia-Pacific tips](#)
- [Read more North America tips](#)

[Read Savills World cities prime residential forecasts](#)

In earlier issues (05/20) Savills discuss the potential changes that may be seen across the different sectors. If you prefer to read a specific sector, then select the relevant sections title to go straight there and include: **[Office sector](#)**, **[Logistics sector](#)**, **[Retail sector](#)**, **[Hotels sector](#)**, **[Institutional residential sector](#)**, **[Senior housing and healthcare sectors](#)**, **[End-use residential sector](#)**, and **[Conclusion](#)**.

[Back to top](#)

[Read the full Savills Impact Publication 'The Impact of Covid-19 on real estate', 2020'](#)

[Savills \(2020\) 'Welcome to Impacts 2020' Impacts, May, Savills \[online\]. Available at Savills.com](#)

2) Joseph Rowntree Foundation (JRF) -

- Inspiring Social Change: The Joseph Rowntree Foundation is an independent social change organisation working to solve UK poverty.

UK Poverty 2022: The essential guide to understanding poverty in the UK

Related topics – Housing; Work; Income and benefits

- This is the first issue of the JRF's new-style *UK Poverty* report, which looks comprehensively at trends in poverty across all its characteristics and impacts.

What is the picture of poverty at the start of 2022, coming up to two years after a global pandemic struck? To an extent the picture is unclear: we don't yet have official poverty data covering the pandemic period, and we know that the quality of the very surveys we rely on for this information were affected by the onset of the pandemic.

But many sources make it clear that while some groups have been well supported and face better prospects as we enter 2022 (see publication date), others face deep and persistent poverty. In a way this is much better than might be expected given the economic and social shock the country has been through.

We know poverty at any stage in life can lead to negative impacts and so it is critical to scrutinise the data thoroughly to work out who is worst affected, determine how trends are changing over time and see what future prospects are.

This report gives a clear statement, agreed by JRF's Grassroots Poverty Action Group (GPAC), that we need coordinated commitment, effort and action on the intersecting issues and challenges identified in this report. This can turn back the tide of poverty, and offer security for the many people experiencing hardship across the UK.

[Read the JSR article entitled, 'UK Poverty 2022: The essential guide to understanding poverty in the UK' in full](#)

Also gain access to the following free downloads that include:

Findings:

[JRF \(2022\) UK Poverty 2022: The essential guide to understanding poverty in the UK \(148.85 KB\),](#)

[Back to top](#)

and the Full Report:

[JRF \(2022\) UK Poverty 2022: The essential guide to understanding poverty in the UK \(3.71 MB\).](#)

Related Links:

[Read the JSR report entitled, 'UK Poverty 2020/21' in full](#)

[Read the article 'UK Poverty 2019/20 Housing' in full](#)

[UK Poverty Statistics from the Joseph Rowntree Foundation -](#)

The latest UK poverty data, statistics and analysis from JRF's Analysis Unit. This **online toolkit** can be used to find information about poverty rates and related issues in the United Kingdom.

[JRF Spring Budget 2021 analysis](#)

[JRF Analysis of the 2020 Spending Review](#)

3) The Smith Institute

- The Smith Institute is a leading independent 'think tank' which promotes progressive policies for a fairer society. They provide a high-level forum for new thinking and debate on public policy and politics. Through research, reports, briefings, monographs, events, lecturers, education, and their website, the Institute offers a platform for thought leadership on a wide range of topics.

A Just Transition: Ensuring responsible investment for a just transition to net zero.

The Smith Institute (2021)

The Smith Institute supported the All-Party Parliamentary Group for Local Authority Pension Funds inquiry into 'Responsible investment for a just transition.'

This report is based on evidence sessions and written submissions to that inquiry from investors, industry, academics, community groups, trade unions, and other non-government organisations. The inquiry report seeks to inform politicians, policymakers, stakeholders and the public on the roles and responsibilities that investors can play, with the support of their members and government, in enabling a just transition to net zero carbon emissions.

What is just transition?

A just transition is broadly interpreted as a policy approach to climate action which seeks to ensure that the benefits

The following components of a just transition to a net zero carbon economy were described to the inquiry:

- It is about moving to a net zero carbon economy in a just way for society – and thus combines environmental and social considerations.

[Back to top](#)

- It is about the fair distribution of climate 'goods' (such as new jobs and cleaner air) and climate 'bads' (such as higher costs associated with decarbonisation and job losses in certain sectors and places).
- It is about maximising the opportunities of a green economy and mitigating the risks.
- The social dimension is about workers, consumers, supply chains and communities.
- It is about both the process and the outcome: engaging and involving stakeholders to ensure that all social groups have support and opportunities in transitioning to a net zero carbon economy.
- It involves a planned and orderly transition.
- It is a global issue, affecting UK and international communities and supply chains.

Also covered in this research:

- The financial materiality of a just transition
- What can investors do? and
- What can government do?

[Read the full piece of research, 'A Just Transition: Ensuring responsible investment for a just transition to net zero.'](#)

The Living Wage Dividend: maximising the local economic benefits of paying a living wage.

Hunter P (2021)

The economic fall-out from Covid has been substantial. However, it has not been evenly felt. This is especially true for the labour market with low paid workers more likely to see their hours and pay fall and more likely to be made unemployed or furloughed. Indeed, the pandemic has placed the spotlight on low pay and in-work poverty. Recent polling for the TUC, for example, showed how low-income workers have borne the brunt of the pandemic.

This report seeks to take forward the work of the Foundation's 'Living Wage Places' initiative, focusing on how to maximise the benefits of the Living Wage in towns, cities and city-regions across the UK. Using evidence-based assumptions, the report examines and quantifies how much individuals gain, how that wage uplift is paid for and what the local economic impact is likely to be based on moving 25% of low paid workers up to the Living Wage.

[Read the full piece of research, 'The Living Wage Dividend: maximising the local economic benefits of paying a living wage.'](#)

Planning for the recovery and the shift towards homeworking: implications for poverty in outer London

Hunter P (2021)

[Back to top](#)

This report, supported by Trust for London, examines the short and long-term implications of Covid on poverty and inequality in outer London, with a particular focus on employment, low pay, housing, and the shift towards homeworking.

The report acknowledges the devastating impact that the pandemic has had on the lives of outer London's five million residents – not least on people's health and well-being – but seeks mainly to understand the after-effects and explore the options for change.

[Read the full piece of research, 'Planning for the recovery and the shift towards homeworking: implications for poverty in outer London.'](#)

A National Housing Conversion Fund: buying properties to boost affordable housing supply

September 2020

The Smith Institute's Affordable Housing Commission published a report into the national housing conversion fund.

The report examines two main ways a ring-fenced National Housing Conversion Fund could be achieved. The first is targeting funds to purchase homes on the secondary (existing) market. It examines which housing markets – in broad terms – the investment might be best aimed at, factoring in how it could help improve housing condition and support jobs and growth.

[Read the full piece of research, 'A National Housing Conversion Fund: buying properties to boost affordable housing supply.'](#)

Falling behind: The impact of Universal Credit (UC) on rent arrears for council tenants in London

July 2020

Southwark Council commissioned this report, with the support of eleven other London local authority landlords and coordinated by London Councils. The research and report focus on two main questions:

- How has the roll-out of Universal Credit (UC) affected rent payment behaviours among residents in local authority-owned housing across London?
- How are identified changes in behaviour – or the absence of behaviour change – affecting the tenancies of those tenants who are receiving housing cost support under the new arrangements?

The report tells this story of financial stress through analysis of tenant rent accounts. The scale of the costs to social landlords is also apparent in escalating arrears after tenants make an effective UC claim.

[Read the full piece of research, 'Falling behind: The impact of Universal Credit on rent arrears for council tenants in London.'](#)

[Back to top](#)

Consumer Rights in the Private Rented Sector

July 2020

This report sets out a new perspective on how we can improve the private rented market: by recognising the consumer gifts we're used to having in other markets, from utilities to financial services, and looking at how we might apply those lessons to the private rented sector.

[Read the full piece of research, 'Consumer Rights in the Private Rented Sector.'](#)

Making Housing Affordable after Covid-19: A follow up report from the Affordable Housing Commission

Affordable Housing Commission (2020)

- The Smith Institute's Affordable Housing Commission published a report into making affordable housing after Covid-19.

[Read the full piece of research, 'Making Housing Affordable after Covid-19: A follow up report from the Affordable Housing Commission'.](#)

Making Housing Affordable Again: Rebalancing the Nation's Housing System: The final report of the Affordable Housing Commission

March 2020

- The Smith Institute's Affordable Housing Commission published its final report and recommendations: making housing affordable again.

[Read the full piece of research, 'Making Housing Affordable Again: Rebalancing the Nation's Housing System: The final report of the Affordable Housing Commission.'](#)

4) CBRE Research Blog: About Real Estate

The CBRE Research blog showcases a variety of informed viewpoints, spanning all major property sectors that include –

- **Offices** – Discover up to the minute and future looking trends in the Office sector for occupiers, landlords, investors and developers
- **Retail** in detail,
- **Industrial** – CBRE 'shed' light on all things industrial,
- **Residential** – CBRE's 'house' vide on all things residential, and
- **Investment** – addressing the challenges and opportunities facing commercial real estate property investors

[Access the CBRE website and About Real Estate Research Blog](#)

[Back to top](#)

5) CABE – Chartered Institute of Building Engineers

Latest news: Fire Safety Act and Regulations

- **Changes to Building Regulations for fire safety in specific types of buildings**
 - On 1 June 2022, the Department for Levelling Up Housing and Communities (DLUHC) announced the outcome of its consultation on extending controls on use of combustible materials, and additional fire safety measures in higher risk buildings. These will come into force on 1 December 2022.
 - [Further information on the Changes to the Building Regulations](#) and
 - [More details can be found in the Amendment Document issued by DLUHC](#)
- **Coming into force of Schedule 1 of the Fire Safety Act relating to Fire Risk Assessments**
 - The Fire Safety Act 2021 will come into force in 2023, but ahead of this Section 1 – Premises to which the Regulatory Reform (Fire Safety) Order (FSO) applies and Section 3 – Risk-based guidance about the discharge of duties under the FSO of the Act commenced on 16 May 2022.
 - [Fire Safety Act Commencement Prioritisation Advice](#)
 - [Information on commencement of Section 1 and 3 of the Fire Safety Act](#)
 - [Fire Risk Assessment Prioritisation Tool](#)

Key publications from CABE

Setting the Bar – a blueprint to improve competence for those working on higher risk buildings and drive culture change has been set out by a cross-industry group representing more than 150 organisations, including CABE, in the fire and built environment industries. [Access *Setting the Bar* – Final Report](#)

Also: [Access *Safer people, safer homes: Building Safety Management*](#)

[Access the Chartered Association of Building Engineers for further information.](#) and [Access *Building Engineer* website](#)

6) RICS – Royal Institution of Chartered Surveyors

- RICS recognise the huge importance of property, land, construction and the built environment. Through their market surveys and research, they aim to advance the thinking of the profession and raise the profile of the industry.

Note: Latest research published by RICS is covered earlier within *Knowledge Foundations* and under **Other News > RICS Market Surveys**.

[Back to top](#)

As of **July 2022**, the [latest news & insights](#) include:

- [RICS Fire Safety Hub](#) – read the latest guidance and development from RICS in the area of fire safety,
- [The future of BIM](#) – An overview of what BIM is and how it is evolving,
- **How will councils cope with new trends in construction?** How will councils cope with new trends in construction.
- **How the right CRM can help built environment professionals** – Matt Nally speaks with Andrew Knight on these topics as they discuss the benefits of CRM systems for surveying practices.
- **How data supports the management of property risk for lenders and insurers** – Graeme Winser and Michael Lawson speak with Andrew Knight on these topics as they discuss how data can support the management of property risk for lenders and insurers.

7) CIOB – Chartered Institute of Building

The quality of the built environment effects every member of society. As a professional body that represents the leaders and managers who work at every stage of the lifecycle of a construction project, The CIOB seek to influence government, industry and other stakeholders around the world with the aim of promoting the construction management discipline and addressing the challenges that the sector faces.

As of **July 2022**, the latest CIOB Policy and Research include:

- **Future of Construction research** – *Aiming the Construction Industry for the Future: Recruiting from the military into construction*. Also access the latest Future of Construction - [CIOB Policy Team Newsletter – January 2022](#) (4th Feb 2022)
- **Ethics research** – *Understanding Mental Health in the Built Environment; Construction and the Modern Slavery Act: Tackling Exploitation in the UK; The State of Well-being in the Construction Industry, and Building a Fairer System: Tackling modern slavery in construction supply chains,*
- **Economics and social impact research** – *The Real Face of Construction 2020: Socio-Economic Analysis of The True Value of The Built Environment*
- *Job Quality in the Irish Construction Sector* (22nd April 2021)
- **Education and skills research** – *Exploring the impact of the ageing population on the workforce and built environment*
- **The Wider Built Environment** – *Overcoming the Barriers to Housebuilding in Ireland* (Feb '22); and *Understanding the Value of Professionals and Professional Bodies*.

[Access the Chartered Institute of Building's Policy and Research website](#)

[Back to top](#)

8) House of Commons Library, 9) the House of Lords Library and 10) the Parliamentary Office of Science and Technology (POST)

About the House of Commons Library - The House of Commons Library is a research and information service based in the UK Parliament. Their impartial analysis, statistical research and resources help MPs, and their staff scrutinise legislation, develop policy, and support constituents.

Watch this quick video to find out how the House of Commons Library works

Source: UK Parliament (2020) 'How the House of Commons Library works', YouTube [video]. Available at: youtube.com.

As of **July 2022**, the House of Commons Library has recently updated their website that is now broken down into the following sections or subject areas:

Services that include Research, Resources, Training & Events,

Brexit that covers Legislation, Negotiations, Policy, The EU, and Brexit explainer videos,

Coronavirus – read the latest Coronavirus (COVID-19) research and analysis from UK Parliament.

Economy, Business and Transport that include Business, Economy, Economic Updates, Transport, and Work & Incomes,

Home Affairs incl. Communities, Crime, Family & Civil Law, Justice, Immigration, Security, and Culture, Media & Sport,

Parliament & Elections that include Devolution, Elections, Government, Parliament, and Local Government,

Science, Environment and Technology that include **Energy, Environment, Climate Change**, Sciences, **Local Data**

Social Policy that include **Education**, Families & Social Services, Health, **Housing & Planning**, and Welfare & Pensions,

World Affairs that is broken down into Africa, Americas, Asia Pacific, Defence, Europe, Institutions, and Middle East, and more.

As of **July 2022**, the latest House of Commons Library, **Research publications** incl.

1. The crisis in Ukraine,
2. Unemployment by ethnic background,
3. Leadership Elections: Conservative Party, and
4. The impact of the cost of living crisis in Wales.

Review House of Commons Library, Research for this week

As of **July 2022** the latest **House of Commons Research**:

[Back to top](#)

Under '**Education**' and within 'Social policy,' the top research briefings incl.

1. Careers guidance in schools, colleges and universities (England),
2. The spending of the Department for Education,
3. Coronavirus: GCSEs, A Levels and equivalents in 2022,
4. Support for children and young people's mental health (England), and
5. Higher Education (Freedom of Speech) Bill: Progress of the Bill.

Under '**Housing and Planning**' and within 'Social policy,' the top research briefings incl.

1. Help with paying for historical fire safety work: high-rise blocks (England),
2. Energy efficiency of homes in the north of England,
3. Q&A: Energy efficiency in old homes,
4. Disabled adaptations in leasehold flats and common parts,
5. Housing Market: Key Economic Indicators
6. The end of 'no fault' section 21 evictions,
7. Leasehold reform in England and Wales: What's happening and when?
8. Local authority data: housing supply,
9. Flood risk management and funding, and
10. Constituency data: house prices.

Under '**Energy**,' '**Environment**' and '**Climate change**,' and within 'Science, Environment and Technology' include:

1. Food Banks in the UK,
2. The effect of the war in Ukraine on UK farming and food production,
3. Energy (Oil and Gas) Profits Levy Bill 2022-23, and Q&A: Energy efficiency in old houses, and
4. Estimates Day debate: The Spending of the Department of Business, Energy and Industrial Strategy on action on climate change and decarbonisation.

[House of Commons Library search](#) on '**construction industry**' identifies 18 key documents, that incl. 'Taxation in the construction industry', 'CITB – Construction Industry Training Board Levy', and '**The construction industry: statistics and policy, Dec. 2019**' -

Abstract: Construction industry – employment, new orders, output. [Construction 2025](#), [The Farmer Review](#) and the [Construction Sector Deal](#) (part of the government's [Industrial Strategy](#)).

Key statistics – In 2018, the construction industry contributed £117 billion to the UK economy, 6% of the total.

Economic output in 2018 was slightly down on 2017, the first fall since 2013.

There are 2.4 million construction industry jobs in the UK in Q2 2019, 6.6% of all jobs. There are more construction jobs now than at any time since 2007, although throughout this period, roughly the same proportion of jobs have been in construction.

The construction industry is unusual because of the high proportion of self-employment in the sector – 36% in Q2 2019, compared to the average for the whole economy of 13%.

New orders to the construction industry were worth £61.7 billion in 2017. This is 13% down in 2017, the first fall since 2011. New housing orders accounted for 35% of all construction orders, commercial orders accounted for 25% and infrastructure orders accounted for 19%.

[Access and download the full report, 'Construction industry: statistics and policy](#)

[Back to top](#)



e-Journal Review

Built Environment Industry Journal titles reviewed by UCEM e-Library

MODUS

MODUS - the RICS magazine that brings you the latest news and views, expert advice and in-depth features spanning the breadth of the surveying profession around the world.

In the latest digital **MODUS (July 2022)**, 'How drones became a crucial kit for construction sites' – The problem-solving flying machines can track equipment, monitor health and safety requirements, provide site inspections and boost profits.

Subject Terms/Keywords: Building surveying; Data management; Environmental surveying; Geomatics; Projects and people; and Technology.

Latest articles within *Modus*:

- **Buildings that elevated cities: Sydney Opera House** – The world-famous concert hall had a rocky start but won over its critics to be lauded as an 'indisputable masterpiece of human creativity.'

Subject Terms/Keywords: Cities and placemaking; Commercial property; Facilities management; Heritage and conservation; Marine environments.

- **The Bichard Review is an opportunity to change** – RICS President Clement Lau discusses Lord Bichard's report and how its findings will inform the future of the organisation.

[Back to top](#)

Subject Terms/Keywords: Learning and development; and RICS standards and guidance.

- Why commercial property is more valuable when it's green –

Introducing carbon reducing measures into existing buildings has long been regarded as too costly, but rising demand for greener offices is making retrofitting profitable.

Subject Terms/Keywords: Building surveying; Commercial property; Commercial valuation; Retrofit; Sustainability; and Valuation.

- Everyone's invited: designing safe and inclusive spaces –

Urban planners around the world are finding different ways to make sure cities are well-designed spaces in which everyone feels welcome.

Subject Terms/Keywords: Cities and placemaking; Commercial property; Diversity and inclusion; Health and safety; Research; and Residential.

- Protecting surveyors' systems from hostile cyber-attacks –

From smart buildings to blockchain and connecting remotely in the field, the networks and platforms used by surveyors are also fertile ground for hackers.

Subject Terms/Keywords: Building control; Data management; Facilities management; Infrastructure and services; Technology; and Telecommunications.

- Building the future: designing indigenous architecture –

Architect Sam Olbekson talks to Ann Gray FRICS about working with Indigenous American communities on projects that mean a great deal to them.

Subject Terms/Keywords: Diversity and inclusion; Land and resources; Land nights; Planning and development; Projects and people; Rural.

- Transforming vacant lots into fun outdoor spots – From a lagoon in the shell of a shopping mall, to a 'sky park' on a metro station roof, densely populated cities are reappropriating urban infrastructure to meet the changing needs of citizens.

Subject Terms/Keywords: Cities and placemaking; Land and resources; Planning and development; Sustainability.

- How can employers attract more women to construction?

Laura Collins MRICS is exploring how to shift the gender balance in a male-dominated industry as part of a review of the routes to RICS membership.

Subject Terms/Keywords: APC; Diversity and inclusion; Project management; Property finance and investment; and RICS standards and guidance.

[Back to top](#)

- **Monet laundering: how criminals use art transactions** – The art industry’s reputation for secrecy makes it a great place for criminals to do business. Who can tackle this problem and is stronger regulation needed?

Subject Terms/Keywords: Ethical practice; Finance and lending; Personal property; Technology; and Valuation.

- **Buildings that elevated cities: Chicago’s Sears Tower** – The skyscraper now known as Willis Tower is a ‘powerful expression of Chicago’s urban might and industrial strength,’ says architecture critic Blair Kamin.

Subject Terms/Keywords: Cities and placemaking; Commercial property; Commercial valuation; Economics; Facilities management; and Property finance and investment.

- **Cutting waste from facilities management** – What role can surveyors play in reducing the amount of waste produced by the daily operations of a building and the people who use it?

Please note: In addition to *MODUS*, RICS publishes other journals that are free to view online incl.

1. **Construction Journal** - The journal helps **quantity surveyors** and project managers with the technical and professional aspects of their day jobs and keep up to date with developments and practical matters in the profession. It covers topics including contracts, cost management, procurement, construction law and regulations, communications, and project management skills.
2. **Built Environment Journal** (Incl. Building Surveying, Building Conservation, and Building Control) - Coverage keeps practitioners in the disciplines of building surveying, building control, and building conservation up to date on the latest developments, products, standards, and guidance.
3. **Land Journal** - The journal emphasises the crossovers in these practice areas and their global nature, with articles contributed by experts from all over the ..
4. **Property Journal** - The journal contains high-quality technical material in clearly defined sections, as well as some material that crosses professional groups to reach a wider audience.

Further information can be accessed via the RICS Website, Home > News & Insights > **RICS Publications** [online].

The Heritage Alliance’s (HA) **Heritage Update**, the latest edition, **July 2022 - Issue 472** focusing on – Cabinet Reshuffle and Recent Appointments; Funding Announcements and Updates; and Government Response to ‘Living in a COVID World’. Also: **Engaging Digital Audiences**, available on the **HA project portal** - access webinars on diversifying digital audiences, how to plan great webinars, how to use exceptions to copyright in

[Back to top](#)

your digital activities & how to encourage your audience to create user-generated content.

Institute of Workplace and Facilities Management (IWFM)

Facilitate, the latest **July/August 2022** edition focus is on 'Stepping up in hard times' – Many expected that we would be busy 'building back better' at this time (see publication date), but instead we find ourselves in a punishing cost-of-living crisis. The IWFM Conference is also covered incl.- the importance of social value as an essential tool to boost local communities and improve lives.

Read more related articles on the [IWFM Insight webpage](#).

Contractors World International,

Construction Management (formerly *Construction Manager*) is the magazine of the Chartered Institute of Building (CIOB) who also publish the **Global Construction Review** (GCR). Note: Latest articles from both journals are covered earlier within this issue of *Knowledge Foundations*.

Subscriptions available via the VLE e-Library include:

Construction Information Service (CIS) Insight 2022. The Latest Edition [**July 2022**] focuses on – **Moving from linear to circular: incorporating circular economy thinking into the built environment**, and covers -

- **What is a circular economy?**
- **Moving from linear to circular thinking**, and
- **Issues, challenges, and where do you fit in.**

Taylor and Francis Online and include the following e-Journals:

- *Construction Management and Economics*,
- *Building Research and Information*, and
- *Journal of Property Research*

Henry Stewart Publications and include the following e-Journals:

- *Building Survey, Appraisal and Valuation*,
- *Journal of Urban Regeneration & Renewal*, and
- ***Corporate Real Estate***.

Corporate Real Estate Journal is the essential peer-reviewed, professional journal for corporate real estate executives.

Each quarterly 100-page issue publishes high quality articles and real case studies on new thinking, strategies, and techniques in corporate real estate. It cuts through the deluge of information facing corporate real estate professionals to deliver content, which is authoritative, practical, and relevant by providing a blend of genuine thought-leadership – which expands what can be achieved with corporate real estate – with detailed, actionable advice and 'lessons learned' from industry peers.

[Back to top](#)

In-depth articles and case studies scheduled for the new volume, **Vol 11, Number 3 (2021-2022)** of **Corporate Real Estate Journal** incl.

Editorial.**Practice papers**

1. Turning disruption into opportunity: Leading corporate real estate in a post-COVID-19 world,
2. Trust, flexibility and technology: The keys to creating a more mature workplace,
3. How to turn uncertainty into a corporate real estate opportunity,
4. How companies can create a winning site selection process,
5. New journeys in change: A 'hybrid' primer – Part 2
6. The great office evolution: Reimagining the workplace,
7. Indian real estate in the post-COVID-19 era,
8. Work experience from home: hybrid work and the future of distributed work locations: A comparative empirical analysis between the US and Germany

Book review:

Elemental Change: Making stuff happen when nothing stands still by Neil User.

Other articles from *Corporate Real Estate Journal* (2021-22), Volume 11, Number 2:**Practice papers**

9. Why a hybrid office needs to understand and support employee commutes with transportation information
10. Data analytics and change management are transforming the future of the workplace: The opportunity to create value driven harmony between people, place and technology
11. The great workplace reset: Pivoting to the human experience in the war for talent
12. Information strategy in view of enterprise real estate futures: The evolving role of information systems in corporate real estate and facility management
13. Liberated work: Responding to the unshackling of 'work' from 'place'
14. Why and how formal relational contracts will improve your next corporate real estate outsourcing deal
15. India's transforming post-pandemic workplace: The emerging role of the hybrid work model

Other articles from *Corporate Real Estate Journal* (2021-22), Volume 11, Number 1:**Editorial though pieces**

16. The end of corporate real estate – revisited
17. The workplace post-COVID-19: Embrace the new normal or

[Back to top](#)

back to the future?

18. Diversity, inclusion and effective business transactions

Practice paper example:

19. The importance of the physical office post-COVID-19

20. New data sources in the age of hybrid work

Book Review – *Elemental Change: Making stuff happen when nothing stands still* by Neil Usher.

Vol 11 (2) (2021-22) of [Corporate Real Estate Journal](#)

Vol 11 (1) (2021-22) of [Corporate Real Estate Journal](#)

Vol 10 (4) (2020-21) of [Corporate Real Estate Journal](#)

Vol 10 (3) (2020-21) of [Corporate Real Estate Journal](#).

Vol 10 (2) (2020-21) of [Corporate Real Estate Journal](#), and

Vol 10 (1) (2020-21) [Special issue: COVID-19, CRE and workplace response](#)

HSTalks

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HSTalks is a member of the Henry Stewart Group which has been a leader in providing graduate and continuing professional education in science, business, and management for over 40 years through peer reviewed vocational journals (such as the *Corporate Real Estate Journal*), conferences and online education for medical schools, business schools, universities, government, and commercial enterprises in over sixty countries around the world.

Henry Stewart Talks Ltd (HSTalks) provides specially prepared, animated, online, audio-visual lectures, seminar-style talks and case studies that accompany the 'Business & Management Collection' of e-Journals that the UCEM e-Library subscribes to.

Educational Journal titles and Open Educational Resources (OERs) reviewed by UCEM e-Library

[Open Praxis](#) – peer-reviewed open access scholarly journal focusing on research and innovation in open, distance and flexible education. It is published by the **[International Council for Open and Distance Education – ICDE](#)**.



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[Back to top](#)

This latest *Open Praxis* special issue **Vol 13(4)** compiles six selected papers derived from contributions presented at the 2021 ICDE Virtual global Conference Week that took place online in October, including two articles that received the Best Paper Awards in the two conference tracks: innovation and open education, respectively. The issue includes three more research papers and one innovative practice article from the conference. Finally, the issue includes one book review.

Keywords: open education, innovation, higher education, distance learning, OER, assessment, teacher education, international education.

Editorial:

1. Upskilling and Upscaling for Quality Open, Flexible and Distance Learning. Introduction to Selected Contributions from the 2021 ICDE Virtual Global Conference week

Research articles include:

1. 'Innovative Application & Enrolment Processes for More Informed Students: Reflections on the Benefits of this innovative Process through the Analytical Lens of Behavioural Science',
2. 'How to Promote the Use of Open Educational Resources (OER) in Higher Education. A Parley with OER Experienced Teachers,'
3. 'Towards Digital Thinking and Practices: Experiences of Sri Lankan Teachers and Students',
4. 'Developing Student Behaviours that Support Academic Integrity in Distance Learning',
5. 'A Formative Assessment Design Suitable for Online Learning Environments and its Impact on Students' Learning',

Innovative practice articles:

1. 'Integrating Metaliteracy into the Design of a Collaborative Online International Learning (COIL) Course in Digital Storytelling',

Book review(s):

1. 'Book Review of *Reimagining Digital Learning for Sustainable Development*'.

European Journal of Open, Distance and E-Learning

(EURODL), an electronic, multi-media, open access journal. It publishes the accounts of research and presents scholarly work and solid information about open, distance, online and e-learning in technology-enhanced education and training in its most inclusive definition.

Published in the **Latest Issue of EURODL**, **Vol. 23 (2021): Issue 2 (Jan 2021)**, article titles include:

- 'Building Digital Capacity for Higher Education Teachers: Recognising Professional Development Through a National Peer Triad Digital Badge Ecosystem,'
- 'Cultivating Self-Regulated Learning in Flipped EFL Courses: A Model for Course Design,'

[Back to top](#)

- 'Transcript and Accessibility: Student Views from Using Webinars in Built Environment Education,' by UCEM's Tharindu R. Liyanagunawardena
- 'Vector AR3-APP – A Good-Practice Example of Learning with Augmented Reality',
- 'Educators' Digital Competence in Swedish Rural Schools,'
- 'Proposition for the Introduction of the Concept Telemathesis in Videoconferencing in Distance Education,'
- 'Developing E-Authentication for E-Assessment'
- 'Diversity of Students Testing the System in Higher Education.'

Online Learning Journal (OLJ), the official journal of the Online Learning Consortium (OLC)

The **Online Learning Consortium's** premier journal dedicated to the development and dissemination of new knowledge at the intersection of pedagogy, emerging technology, policy, and practice in online environments.

The OLC **Online Learning Journal**, latest edition, **OLJ 2022 Vol 26(2)**. This second issue in OLC's 26th volume contains a collection of articles groups into four sections. The first group of papers relate to faculty and professional development, followed by a group of empirical studies on a range of issues. This issue also features two qualitative studies, a book review and a review of literature. These new studies provide guidance for researchers and practitioners working to better understand how students and faculty learn, teach and assess in online environments.

Faculty, Professional Development, and Online Teaching

1. Improving Retention Factors and Student Success Online Utilising the Community of Inquiry Framework's Instructor Presence Model (Rosser-Majors, M. L. et al.), and
2. Online Presentations with PowerPoint Present Live real-Time Automated Captions and Subtitles: Perceptions of Faculty and Administrators (Orellana, A. et al.)

Empirical Studies

Some of the articles include:

3. The Impact of Attitudes, Beliefs, and Cognitive Reflection on the Development of Critical Thinking Skills in Online Students (Simonovic, B., Vione, K. et al.),
4. Facilitating Cognitive Presence Online Perception and Design (McCarrol, J., and Hartwick, P.)

Qualitative Perspectives

5. Understanding the Lived Experience of Online Learners: Towards a Framework for Phenomenological Research on Distance Education (Becker, J., and Schad, M.,)

6. A Case Study Approach to Exploring Resilient Pedagogy During Times of Crisis (Clum, K., et al.)

Book Review

- 'Book Review: Leading the eLearning Transformation of Higher Education: Leadership Strategies for the New Generation, 2nd ed. Gary E. Miller and Kathleen S. Ives (eds).

Review of Literature

- 'Community of Inquiry Framework: Research Trends Between 2000-2020' (Olpak, Y. Z.)

[ISSN: 2472 – 5730]

[Higher Education Pedagogies](#), an Open Access Journal.

[Henry Stewart Publications](#), Management e-Journal collection incl. *Journal of Education Advancement & Marketing*.

[The Open Education Research Hub](#) (OER Hub), and

[The Directory of Open Access Journals](#) (DOAJ)

[Back to top](#)



e-Book Review

Managing Diversity and Inclusion in the Real Estate Sector

Clack A and Gabler J (2019) *Managing diversity and inclusion in the real estate sector* [e-book], Oxon: Routledge. e-ISBN-13: 9780429428975

Research shows that high-performing organisations focus on diversity and inclusion (D&I). In any workplace, it is important to both understand and recognise the benefits that having a D&I workforce provides. It is integral to developing people within an organisation, serving clients as best we can, and playing an important leadership role in communities.

Managing diversity and inclusion in the real estate sector is the first to place D&I at the centre of successful real estate and construction organisations. It provides guidance to, and most importantly, actions for professionals in the sector who want to make D&I an inherent part of the culture of their organisation. This book has been written to bring the sector up to speed with what D&I is all about and how a D&I strategy can be implemented to secure future success.

This book is essential reading for all property leaders and professionals working in the real estate and construction sectors. Readers will gain especially from personal reflections on all aspects of diversity by a broad range of people working in the property industry.

[Back to top](#)

Real Estate: The Basics

Forsyth, J. and Wilcox, J. (2022) *Real Estate: The Basics*, Oxon: Routledge. ISBN-13: 9780367725433

Real Estate: The Basics provides an easy-to-read introduction to the core concepts of the industry to students new to the subject or professionals changing direction within the sector. Note: This book would not have been written if it were not for some students on UCEM's 'Property Transactions' module –some of them are anonymously quoted in the Introduction.

The book encapsulates the key 'need to know' aspects of Real Estate including the 'language' of real estate; its value and contribution to countries' GDP; its primary purpose, whether as an asset or as a resource; valuation concepts; asset classes; basic concepts of land law, and of landlord and tenant law; the increased role and importance of sustainability and technology; and an overview of the wide range of professionals involved in the industry.

Note: Introductory offer 25% off *Real Estate The Basics* for a limited period. Go to [Routledge.com](https://www.routledge.com) and use the code **REB25**.

Studying at a Distance

Talbot C (2010) *Studying at a Distance* [e-book]. Maidenhead: Open University Press, e-ISBN-13: 9780335238057

This essential guide provides practical help and support for those who have not previously studied at a distance and is ideal for students returning to study after a break. It covers fundamental issues such as motivation, goal setting, time management and coping strategies. Additional coverage in this edition includes specific information on the use of new technologies in distance learning; detailed coverage of referencing, citation, and plagiarism; description of using mind maps and other techniques for planning and writing essays or reports; support for disabled students, particularly those with dyslexia; and a further resources section.

Adding some Tec-Variety: 100+ Activities for Motivating and Retaining Learners Online

Bonk C J, and Khoo E R (2014) *Adding some Tec-Variety: 100+ Activities for Motivating and Retaining Learners Online* [e-book]. CreateSpace Independent Publishing Platform, e-ISBN-13: 9781496162724. [Access the free online book *Adding Some TEC-VARIETY*](#)

Please note: The authors have made an online version of this work available under a [Creative Commons Attribution-Non-Commercial-Share-Alike 3.0 Licence](#).

Directory of Open Access Books (DOAB)

The primary aim of DOAB is to increase discoverability of Open Access books.

[Access the Directory of Open Access Books \(DOAB\)](#)

[Back to top](#)



UCEM e-Library Portrait

The aim of the e-Library

The aim of the e-Library is to:

- disseminate information, share good practices, and promote current awareness to assist in underpinning written work,
- add value and depth to our students' study experience, and
- support the continuing professional development of all those working and aspiring to work in the built environment.



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Source: UCEM (2022) *Getting started with the e-Library* [video], YouTube. Available at: www.youtube.com/watch?v=iEg8DFUFifY&t=5s [accessed 15 July 2022].

At UCEM, we recognise that in an information-rich age and when everyone is pressed for time, it can be a challenge to find good-quality information when you need it.

Whether you are obtaining a qualification, undertaking CPD or researching a particular field, having access to a well-equipped library is essential.

The UCEM e-Library (accessed through the Virtual Learning Environment - VLE) is a comprehensive and valuable online resource, enabling students to access a wealth of subject-specific and credible information to support them throughout their studies and career development.

What resources are available in the UCEM e-Library?

The e-Library is made up of eleven sections and provides students with around the clock access to online searchable databases from key industry and educational sources, thousands of journals, books, and resources, UCEM's entire collection of study materials and published work and UCEM's dissertation library.

[Back to top](#)

The sections that make up the UCEM e-Library:



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Resources available within the UCEM e-Library include Up-to-date information and online searchable databases from –

Key educational sources that include- Taylor and Francis Online, Ingenta Connect, Henry Stewart Publications and HS Talks, vLex | Justis, Westlaw EDGE UK, EBSCO Business Source Premier, Emerald Insight - access to around 2600 e-Book titles and their entire ‘Property Management and the Built Environment’ collection of journals, and

Industry-specific sources that include- IHS’s Construction Information Service, *Estates Gazette* (EG) digital journal and EG Radius, *Property Week*, RICS’s BCIS – Building Cost Information Service and ISURV online information service, NEC - New Engineering Contract Academia, BSRIA – Building Services Research and Information Association, and more.

Where to find help - Overwhelmed by the sheer amount of information out there?

Not only do libraries provide us with books to read, but they are valuable tools and resources. The UCEM e-Library is continually striving for improvement and changing to meet the demands of today’s technology and ever-expanding volumes of knowledge creation.

The e-Library is here to help make finding up-to-date, credible, and relevant information easier. Access the [2022 e-Library interactive brochure](#) for further information.

[Back to top](#)

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Emerald Insight – the online platform for Emerald Publishing. Emerald champions new ideas in advancing the research and practice of business and management, and manages a portfolio of nearly three hundred journals, including a 'Property Management and the Built Environment' collection that UCEM subscribes to.



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Emerald works in close collaboration with numerous academic (including UCEM) and corporate organisations worldwide. Emerald Publishing endorses the e-Library's tailor-made research reports – a service provided to UCEM tutors to help supplement teaching and learning materials on subject-specific areas.

[July 2022] - Here are some Open Access Journal articles available via Emerald, all around the theme of '**Online Teaching and Learning**'.

Note: The following article examples are freely available via **Emerald Publishing Open Access**:

1. Leslie, H.J. (2020), 'Trifecta of Student Engagement: A framework for an online teaching professional development course for faculty in higher education', ***Journal of Research in Innovative Teaching & Learning***, Vol. 13, No. 2, pp.149-173. Emerald Publishing Ltd.
2. Saib, M. O., [et al.] (2022), 'Digital pedagogies for librarians in higher education: a systematic review of the literature', ***Information Discovery and Delivery***, Vol. ahead-of-print, No. ahead-of-print. Emerald Publishing Ltd.
3. Stevens, G.J., [et al.] (2021), 'Online university education is the new normal: but is face-to-face better?', ***Interactive Technology and Smart Education***, Vol. 18, No. 3, pp. 278-297. Emerald Publishing Ltd.



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Remember:

“A Librarian is a powerful search engine with a heart, that listens and understands the library and information requirements of others and provides a response in a format that suits their needs” says Lucy Roper, UCEM Information Governance Manager and who can be contacted on the library@ucem.ac.uk email address

[Back to top](#)

Student Career Services

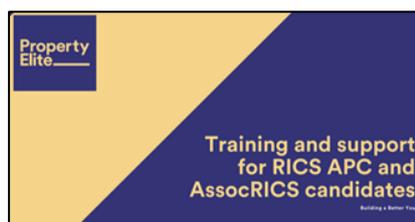
UCEM Career Services

UCEM Career Services is part of the Student Outreach Team and Student Services. They offer careers Information, Advice and Guidance (IAG) to potential, current and past students. The service is confidential, non-judgmental, and impartial.

[Access and read the UCEM Careers interactive brochure](#)

[Access UCEM Career Services](#)

Building Better Property Professionals



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Property Elite's sole aim is to build better property professionals – supporting your career every step of the way, whether you are completing a RICS accredited degree course, your RICS Assessment of Professional Competence (APC) or simply seeking engaging Continuing Professional Development (CPD).

[Property Elite](#) provides training and CPD services for property professionals, including students, APC candidates and corporate clients.

Their Hot Topic Highlight blog posts will arm you with the information on the hottest topics – ready to tackle an important client meeting or begin revising for your RICS APC final assessment.

[Back to top](#)

This month [**July 2022**] the **Hot Top Highlight – Black Book Part 1: Introduction & Change Management**.

In this latest blog article, Property Elite consultant, Abigail Blumzon BArch (Hons) MSc, MRICS, MAPM discusses what the Black Book is and gives an update on one of the latest Guidance Notes published by the RICS. Note: This is part 1 of a 2-part blog exploring the Black Book and is essential reading for RICS APC and AssocRICS candidates on the Project Management and Quantity Surveying & Construction pathways.

This week's blog will explore:

- What is the Black Book?
- Why is it important
- What is the '**Change Control and Management**' RICS guidance note?
- What is Change?
- How do Contracts Deal with Change?

Part 2 will look at the Subcontracting guidance note, and how the Black Book is useful for those sitting their APC and AssocRICS qualifications.

What is the Black Book?

The 'Black Book' is a suite of guidance notes (GN) that define good technical standards for quantity surveying and construction professionals. Many of these guidance notes are also relevant to other pathways, especially project management and building surveying. These standards are essential development tools for younger professionals working through their APC and useful guides to best practice for more experienced professionals.

Examples of Black Book GNs include Change Control and Management, Subcontracting, Acceleration, Retention and E-tendering.

Further details and access to the Property Elite Hot Topic Highlight blog: Black Book Part 1: Introduction & Change Management

Also: **Property Elite Hot Topic Highlight blog: A-Z of Investment Terms**, and **Access Property Elite's 'Building Better Property Professionals', Latest Blogs**

Note: The author of most of these blogs, Jen Lemen-Hogarth is an Associate Tutor – UCEM and Partner – Property Elite.

Lucy's Top Tips – If you are planning to sit your RICS APC/AssocRICS, make sure you are aware of Property Elite's APC Support services, including submission reviews, question

[Back to top](#)

packs, revision quizzes and e-mock interviews (available via the e-Library). You can also download this blog [in audio format](#) and listen whilst on the move. When you're done, you can request further information and a free CPD certificate.

Other related web-links

Gerrard N (2022) '[CM reader survey: 'We're creating people's dreams'](#)', *Construction Management*, 3 January - What *CM* readers like most about a career in construction management.

[GoConstruct.org](#) website highlights the many career opportunities available in construction and the built environment. The website helps to meet the future skills needs of the industry.

[TARGETjobs](#) – All TARGETjobs graduate career guides and directories are available for you to view online and download for future reference and include [Explore Property](#), [Explore Engineering](#), [Engineering 2021](#), and [Careers Survival Pack](#).

[House Building Careers](#) – Part of Home Builders Federation (HBF), here you will be able to learn about the home building industry and how it benefits you, your community, and the country as a whole.

[Access to: RICS Careers](#) – What is surveying? See how surveyors shape our communities and tackle global issues like climate change – and discover how you can improve the world around you.

Building People

[Enabling connections for a competent, diverse, and valued built environment workforce](#)



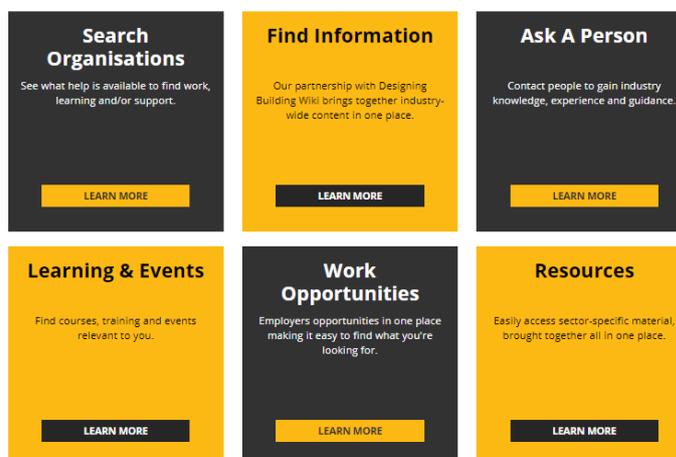
© UCEM 2021

The aim of 'Building People' was to create a technology platform and collaborative network, which enables connections and seeks to reduce the skills shortages across the Built Environment. 'Building People,' a social enterprise that aims to connect people traditionally not involved in the Built Environment sector with employers seeking to plug the skills gap via an online platform.

[Back to top](#)

People Wiki:

What are you looking for?



© Building People 2021

The UK needs to build, but there is a shortage of competent and experienced workers, and the workforce we have lacks diversity. Building People joins the dots to help people find employers, opportunities, and resources, and to help employers engage with a more diverse range of talent.

People Wiki (a free, open access knowledge sharing platform for diversity and inclusion, skills and careers, and social value.) is a crucial part of Building People's ambition to create a single platform that brings together a multitude of previously fragmented information, knowledge, resources, opportunities, and needs focused on diversity and inclusion, skills and careers, and social value.

Related Link:

UCEM incubate social enterprise, Building People, becomes a fully-fledged success story

Building People, whose mission is to improve equality, diversity, and inclusion in the built environment, is now an independent entity.

Since its inception in 2018, UCEM has provided the enterprise with office space, founder job security and donations totalling £150,000. This gave Building People the perfect platform to deliver its collaborative 'dot-joining' activity, connecting people to opportunities across the built environment and enabling employers to engage with a more diverse range of talent.

With strong levels of support coming in from across the sector, both parties are in agreement that now is the time for Building People to fledge the nest and become a separate entity.

It is an exciting time for the social enterprise as it announces its three-year plan, which focuses on five key areas:

1. **Profile:** Positioning Building People as the go-to source for equality, diversity and inclusion best practice and activities, and thought leadership in the built environment,
2. **Partnerships:** Delivering maximum joined-up impact through the growth and development of Building People's supply and demand networks,
3. **People:** Enabling equality of opportunity through the provision of a simpler and more supported user experience in a fragmented careers landscape,
4. **Policy:** Aligning with and supporting the achievement and enhancement of relevant national sector policy and activity, and
5. **Planning:** Establishing a secure future of Building People as a sector-backed movement for collaborative change across the built environment.

Access the article '[**UCEM incubated social enterprise, Building People, becomes a fully-fledged success story**](#)' in full.

[Back to top](#)



UCEM Sustainability Hub

Sustainability supports UCEM vision and core purpose to provide truly accessible, relevant, and cost-effective education, enabling students to enhance careers, increase professionalism and contribute to a better built environment.

UCEM has a Sustainability Hub within the VLE e-Library where you will find interesting resources, news, articles, projects and publications which support and information 'future skills' for sustainability within the construction, surveying, and property industries.

Building Research Establishment (BRE) Sustainability

- Access BRE Sustainability: Practical guidance and support for delivering genuine sustainability benefits.

Greater sustainability and its many benefits can be achieved for all buildings, homes, organisations, and communities. The BRE provides leading edge information and advice on all aspects of sustainable that include – Sustainable construction of buildings, Communities, Infrastructure, Sustainable organisations, Materials, products and services, Waste management, Energy management services, and Training and publications.

[Access BRE Sustainability](#)

[Back to top](#)

The Routledge Sustainability Hub

The Routledge Sustainability Hub is an innovative Knowledge Centre for the global sustainability community, this Hub offers a wide range of resources for everyone – whether you are a teacher, a student, a professional or a citizen of the earth curious to discover more about the many facets of sustainability.

[Access the Routledge Sustainability Hub](#)

The Green Agenda

Within the Savills Market Trends – ‘Real estate investment in 2021: global outlook’ (mentioned earlier within this issue of *Knowledge Foundations*) they covered ‘The Green Agenda’ Despite the challenges of 2020, the rising importance of environmental, social and governance (ESG) credentials for investors has continued to grow.

Across the globe, governments are making ‘climate emergency’ declaration and commitments to meeting net zero carbon in certain timeframes. To honour these commitments, new investment into green technology, energy and much more has been announced but also an increasing amount of regulation.

Real estate is under the spotlight as the built environment accounts for 40% of carbon emissions across the world. This will present challenges but it’s also an opportunity for real estate investors to make a significant difference.

[Read the Market Trends – ‘Real estate investment in 2021: global outlook’, in full.](#)

UCEM signs up to CIC’s new ‘carbon zero’ climate action plan

UCEM is one of the institutions which has signed up to the Construction Industry Council’s (CIC) new climate action plan.

CIC’s Climate Change Panel, chaired by its deputy chairman, Stephen Hodder MBE, led on the initiative, with signatories to the plan agreeing that:



CIC BUILT ENVIRONMENT PROFESSIONS TOGETHER

Carbon Zero: the professional institutions’ climate action plan

The signatories to this Action Plan agree that:

- the actions listed are necessary for dealing with the challenge of climate change;
- they will implement those actions appropriate to them as an institution/organisation; and
- they will support the other signatory institutions and organisations in delivering the remaining actions

© CIC 2021

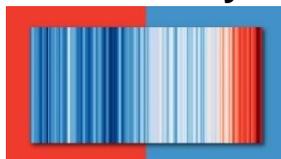
[Back to top](#)

The document, entitled 'Carbon Zero: the professional institutions' climate action plan,' was released last week and coordinates the efforts of built environment institutions in meeting the UK government's 2050 net zero emissions target.

To read the plan, head to the [CIC news story – 'CIC launches a Carbon Zero climate action plan for Professional Institutions'](#).

[Access the article 'UCEM signs up to CIC's new 'carbon zero' climate action plan' in full.](#)

UK sets 'most ambitious' climate target to cut emissions by 78% by 2035



[Image: courtesy Ed Hawkins]

(Climate stripes as shown in this image are sometimes referred to as warming stripes, or climate timelines and are data visualization graphics that use a series of coloured stripes chronologically ordered to visually portray long-term temperature trends.)

The UK government has set the 'world's most ambitious' climate change target into law to slash emissions by 78% by 2035 compared to 1990 levels. In line with the recommendation from the independent [Climate Change Committee](#), this sixth Carbon Budget limits the volume of greenhouse gases emitted over a 5-year period from 2033 to 2037, taking the UK more than three-quarters of the way to reaching [net zero by 2050](#). For the first time, this Carbon Budget will incorporate the UK's share of international aviation and shipping emissions.

On **Earth Day (22 April 2021)** the then Prime minister Boris Johnson urged countries to raise ambition on [tackling climate change](#) and join the UK in setting stretching targets for reducing emissions by 2030 to align with net zero.

The government is already working towards its commitment to reduce emissions in 2030 by at least 68% through the UK's latest Nationally Determined Contribution. The latest announcement builds on this goal to achieve a 78% reduction by 2035. The new target will become enshrined in law by the end of June 2021.

- **Raising the bar on tackling climate change**
- **Government must clearly map out how it plans to tackle the carbon emissions'**

[Access further information and the *PBC Today* article, 'UK sets 'most ambitious' climate target to cut emissions by 78% by 2035', in full.](#)

[Back to top](#)

China Dialogue – Policy briefing: EU-China climate engagement

- This briefing examines the policies driving decarbonisation in the EU and China, and the synergies and gaps that are shaping their cooperation.

[Access China Dialogue reports online.](#)

QSAND and the Sustainability Goals

The UN Sustainable Development Agenda, adopted by world leaders in 2015, maps out a 15-year plan to fight inequality, end poverty and tackle climate change challenges.

Quantifying Sustainability in the Aftermath of Natural Disasters (QSAND) is a self-assessment tool to promote sustainable approaches and contributing to aid the achievement of several of these 17 goals in disaster affected global communities:

Libraries' contribution to SDGs

Agenda Vision: Universal literacy

Goal 3: Good health and wellbeing

Goal 4: Contribution to quality education

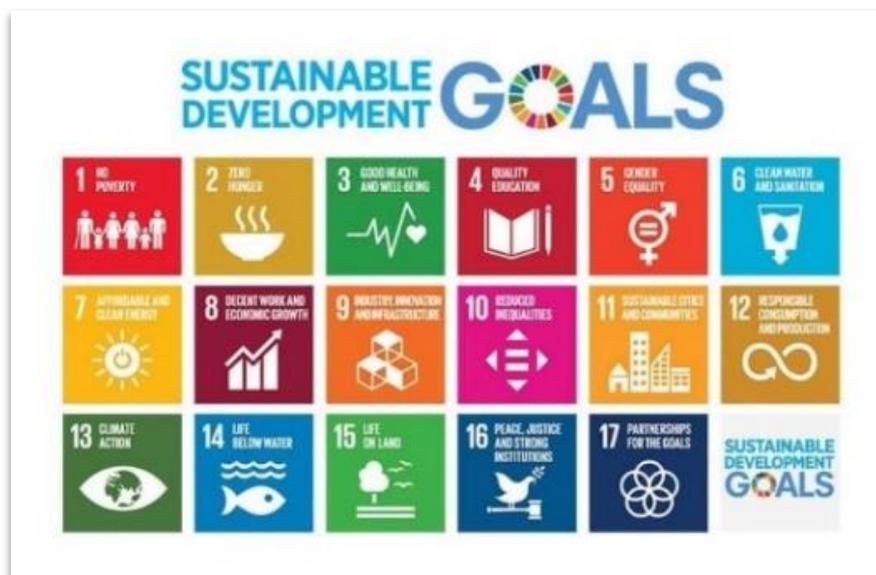
Goal 5: Culture

Goals 5, 9, 7: ICT skills and access

Goals 8 & 10: Decent work, economic growth, reducing inequality

Goal 16: Access to information

Note: Information plays a vital role in just about everything we do.



(UN.org 2022)

Source: Designing Buildings .co.uk Wiki (2021) '[Forgetting the big picture when considering sustainability](#)' [online], last edited 19 January. Note: "The Sustainable Development Goals icons and colour wheel are free to use" (UN.org 2021)

[Back to top](#)

Note: Use of Wikis as a reference site – Wikipedia and use of other Wikis are increasingly being used by people in the academic community, as an easy source of information about anything and everything. However, citation of Wikipedia may not be considered acceptable, because Wikipedia is not a creditable source. It is important to note that whilst Wikipedia may be one of the Web's most popular reference sites, it is not classed as a credible resource because anyone can be a contributor to the website.

This can be avoided by following two simple rules:

- 1) Remember that an encyclopaedia (which includes Wikipedia and any other Wiki) can be a good starting point for research and not an ending point.
- 2) An encyclopaedia can be good for getting a general understanding of a subject before you extend your study of the subject further. But you then must consider the subject in more depth using books, journals articles and other appropriate and credible resources. What you find in these other sources of information will be more detailed, more precise, and more carefully reasoned than the summary you found in an encyclopaedia. The sources you reference/cite in your work will therefore be these more detailed sources you have used.

(Connors State College 2022)

Book Review:**Climate Adaptation: accounts of resilience, self-sufficiency and systems change**

Thakore, Dr. R., Barinaga E [et al.] *Climate Adaptation: accounts of resilience, self-sufficiency and systems change* [print book], Arkbound Foundation, ISBN: 9781912092123

- Where is the world really heading, and what can we do about it?

This book takes an unflinching look at climate change, drawing upon the latest data to analyse what the next decades hold in store. With atmospheric CO₂ at unprecedented levels and insufficient action being taken to prevent a rise in temperatures above 2 degrees centigrade, we are not just looking at significant disruption but the possibility of societal collapse. For the first time ever, the magnitude of this challenge is faced head on, with avenues to truly address it presented. Case studies and models from sixteen authors around the world show ways that we can build adaptation and resilience, as well as what 'zero emissions' really mean. The book also provides a platform for those from a range of diverse backgrounds, whose unique experience and knowledge brings vital new perspectives.

Please note: Further information is also available later in *Knowledge Foundations* and can be found within the **UCEM e-Library Sustainability Hub**.

[Back to top](#)



Information Governance

UCEM is committed to advancing information governance and compliance, ensuring that the services provided comply with the General Data Protection Regulation (GDPR), Data Protection, Freedom of Information, Records management, Copyright, and Information Security.

Information Governance:



© 2020 iStockphoto LP. Royalty free

[image](#)

To make sure that information is available in the right place and at the right time to support others, the e-Library ensures that the information services comply with data protection and copyright.

Data Protection

With new technologies constantly emerging and us finding ourselves moving further into an ever more digital direction, our personal data, how it is used and who has access to it becomes a growing and global concern for all.

The General Data Protection Regulation (GDPR) was the first legislative change in recent years to address these concerns, with a broad aim to invoke a cultural shift in the way organisations manage personal data.

Further information, advice, and guidance on Data protection, GDPR and more can be found at the Information Commissioner's Office (ICO), the UK's independent authority set up to uphold information rights in the public interest, promoting openness by public bodies and data privacy for individuals.

[Access the Information Commissioner's Office website](#)

Latest Data Protection News [July 2022]

BBC News: University of Essex data breach being taken 'very seriously'

- A data breach affecting more than four hundred students is being treated "very seriously," the University of Essex said. **Keywords** include – [Data Breaches](#).

[Access the BBC News article, 'University of Essex data breach being taken 'very seriously,' in full.](#)

[Back to top](#)**ICO Latest News [July 2022] -**

14 July 2022 – **UK Information Commissioner sets out focus on empowering people through information** – The ICO has set out a commitment to safeguard the information rights of the most vulnerable people, including regulatory work around e.g., children’s privacy, AI-driven discrimination, the use of algorithms.

23 May 2022 – **ICO fines facial recognition database company Clearview AI Inc more than £7.5m and orders UK data to be deleted.**

14 September 2021 - ICO Blog: **Sharing personal data in an emergency – a guide for universities and colleges.**

11 August 2021 – **ICO consults on how organisations can continue to protect people’s personal data when it’s transferred outside of the UK**

Access the Information Commissioner’s Office, ‘News, blogs, and speeches’ section of their website

Further information, advice, and guidance (IAG) provided by the ICO

The ICO publish detailed IAG on:

- **Guidance on direct marketing and the public sector** (ICO, August 2021)
- **Sharing personal data with law enforcement authorities,**
- **Data sharing and reuse of data by competent authorities for non-law enforcement purposes,**
- The **Accountability Framework**, (ICO, September 2020),
- **Codes of conduct** and **certification schemes**. (ICO, February 2020)
- When using data analytics on personal data, the ICO is urging all organisations to look at its toolkit. It can be found at **ICO > For Organisations > Toolkit for organisations considering using data analytics** (ICO, February 2021)
- **Freedom of Information Self-assessment toolkit** launched in 2020 helps identify gaps in compliance.
- Further updates have been made to **guidance for handling Subject Access Requests** including a **step-by-step guide for small businesses**
- **Building a controller-to-controller contract** + template contract with guidance

ICO What’s new? [July 2022]

The Information Commissioner’s Office (ICO) website has a ‘What’s new’ section that is updated on a regular basis to highlight and link to any changes in their **ICO Guide to Data Protection** as they occur, for example: In April 2021 – The ICO have published guidance on the **National Security Provisions** in Part 3 of the DPA18 and updated the **Guide to Intelligence Services Processing**.

[Back to top](#)

The ICO have published:

March 2021 – Guidance on the [national security exemption](#) in Part 2 of the DPA18.

January 2021 - Updated BCR communication following the EU-UK Trade and Co-operation Agreement to the [International transfers after the UK exit from the EU Implementation Period](#).

December 2020 - [Data Sharing Code of Practice](#), alongside a [data sharing information hub](#) with further resources and support.

Further guidance provided by the ICO.

[Read the Blog: ‘Access to information: driving change through education, engagement and enforcement,’ in full](#)

Copyright



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“It is important to remember that Copyright material in digital form is protected in exactly the same way as Copyright material in any other format. For example, text and images on a website are protected by copyright in the same way as printed material. Please note: if there is something you really want to use for learning materials and someone else owns the copyright ... [permission must be sought!](#)”

The copyright owner may wish to charge you, but often they just appreciate you asking them if they are happy for you to acknowledge their work and inform them of how the information will be used and who it will be circulated to.”

Source: Salmon, Prof. G., (2013), *E-tivities*, London: Routledge

Introducing Copyright: A plain language guide to Copyright in the 21st Century - Computers and the Internet have transformed the way we produce and distribute information and entertainment. This book explains copyright protection and what it means for copyright holders and copyright users. It also introduces readers to contemporary topics: (i) digital rights management, (ii) open licences, (iii) software patents & (iv) copyright protection for works of traditional knowledge.

Source: Hofman J (2009) *Introducing Copyright: A plain language guide to Copyright in the 21st Century* [e-book], Vancouver: The Commonwealth of Learning.

 **creative commons** [CC-BY-NC-ND](#)

[Access free copies of this book \(in PDF and EPUB formats\)](#)

[Back to top](#)

The Copyright Licensing Agency Ltd (CLA)

The CLA are a licensing body as defined by the Copyright, Designs and Patents Act 1988 c.48 (as amended) ["CDPA"]

The CLA licence organisations to copy and re-use extracts from print and digital publications on behalf of copyright owners – authors, publishers, and visual artists. By 'copying' the CLA means photocopying, scanning and re-use of content from magazines, books, journals, electronic and online publications, as well as press cuttings or documents supplied by a licensed third party.

Having a CLA licence helps to reduce the risk and potential cost of copyright infringement. This requirement applies to any organisation in the business, education, public or charitable sectors. **Note:** UCEM holds a **CLA 'Higher Education Photocopying and Scanning Licence'**

[Access the Copyright Licensing Agency website for further information](#)

CLA Title Search tool

The [CLA Title Search tool](#) is an online search tool that lets you quickly find out what you can copy under your organisation's CLA licence. Whether you'd like to photocopy and distribute an article to colleagues or upload a report to an intranet or VLE, the CLA Title Search simplifies the steps required to ensure compliance.

[Check permission at CLA Higher Education Licence.](#)

[Introducing the CLA Step-by-Step Guide and Interactive Toolkit for those checking permissions within their licence.](#)

Latest Copyright News [June 2022]

Article 13: UK will not implement EU copyright law.

- Universities and Science Minister Chris Skidmore has said that the UK will not implement the EU Copyright Directive after the country leaves the EU.

Several companies have criticised the law, which would hold them accountable for not removing copyrighted content uploaded by users if it is passed. EU member states had until 7 June 2021 to implement the new reforms, with UK having left the EU by then.

[Read the full BBC Technology news item 'Article 13: UK will not implement EU copyright law'](#)

[Latest 'BBC Copyright News' incl. Ed Sheeran Copyright case.](#)

Government Guidance – Changes to copyright law from 1 January 2021

- This guidance covers the impacts on UK right holders, businesses, cultural heritage institutions and consumers. Note: It is not legal advice.

[Back to top](#)

[Access the GOV.UK 'Changes to copyright law from 1st January 2021', in full.](#)

Keeping abreast of the latest developments in Information Governance: [Copyright Resources](#) – Naomi Korn Associates has developed free and openly licensed copyright, licensing and data protection help resources.

Copyright & Information Technologies in Education (CITE)



© CLA 2020

The CITE Forum is a place to discuss the CLA's technology and licence offerings (such as the Digital Content Store) but also an opportunity for Higher Education Institute's to network, share and disseminate relevant copyright information.

As UCEM Information Governance Manager I regularly attend the Copyright Licensing Agency (CLA) CITE Forum and presented on '[UCEM's e-Library: Our Story So Far](#)', at the [CITE Winter 2021 Forum](#), held in November 2021. *Source:* CLA (2021) [UCEM e-Library: Our story so far](#), a presentation given at the Winter 2021 CITE Forum [video], YouTube. Available at: www.youtube.com/watch?v=GmuENzHeGO0&feature=youtu.be [accessed 26 April 2022]. **Ref: From 58:05 until 1.28:41.**

- Copyright Licensing Agency (2019) '[CITE – 2020 Vision](#)', [CITE Magazine, Winter 2019, No. 3](#) [online].
- Copyright Licensing Agency (2019) '[A CITE to behold](#)', [CITE Magazine, Summer 2019, No. 2](#) [online].
- Copyright Licensing Agency (2018) [CITE Magazine - A biannual magazine for the CITE Community, Winter 2018, No. 1](#) [online].

UCEM is committed to advancing information governance and compliance, ensuring that the services we provide comply with **GDPR, Data Protection, Records Management, Copyright, and Information Security.**

Part of my role as involves keeping abreast of the latest developments and benchmarking the work I do against that of others. I also undertake regular Continuing Professional Development (CPD), and an element of this is attending the CITE Forum attending events and conferences provided through my professional body, CILIP – The Library and Information Association, and others.

CILIP's National Copyright Conference 2022

This national conference was held on 18th May and in association with Naomi Korn Associates, as well as great speakers and further experts in the field in attendance.

[Back to top](#)

The Annual CILIP Copyright Conference provided a unique and important chance to update knowledge about the crucial copyright and licensing related issues and developments. It also provides an invaluable forum for in-depth presentations by UK experts, informed debate and opportunities to ask questions.

This conference provided an opportunity to delve deeper into copyright issues and gain a better understanding of how policy impacts on libraries and the information sector and covered the following:

- Intellectual Property in AI and Information Management
- Government Copyright Policy following Brexit
- eBooks and copyright
- Copyright Licensing Agency update
- Controlled digital lending and the UK legislative framework
- Use of the Quotation Exception.

Sessions covered broad copyright impact for the profession incl.

- **Keynote: NFTs and its Implications for Copyright Law, Libraries and Information Organisations**

Non-fungible tokens (NFTs) captured the imagination of creators and information organisation in March 2020, when an artwork titled 'First Thousand Days' sold for \$69 million. It has since been seen as an effective means selling digital assets, particularly those which form part of a limited edition or collection.

It has the potential to transform libraries and information organisations and this talk questions how NFTs can be useful and beneficial for these organisations? Based on research conducted by *Professor Dinusha Mendis*: Professor of Intellectual Property & Innovation Law, Bournemouth University, the paper takes a leap forward into the future in presenting the various opportunities NFTs offer for libraries and information organisations.

At the same time, NFTs are not without challenges. There have been many questions raised in relation to intellectual property (IP) and ownership. A string of recent IP cases has shone a light on just how challenging NFTs can be for the IP framework, which we have at present.

- **Exceptions to Copyright**

In this talk *Margaret Haig*: Head of Copyright Operations, The Intellectual Property Office (IPO) raises the question – How can the existing copyright framework help or hinder cultural heritage organisations in their work? This presentation highlighted some of the copyright issues and update on the latest relevant developments.

[Back to top](#)

- **The question of #ebookSIS: is copyright reform the answer?**

The Covid-19 pandemic highlighted the tensions and dysfunction of the academic publishing industry as never before, issues that had been bubbling under the surface for years were brought to a head by the sudden closure of universities and libraries and resulting pivot to entirely digital learning provision. The unavailability of many ebooks, the high prices, restrictive licences and building practice of many publishers meant that librarians were hamstrung by the impossibility of providing all the required resources for our users digitally.

The #ebookSOS campaign was born out of this situation and has been campaigning on several fronts for an investigation into the practice of academic publishers, wider awareness for staff and students on the impact of these issues, Open Access alternatives, and for copyright reform that will prioritise educational and research uses over corporate profit margins, via controlled digital lending, the reduction of restrictive licences to control use, and moves to allow libraries to own content, rather than merely licence access. These issues are not unique to the UK or indeed unique to academic libraries.

The #ebookSOS campaign has partnered with LibraryFutures (USA) and Knowledge21 (Europe) to raise awareness and coordinate international pressure to force change and make libraries more equal partners in our relationship with publishers.

Caroline Ball: Academic Librarian, University of Derby

- **An Act for the Encouragement of Lending? UK Copyright Law and Access to Digitised Collections in Libraries**

The ongoing pandemic has brought into sharp focus the difficulties faced by libraries in trying to meet the needs of their users through online provision of library resources. The cost of commercially available ebooks is one difficulty and gaps in availability of electronic versions of vital resources is another. One possible solution to the latter issue is Controlled Digital Lending, this is lending digitised copies of items in library collections under controlled conditions.

The aim is to provide access to items already owned by libraries without compromising the right to control use and income for rights holders. Lending of copyright works is a restricted act under UK copyright law. While copyright law provides for library lending, the legal bases for controlled digital lending are uncertain and current licensing schemes do not fully meet CDL needs. **Dr Adrienne Muir:** Senior Consultant, Naomi Korn Associates explored these issues and possible solutions further.

[Back to top](#)

- **The quotation exception in education and scholarly contexts**

In this presentation, **Professor Tanya Aplin**: Professor of Intellectual Property Law, King's College London, will consider the ways in which the quotation exception in s.30(1ZA) of the CPDA 1988 can allow for various uses of copyright works for educational and scholarly purposes.

- **CLA Licensing and Product Innovation**

James Bennett: Head of Rights and Licensing, Copyright Licensing Agency provided an update on new developments in CLA licensing and technology solutions for the education, corporate and public sectors.

Other talks included:

- **License to View: Copyright & Films in the Age of Covid at a Canadian University – Amy Lorenz**: Metadata and Copyright Librarian, Saint Mary's University – Halifax, Canada
- **The Trouble with TDM – Matthew Lamber**: Head of Copyright, Policy & Assurances
- **Towards Better Sharing of Cultural Heritage – Creative Commons' Agenda for Copyright Reform – Brigitte Vézina**: Director of Policy, Open Culture and GLAM, Creative Commons

Lightning talks included

- **Copyright and Research Data - Dr Hina Zahid**: Senior Research Data Services Officer, University of Essex
- **Going Ape! NFTS and ownership issues in Web3 – Eilish McLaughlin**: Sales and Marketing Consultant, PRFS Europe
- **The Modernist Archives Publishing Project (MAPP) and Copyright – Helena Clarkson**: Project Archivist, University of Reading

Further information is available at: CILIP (2022) '[CILIP Copyright Conference 2022 programme](#)'. CILIP.org.uk, Events.

[#CILIPCopy22](#) / [#copyright](#)

The Challenges of Remote Working at Present

For those who work remotely all or part of the time already, you or your employer [depending on whether you are self-employed / freelancer or an employee] will have safeguards in place that enable you to operate securely when handling commercially sensitive or others' third-party data. The difference, in March 2020, is that at very short notice, organisations are having to move staff to homeworking often with literally hours' notice as the Government COVID-19 instructions are issued.

[Back to top](#)

There are growing numbers of tips and survival guides online that include: Information Commissioner's Office (ICO) [Data protection and coronavirus: what you need to know](#).

The challenges of remote working at present and point to consider from a data privacy perspective.

Provided within this article are points to consider from a data privacy perspective that include:

1. **Have a clear statement to all staff** stressing that "The protection of personal data that we hold, and use is important to us and must be always handled in a way that is compliant with data protection law and our Data Protection and Privacy policies. While we must adapt to comply with the official guidance, we will adjust our working processes to allow us to deliver our services. These are time limited instructions that will be kept under review. At the end of the period then all data that is held temporarily on personal devices as a direct result of this exceptional times, will be deleted." (Tullo 2020)
2. **Set out what use of data**, contact lists, customer documents are being allowed.
3. As part of this exceptional response to homeworking **keep a full record of where staff are working from and what equipment they are using**.
4. **State that you have assessed the best way of ensuring homeworking efficiency** and are proposing that personal devices and mobile phones can be used. That you will review this [weekly seems sensible at present] in line with experience and how staff report it is working.
5. **Reissue and emphasize your usual security arrangements –** Virus and password protection, not leaving data visible to others, having a PIN code, or not sharing their device with others in their family or household.
6. **Take care to be aware where data is being stored**, even if temporary so that the security risk is managed and assessed.
7. For the **weekly reviews –** have your Senior Leadership Team note the number of staff using personal devices, any queries, or issues they are finding and demonstrate that you are monitoring the situation and are flexible in closing it down if any specific concerns arise.
8. Choose your collaboration tool of choice and consider recording online meetings and note actions especially where team members are geographically spread out and where broadband speeds and kit may vary in quality.
9. You might also consider having a standard introduction for homeworking staff to explain that they are homeworking and not in the office, so callers understand the position.
10. This is where a nominated Data Protection Officer (DPO) or Data Officer can support the senior team in the messaging to colleagues.

[Back to top](#)

Source: Tullo C, OBE (2020) '[The Challenges of Remote Working at Present](#)'. © [Naomi Korn Associates](#), 2020. Some Rights Reserved. The text is licensed for use under the Creative Commons Attribution Share Alike Licence (CC BY SA).

Regarding UCEM we have followed these pointers:

(i) A clear statement went to staff, and UCEM has a designated area within their central SharePoint site for Business Continuity Planning (BCP) that has the following folders containing

- Official Communications [Internal and External]
- Human Resources (HR) guidance and support
- Information Technology (IT) technical support, guidance, and documents

Data Protection guidance (incl. a new guidance note entitled, 'Processing Personal data when remote working.')

- The [UCEM Data Protection and Privacy Policies](#) have been updated and should be read in conjunction with IT Policies).
- & Hints and tips for working from home.

(ii) A retention and destruction schedule is in place that collates lists of data used within respective teams and departments; (iii) A register is kept of where staff are working from and equipment used; (iv) Regular online meetings and weekly All-staff keep everyone updated and ensuring regular communication; (v) IT provide regular updates and guidance; (vi) GDPR 2020 training has been launched to re-enforce the importance of knowing how data is used and where it is being stored, even if temporary so that risk is managed and assessed; (vii and viii) online equipment and collaboration tools are well established at UCEM as an online education provider, but are regularly monitored; (ix) As mentioned above, hints and tips for working from home are provided, & (x) UCEM has a designated Data Protection Officer (DPO).

Please note: There are regular updates -

- (i) On the [UCEM Website](#),
- (ii) [VLE Help Page](#) (for students), and
- (iii) within the [UCEM Website Home > Supported Online Learning > e-Library](#) current awareness services, incl. Information blog and *Knowledge Foundations* (for all).

#BE Informed

(iv) A short [UCEM e-Library video](#) (used within UCEM Marketing, [Social Media business channels i.e. LinkedIn](#) to promote the e-Library, *Knowledge Foundations*, regular information blogs, and more)

“Perseverance will get you anywhere.”

@NASAPersevere / #NASAPersevere

[Back to top](#)

A to Z of useful references and web-links:

[A](#) - [B](#) - [C](#) - [D](#) - [E](#) - [F](#) - [G](#) - [H](#) - [I](#) - [J](#) - [K](#) - [L](#) - [M](#)

[N](#) - [O](#) - [P](#) - [Q](#) - [R](#) - [S](#) - [T](#) - [U](#) - [V](#) - [W](#) - [X](#) - [Y](#) - [Z](#)

A

Advance HE (Previously HEA – Higher Education Academy) is dedicated to helping higher education shape its future. Providing insight, enhancing organisational performance, developing, and connecting people, and accrediting achievements. Advance HE [online]. Further information is available at: www.advance-he.ac.uk [accessed 28 July 2022]

American Society of Civil Engineers (ASCE) Civil Engineering database provides free access to over eighty thousand abstracts taken from ASCE publications since 1973. ASCE [online]. Further information is available at: www.asce.org [accessed 28 July 2022]

Association of Researchers in Construction Management (ARCOM) brings together all those interested in construction management research. It aims to further the advancement of knowledge in all aspects of management in construction by support education, dissemination, and research. ARCOM [online]. Further information available at: www.arcom.ac.uk [accessed 28 July 2022]

AJ Buildings Library (AJBL) – The AJ Buildings Library highlights thousands of exemplar projects, most from the last 20 years but including major projects back to 1900. Available at: www.ajbuildingslibrary.co.uk [accessed 28 June 2022] (This valuable resource is just one part of the *Architects' Journal* subscription, available via the VLE e-Library > OpenAthens Library login > Construction Information Service (CIS) and/or EBSCO Business Source Premier).

ARCOM Abstracts database – contains open access of every ARCOM conference paper since 1997 and is now a major resource for all active researchers.

ARCOM Newsletters - contains the latest news from the industry.

[\[Back to A to Z\]](#)

B

BBC Education [online]. Further information available at: www.bbc.co.uk/news/education [accessed 28 July 2022]

BBC Search [online]. Further information available at: www.bbc.co.uk/search [accessed 28 July 2022]

BIDSTATS [online] – Free UK tenders' portal. Find UK public sector contracts and further information available at: <https://bidstats.uk/> [accessed 28 July 2022]

BIM Task Group – The Building Information Modelling (BIM) Task Group support and develop the objectives of the Government Construction Strategy and the requirement to strengthen the public sector's capability in BIM implementation [online]. **N.B.** This group and programme are now part of the University of Cambridge, **Centre for Digital Built Britain (CDBB)** [online]. Further information

is available at: www.cdcb.ac.uk/AboutDBB/FAQs [accessed 28 July 2022]. Please refer to question 9 – What is the Digital Built Britain Programme? specifically.

BIMForum – The BIMForum’s mission is to facilitate and accelerate the adoption of building information modelling (BIM) in the AEC (Architecture, Engineering and Construction) industry. Further information is available via the BIMForum Website [online] and at: <http://bimforum.org> [accessed 28 July 2022]

BOMA International (Building Owners and Managers Association International) – a federation of 91 BOMA U.S. associations and seventeen international affiliates. Founded in 1907, BOMA’s mission is to advance a vibrant commercial real estate industry through advocacy, influence, and knowledge. **BOMA Research and Resources** [online] and available at: www.boma.org/BOMA/Research-Resources [accessed 28 July 2022]

British and Irish Legal Information Institute (BAILLI) Case Law Search [online]. Further information available at: www.bailii.org/form/search_cases.html [accessed 28 July 2022]

British Council of Shopping Centres (BCSC) was the professional body and authoritative voice for retail-led regeneration and for the management of and investment in shopping places [online]. Note: BCSC has changed and is now **REVO – Retail. Property. Community.**

British Institute of Facilities Management (BIFM) – The BIFM is now the Institute of Workplace and Facilities Management (IWFM).

British Property Federation (BPF) – The British Property Federation is a membership organisation devoted to representing the interests of all those involved in real estate ownership and investment. BPF [online]. Further information available at: <https://bpf.org.uk> [accessed 28 July 2022]

Building Conservation.com [online] – Information resources for conservation, restoration, and repairs. Further information is available at: www.buildingconservation.com [accessed 28 July 2022]

Building Conservation.com Articles directory by subject [online]. Available at: www.buildingconservation.com/articles/articles.htm [accessed 28 July 2022]

Building Design Directory [online] – provides construction and environmental products / services / information for Architects, Engineers and Facility Managers. Further information is available at: www.buildingdesign.co.uk [accessed 28 July 2022]

Building Engineer [online] – Building Engineer website covers news and insights from the following topics: Building & Fire Safety; Business & Management; Construction & Building Materials; Energy & Sustainability; Health, Safety & Wellbeing; Policy & Regulations; Refurbishment; Technology & Digital Construction. Further information is available at: www.buildingengineer.org.uk/ [accessed 28 July 2022]

Building People - a technology platform and collaborative network, which enables connections and seeks to reduce the skills shortages across the Built Environment. Building People [online]. Further information is available at: www.buildingpeople.org.uk [accessed 28 July 2022]

Building Research Establishment (BRE) [online] is an independent and impartial, research-based consultancy, testing and training organisation, offering expertise in every aspect of the built environment and associated industries. Further information available at: <https://bregroup.com/about-us> [accessed 28 July 2022]

BRE A-Z of BRE Services (from Accreditation to Zero Carbon) [online]. Further information is available at: www.bregroup.com/a-z [accessed 28 July 2022]

BRE Case Studies [online]. Further information is available at: www.bre.co.uk/podpage.jsp?id=1744 [accessed 28 July 2022]

Building Services Research and Information Association (BSRIA) [online]. BSRIA is a test, instrumentation, research, and consultancy organisation, providing specialist services in construction and building services. Available at: www.bsria.co.uk [accessed 28 July 2022]

Building talk [online]. Available at: www.buildingtalk.com [accessed 28 July 2022] *Building Talk* is an email newsletter for Architects, Civil Engineers and Building Services Contractors.

[Back to A to Z]

C

Campaign to Protect Rural England (CPRE) campaign for a beautiful and living countryside. They work to protect, promote, and enhance our towns and countryside to make them better places to live, work and enjoy, and to ensure the countryside is protected for now and future generations. CPRE [online]. Available at: www.cpre.org.uk [accessed 28 July 2022]

CBRE Research and Resources - CBRE sets the standard for global real estate research by providing clients with accurate and insightful market knowledge. CBRE [online]. Available at: www.cbre.com/research-and-reports [accessed 28 July 2022]

CPRE Resources provides the latest news articles, policy guidance notes, published reports and research surrounding the following - Countryside, Farming and food, Housing and planning, Energy and Waste, and Transport. CPRE Resources [online]. Available at: www.cpre.org.uk/resources [accessed 28 July 2022]

Centre for Architecture and Built Environment Research (CABER) seeks to develop innovative approaches, procedures, technologies, and techniques that support the design, management, reconfiguration, maintenance and operation of buildings, their fabric, and the environments they create. Note: CABER incorporates the previous Centre for Construction and Property Research (CPRC). CABER [online] and available at: www1.uwe.ac.uk/et/research/caber.aspx [accessed 28 July 2022]

The Center for Construction Research and Training (CPWR) is dedicated to reducing occupational injuries, illnesses, and fatalities in the construction industry through research, training, and service programs. CPWR [online] and available at: www.cpwr.com [accessed 28 July 2022]

Centre for Digital Built Britain (CDBB) is a partnership between the Department of Business, Energy & Industrial Strategy, and the University of Cambridge to deliver a smart digital economy for infrastructure and construction for the future and transform the UK construction industry's approach to the way we plan, build, maintain, and use our social and economic infrastructure. CDBB [online]. Available at: www.cdbs.cam.ac.uk/AboutDBB [accessed 28 July 2022]

Centre for Sustainable Energy (CSE) is an independent national charity that shares our knowledge and experience to help people change the way they think and act on energy.

CSE Resources [online] include - Reports & publications, Toolkits, Advice leaflets, Websites, *Energise* newsletter, Videos on The fundamentals, Improving your community building, Community-wide energy saving projects, Neighbourhood and low carbon planning, Renewable energy projects, and further Resources for schools and educators. Available at: www.cse.org.uk/local-energy/resources [accessed 28 July 2022]

Chartered Association of Building Engineers (CABE) is a member-focused non-profit organisation. CABE shares knowledge, raises standards, and develops professionals, enabling a professional construction sector that works to create better, safer, and more sustainable buildings that enhance people's lives. CABE [online]. Available at: <https://cbuide.com/> [accessed 28 July 2022]

Chartered Institute of Building (CIOB) [online]. The Chartered Institute of Building is the international voice of the building professional, representing an unequalled body of knowledge concerning the management of the total building process. Available at: www.ciob.org [accessed 28 July 2022]

Chartered Institution of Building Services Engineers (CIBSE) – the prime source of expertise in the Building Services Industry. CIBSE [online]. Available at: www.cibse.org [accessed 28 July 2022]. N.B. Within the CIBSE website you can '**CIBSE - Search the Knowledge Portal**' covering themes such as BIM, Building Regulations, FM, Facades, Fire Safety, Lighting and Heating, Management, and project management, Residential, Sustainability, and more.

China Dialogue [online] – China and the world discuss the environment. Available at: www.chinadialogue.net [accessed 28 July 2022]

CIBSE Journal [online]. Available at: www.cibsejournal.com [accessed 28 July 2022].

CIOB Library Incl. Library and Information Services [online]. Available at: www.ciob.org/library [accessed 28 July 2022]

CIOB BIM+ online newsletter [online]. Available at: www.bimplus.co.uk [accessed 28 July 2022]

CIOB's Construction Management journal (formerly *Construction Manager*) [online]. Available at: <https://constructionmanagement.co.uk/> [accessed 28 July 2022]

CIOB's Global Construction Review journal [online]. Available at: www.globalconstructionreview.com/ [accessed 28 July 2022]

CIOB's Policy and Public Affairs portal [online]. Available at: www.ciob.org/industry/policy-research [accessed 28 July 2022]

The CIT-eA Project Creating Innovative Technology – Enhanced Assessments – a research project that explored ways to increase the number of assessments in Further and Higher Education using technology. The CIT-eA Project [online]. Available at: <http://citea.digitalinsite.co.uk> [accessed 28 July 2022]

Cities / buildings images database [online]. Available at: www.washington.edu/ark2 [accessed 28 July 2022] is a collection of images of buildings and cities from around the world aimed at students, researchers, and educators.

C-Link is a procurement software company who also provide resources (incl. guides, eBooks, and other materials) created to help you make more money on your construction project. C-Link [online]. Available at: www.C-Link.com [accessed 28 July 2022]

Commercial Real Estate Services (CBRE) is the world's largest real estate services provider, with a preeminent leadership position in virtually all key business centers globally. CBRE [online]. Available at: www.cbre.co.uk [accessed 28 July 2022]

Community-Led Housing (CLH) Toolkit: a resource for local authority and housing professionals' [online]. Available at: <https://clhtoolkit.org/> [accessed 28 June 2022]. This Toolkit provides a wealth of technical and non-technical information on a broad range of issues relevant to CLH. There are five Toolboxes, covering (i) Housing (ii) Communities (iii) Legal (iv) Planning and (v) Finance.

Confederation of British Industry (CBI) is the UK's premier business lobbying organisation, providing a voice for employers at a national and international level. CBI [online]. Available at: www.cbi.org.uk [accessed 28 July 2022]

Conference on Training in Architectural Conservation (COTAC) was formed in 1959 to improve the standard of education of everyone involved in building conservation, including craftsmen, professionals, and homeowners. COTAC [online]. Available at: <http://ihbconline.co.uk/cotac2> [accessed 28 July 2022]

COTAC Digital Bibliography [online]. Available at: http://cotac.global/digital_bib/ [accessed 28 July 2022]

Constructing Excellence (delivered with **bre**) is a platform for industry improvement to deliver excellence through clients, industry, and users through collaborative working. Resources include publications, tools, and newsletter. Constructing Excellence [online]. Available at: <http://constructingexcellence.org.uk/> [accessed 28 July 2022]

Construction Enquirer is a news website in construction. Construction Enquirer [online]. Available at: www.constructionenquirer.com [accessed 28 July 2022]

The **Construction Index** [online] provides a wide range of information services for the UK construction industry, that include a search engine of construction companies, daily construction news, market data, email newspaper letter, and Case Law analysis and legal commentary. Further information is available at: www.theconstructionindex.co.uk [accessed 28 July 2022].

Construction Industry Council (CIC) – The representative forum for the professional bodies, research organisations and specialist business association in the construction industry. CIC [online] and available at: <http://cic.org.uk> [accessed 28 July 2022]

The **Construction Industry Research and Information Association** (CIRIA) [online]. Further information and resources are available at: www.ciria.org/default.aspx [accessed 28 July 2022]

Construction Industry Training Board (CITB) is the training board for the construction industry and partner in Construction Skills, the Sector Skills Council. CITB [online]. Available at: www.citb.co.uk [accessed 28 July 2022]

Construction Manager is the magazine of the Chartered Institute of Building (CIOB) [online] and available at: www.constructionmanagemagazine.com/ [accessed 28 July 2022]

Construction News [online]. Available at: www.constructionnews.co.uk [accessed 28 July 2022]

Construction Products Association (CPA) represents the UK's manufacturers and distributors of construction products and materials. Construction Products Association [online]. Further information is available at: www.constructionproducts.org.uk [accessed 28 July 2022]

Construction Project Information Committee (CPIC), responsible for providing best practice guidance on the content, form, and preparation of construction production information, and making sure this best practice is disseminated throughout the UK construction industry. CPIC [online]. Available at: www.cpic.org.uk [accessed 28 July 2022]

Construction and Property Research Centre (CPRC), University of the West of England (UWE) – the CPRC's research activity is focused around the three inter-related stages of the built environment lifecycle, namely design, construction, and maintenance. Note: The UWE **Centre for Architecture and Built Environment Research** (CABER) now incorporates the CPRC.

Contractors World magazines (incl. *Contractors World International* and *Contractors World UK & Ireland*) are the leading international digital publications. Delivering site reports, equipment reviews

and comments of interest on the construction, mining, quarrying and related industries. Contractors World [online]. Available at: <http://cwmags.com/> [accessed 28 July 2022].

COPAC* exposes rare and unique research material by bringing together the catalogues of c.90 major UK and Irish Libraries. In a single search you can discover the holdings of the UK's national libraries (including the British Library), many University libraries, and specialist libraries. Note: From August 2019 Copac was replaced by [Jisc's Library Hub Discover](#).

Copyright Licensing Agency (CLA) [online]. The CLA are a licensing body as defined by the Copyright, Designs and Patents Act 1988 c.48 (as amended) ["CDPA"]. The CLA licence organisations to copy and re-use extracts from print and digital publications on behalf of copyright owners. Available at: www.cla.co.uk [accessed 28 July 2022]

Council for British Archaeology (CBA) is an independent charity bringing together members, supporters, and partners to give archaeology a voice and safeguard it for future generations. Archaeology for all [online]. Available at: <http://new.archaeologyuk.org> [accessed 28 July 2022]

[\[Back to A to Z\]](#)

D

Delta T [online] is the Building Services Research and Information Association's quarterly journal.

Designing Buildings Wiki [online] and available at: www.designingbuildings.co.uk/wiki/Home [accessed 28 July 2022] is an industry-wide, cross-discipline forum for finding and sharing information.

Designing Buildings Wiki – Student resources [online] and available at: www.designingbuildings.co.uk/wiki/Student_resources [accessed 28 July 2022] has a wide range of resources aimed at students of the built environment, as shown here.

Designing Buildings Wiki – Construction industry acronyms [online] and available at: www.designingbuildings.co.uk/wiki/Construction_industry_acronyms [accessed 28 July 2022] providing a list of commonly used construction industry acronyms.

The **Design Council** [online] champions great design that improves lives and makes things better and available: www.designcouncil.org.uk [accessed 28 July 2022]. See also [Inclusive Design Hub for the Built Environment](#) (a project of The Design Council).

Directory of Open Access Books (DOAB) is a service which harvests details of academic and mainly peer-reviewed books published on open access. DOAB [online]. Available at: www.doabooks.org/doab [accessed 28 July 2022]

Directory of Open Access Journals (DOAJ) covers all open access scientific and scholarly journals, using a quality control system to guarantee the content. DOAJ [online]. Available at: <https://doaj.org> [accessed 28 July 2022]

[\[Back to A to Z\]](#)

E

Education and Employers Research - Online research library marks its tenth anniversary. This online library provides a comprehensive repository of different and effective approaches to employer engagement and careers education. It brings together the latest thinking with selected research published over the past 40 years. Education and Employers [online]. Available at: www.educationandemployers.org/research-type/research-library [accessed 28 July 2022]

The Economics Network [online] provides publications, events, and other resources to support university teachers of economics throughout the UK and worldwide. Available at: www.economicsnetwork.ac.uk [accessed 28 July 2022]

EngineeringUK is a not-for-profit organisation, which works in partnership with the engineering community to inspire tomorrow's engineers and increase the number and diversity of young people choosing academic and vocational pathways into engineering. EngineeringUK [online]. Available at: www.engineeringuk.com [accessed 28 July 2022]

Engineering and Physical Sciences Research Council (EPSRC) is the main UK government agency for funding research and training in engineering and the physical sciences, investing more than £800 million a year in a broad range of subjects – from mathematics to materials science, and from information technology to structural engineering. EPSRC [online]. Available at: www.epsrc.ac.uk [accessed 28 July 2022]

English Heritage cares for over four hundred historic buildings, monuments, and sites – from world-famous prehistoric sites to grand medieval castles, from Roman forts on the edges of the empire to a Cold War bunker. English Heritage [online]. Further information is available at: www.english-heritage.org.uk [accessed 28 July 2022]. Note: English Heritage has now separated into two organisations. If you are looking for information on listing, planning, grants or heritage research and advice, please visit **Historic England**.

Estates Gazette The UK's largest commercial property news team. *Estates Gazette Interactive* [online]. Available at: www.egi.co.uk [accessed 28 June 2022] incl. ***Estate Gazette, News from the nationals*** – Round-up of the top property stories with quick links.

European Real Estate Society (ERES) was established in 1994 to create an international real estate network between academics and professionals across Europe. ERES [online]. Further information is available at: www.eres.org [accessed 28 July 2022].

ERES Digital Library [online] and available at: www.eres.org/index.php/activities/libraryeres [accessed 28 July 2022]

[Back to A to Z]

G

Great Buildings [online]. Available at: www.greatbuildings.com [accessed 28 July 2022] provides a database of buildings around the world and across all historic periods. You can search the database by building names, place, or architect name. It provides access to 3D models, photographic images, and architectural drawings.

Glenigan [online]. Available at: www.glenigan.com [accessed 28 July 2022] provides UK construction project sales leads, market analysis, forecasting, and company intelligence.

Global Research Gateway: CBRE's online resource for real estate research and reports. CBRE Global Research Gateway [online]. Available at: www.cbre.com/research-and-reports [accessed 28 July 2022]

Global Construction Review – An online journal from the Chartered Institute of Building (CIOB) [online]. Available at www.globalconstructionreview.com [accessed 28 July 2022]

The Green Construction Board (GCB) is a consultative forum consisting of key members of UK construction and property industry. GCB [online]. Further information is available at: <https://cic.org.uk/projects/project.php?s=green-construction-board> [accessed 28 July 2022]

The Guardian, Housing network – providing insight, advice, and best practice from your community. The Guardian, Housing network [online]. Further information is available at: www.guardian.co.uk/housing-network [accessed 28 July 2022]

The Guardian, Higher Education / Universities [online]. Further information is available at: www.guardian.co.uk/higher-education-network [accessed 28 July 2022]

[Back to A to Z]

H

Health and Safety Executive (HSE) is the national independent watchdog for work-related health, safety, and illness. HSE are an independent regulator and act in the public interest to reduce work-related death and serious injury across Great Britain's workplaces. HSE [online]. Available at: www.hse.gov.uk/index.htm [accessed 28 July 2022]

HSE, Health & Safety in the construction industry [online]. Further information is available at: www.hse.gov.uk/construction [accessed 28 July 2022]

HSE Publications [online]. Available at: www.hse.gov.uk/pubns/index.htm [accessed 28 July 2022]

Heritage Alliance - The largest coalition of heritage interests in England, the Heritage Alliance is the umbrella body for national and major regional Heritage NGOs. Heritage Alliance [online]. Available at: www.theheritagealliance.org.uk [accessed 28 July 2022]

Heritage Update: the online edition of the fortnightly Heritage Alliance's **Heritage Update** e-bulletin [online] and available at: www.theheritagealliance.org.uk/update [accessed 28 July 2022]

Heritage Help - Created by the Joint Committee of the National Amenity Societies, Heritage Help offers information and advice on matters related to the management and protection of local historic environments. Heritage Help [online]. Available at: <http://heritagehelp.org.uk> [accessed 28 July 2022]

Higher Education Academy (HEA) – The Higher Education Academy champions excellent learning and teaching in higher education. The HEA are a national and independent organisation, funded by the four UK Higher Education funding bodies and by subscriptions and grants. Note: HEA is now **Advance HE**.

Higher Education Empirical Research (HEER) Database comprises summaries of the latest published research on a range of topics related to higher education. HEER [online]. Available at: www.srhe.ac.uk/links/higher_education_statistics_and_research.asp [accessed 28 July 2022]

Historic England is the public body that looks after England's historic environment. Historic England champion historic places, helping people understand, value and care for them. Further information is available at: www.historicengland.org.uk [accessed 28 July 2022]

Historic Environment Local Management (HELM) - provides accessible information, training, and guidance to decision makers in local authorities, regional agencies, and national organisations whose actions affect the historic environment. Note: All HELM web content on the Historic England website [online] and available at: <https://historicengland.org.uk/services-skills/training-skills/helmtraining> [accessed 28 July 2022].

Home Builders Federation (HBF) represents and serves its members in a range of ways that include Ensuring senior politicians and government officials are aware of housing issues and the challenges faced by our members; and working with Government officials to ensure housing policies are introduced that facilitate housing supply, in a way that is workable for the industry [online]. Available at: www.hbf.co.uk [accessed 28 July 2022]

House Building Careers (part of HBF). Here you will be able to learn about the home building industry and how it benefits you, your community, and the country as a whole [online]. Further information available at: <http://housebuildingcareers.org.uk> [accessed 28 July 2022]

[Back to A to Z]

Inclusive Design Hub for the Built Environment is a collection of the latest guidance and best practice on inclusive design in the built environment and a project of **The Design Council** [online]. Available at: www.designcouncil.org.uk/projects/inclusive-design-hub-built-environment [accessed 28 July 2022]

INFABODE connects its community of users with industry information from the Real Estate sector on one customisable online platform. Infabode reduces the amount of time people spend trying to access key information from the Real Estate industry. **INFABODE** [online]. Available at: www.infabode.com [accessed 28 July 2022]

Institution of Civil Engineers (ICE) is a registered charity that strives to promote and progress civil engineering. ICE [online]. Available at: www.ice.org.uk [accessed 28 July 2022]

ICE Virtual Library [online]. Available at: www.icevirtuallibrary.com [accessed 28 July 2022] is a free database that indexes all ICE journals.

International Council for Open and Distance Education (ICDE) is the leading global membership organisation for enhancing the quality of open, distance, flexible and online education, including e-Learning. ICDE [online]. Available at: www.icde.org [accessed 28 July 2022]

Institute of Historic Building Conservation (IHBC) is the principal professional body for building conservation practitioners and historic environment specialists working in England, Northern Ireland, Scotland, and Wales, with connections to Ireland. IHBC [online]. Available at: www.ihbc.org.uk [accessed 28 July 2022]

Institute of Workplace and Facilities Management (IWFM) – Formerly the British Institute of Facilities Management, BIFM is now the IWFM. The workplace has been incorporated into their new brand so that the status of the professional can help take careers further, regardless of specialism. IWFM [online]. Further information is available at: www.iwfm.org.uk [accessed 28 July 2022]

IWFM Insight – discover leading research and resources for the workplace and facilities management profession. IWFM Insight [online]. Available at: www.iwfm.org.uk/insight [accessed 28 July 2022]

IWFM News – discover the latest news affecting the profession and gain expert insight and advice. IWFM News [online] Available at: www.iwfm.org.uk/news [accessed 28 July 2022]

IWFM Digital Magazine, facilitate - Informing workplace and facilities management professionals. IWFM *facilitate* [online]. Available at: www.facilitatemagazine.com/ [accessed 28 July 2022]

ITcon – The **Journal of Information Technology in Construction** is a peer-reviewed scholarly journal on the use of IT in architecture, civil engineering, and facility management. *ITcon* [online]. Available at: www.itcon.org [accessed 28 July 2022]

[Back to A to Z]

J

JISC Library Hub Discover – Library Hub Discover replaces COPAC* and SUNCAT, offering increased coverage of university libraries along with new facilities and improved response times. Library Hub Discover currently contains 42,397,777 records created from 106,833,532 records contributed by 144 institutions. Jisc Library Hub Discover [online]. Available at: <https://discover.libraryhub.jisc.ac.uk> [accessed 28 July 2022].

JORUM Archive – After 13 years delivering and sharing content across the higher education, further education and skills sectors the Jorum service and website was retired on 30 September 2016. However, many of the open education resources (OER) that were available in Jorum, access to their Jorum Archive can be accessed via the JISC website [online]. Available at: www.jisc.ac.uk/website/legacy/jorum [accessed 28 July 2022] where you can also gain access to JISC's full digital resources offer.

Journal of Online Learning and Teaching (JOLT) - The **MERLOT Journal of Online Learning and Teaching** is a peer-reviewed, open-access, online publication that aims to promote scholarship in the use of the Internet and web-based multimedia resource in higher education.

JournalTOCs is the largest, free collection of scholarly Journal Title of Contents (TOCs) [online]. Available at: www.journaltoCs.ac.uk/index.php [accessed 28 July 2022]

JSTOR Open Content - a digital library for scholars, researchers and students, JSTOR provides access to academic journal articles, books, and primary sources in seventy-five disciplines. Note: UCL Press publishes peer-reviewed scholarly monographs, edited collections, textbooks and journals. All of its books are available on: (a) **UCL Press**, and (b) **JSTOR** websites
[\[Back to A to Z\]](#)

K

[\[Back to A to Z\]](#)

L

Leeds Beckett University's – School of the Built Environment, Engineering and Computing [online]. Further information that includes Subject Area Research – 1) Civil Engineering and Building Services Engineering, 2) Planning, Housing and Human Geography, and 3) Surveying, Construction and Project Management is available at: www.leedsbeckett.ac.uk/school-of-built-environment-engineering-and-computing/research [accessed 28 July 2022]

Leeds Beckett University's - Leeds Sustainability Institute [online]. Further Information is available at: www.leedsbeckett.ac.uk/leeds-sustainability-institute [accessed 28 July 2022]

Leeds Beckett University – The Library [online]. Available at: <http://libguides.leedsbeckett.ac.uk/home> [accessed 28 July 2022]

Lexology is a comprehensive source of international legal updates, analysis, and insights. Lexology publish more than 450 articles every day from over 1,100 law firms and service providers worldwide across fifty work areas in twenty-five languages. Lexology [online]. Available at: www.lexology.com [accessed 28 July 2022]

Local Government Association (LGA) is the national voice of local government. They work with councils to support, promote, and improve local government. LGA [online]. Available at: www.local.gov.uk [accessed 28 July 2022]

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[\[Back to A to Z\]](#)

M

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[\[Back to A to Z\]](#)

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[Back to A to Z]

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[Back to A to Z]

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[Back to A to Z]

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[\[Back to A to Z\]](#)

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Shoosmiths Insights & articles – Shoosmiths is a major UK law firm with a network of offices working together as one team. Read the latest insights, articles, and commentary from Shoosmiths or explore their content library that include – Placemaking; Real estate; Diversity & Inclusion; Litigation & disputes; Governance; Employment, and more. Shoosmiths [online]. Available at: www.shoosmiths.co.uk/insights [accessed 28 July 2022]

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[\[Back to A to Z\]](#)

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[\[Back to A to Z\]](#)

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UK BIM Framework – The overarching approach to implementing BIM in the UK. Further information on BIM Standards, Guides and Resources. UK BIM Framework [online]. Available at: www.ukbimframework.org [accessed 28 July 2022]

University College of Estate Management (UCEM) is the leading provider of supported distance learning for real estate and construction professionals. UCEM [online]. Available at: www.ucem.ac.uk [accessed 28 July 2022]

UCEM e-Library is a comprehensive and valuable online resource, supplementing teaching and learning materials and enabling students to access a wealth of subject-specific and credible information to support them throughout their studies. UCEM e-Library [online]. Available at: www.ucem.ac.uk/e-library [accessed 28 July 2022]

University of the West of England (UWE), Centre for Architecture and Built Environment Research (CABER) seeks to develop innovative approaches, procedures, technologies, and techniques that support the design, management, reconfiguration, maintenance and operation of buildings, their fabric, and the environments they create. Note: CABER incorporates the previous Centre for Construction and Property Research (CPRC). CABER [online]. Available at: www1.uwe.ac.uk/et/research/caber.aspx [accessed 28 July 2022]

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UWE, ERBE, Construction Films concentrate on domestic building construction. The films explain the principles of modern construction and, where appropriate, trace its evolution over the last one hundred years. ERBE Construction Films [online]. Further information is available at: www1.uwe.ac.uk/et/cp/erbe/constructionfilms.aspx [accessed 28 July 2022]

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[Back to A to Z]

V

Virtual Training Suite - The Virtual Training Suite is a national eLearning service for Higher and Further Education in the UK, offering FREE "teach yourself" tutorials delivered over the Web, for students, lecturers and researchers who want to learn what the Internet can offer in their subject. This is a public service from **JISC**.

[Back to A to Z]

Y

Yale Environment 360 - an online magazine offering opinion, analysis, reporting, and debate on global environmental issues. We feature original articles by scientists, journalists, environmentalists, academics, policy makers, and business people, as well as multimedia content and a daily digest of major environmental news. *Yale Environment 360* [online]. Available at: <https://e360.yale.edu/> [accessed 28 June 2022]

[\[Back to A to Z\]](#)

Z

Zetoc: Informing Research - The monitoring and search service for global research publications, providing access to over 36,000 journals and more than fifty-nine million article citations and conference papers through the British Library's electronic table of contents and over 875,000 Open Access (OA) article citations and conference papers from PubMed. Zetoc [online]. Available at: <http://zetoc.jisc.ac.uk/> [accessed 28 July 2022]

(Note: The web links provided were correct at the time of compilation.)

UCEM e-Library - The UCEM e-Library has a searchable database ([e-Library > section 9](#)) containing circa 1,000 [Useful web-links to e-Resources](#) for all subject areas covered within our programme of studies, pertaining to the built environment profession and the education sector.

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