



# Knowledge Foundations

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## What's in this month's issue

- **Latest UCEM News** incl. UCEM and DiverseCity Surveyors launch BAME mentoring scheme.
- **Things you need to know this week** – Aviva and Packaged Living to partner on rental housing. Asset manager and build to rent developer aim to create rental portfolio of 1,000 sustainable family homes.
- **Latest Research** from JRF, CABE, CBRE, CIOB, RICS, Savills, SI, and more.

Happy Reading!

## Issue 1 – January 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](#)

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## UCEM News

As this is the first issue of *Knowledge Foundations* for 2021, can I take this opportunity to wish you all a very

***Happy, Healthy and Prosperous New Year!***

### **UCEM and DiverseCity Surveyors launch BAME mentoring scheme**

UCEM and DiverseCity Surveyors have joined forces to launch a mentoring scheme designed to support black, Asian and minority ethnic (BAME) students succeed in the built environment.

An initial group of 16 UCEM students have signed up as mentees to the scheme and been allocated mentors with more experience in the sector who can provide advice and support throughout their journey.

DiverseCity Surveyors – the first RICS BAME network – works with its members to provide career advice, networking opportunities and professional mentors from the built environment to aspiring and qualified BAME surveyors.

Nikki Bulteel, UCEM inclusion and employability manager, who set up the scheme with DiverseCity Surveyors founder and chair, Bola Abisogun OBE, said: “I’m delighted that we can work with DiverseCity Surveyors to offer high-quality and professional mentoring support to our aspiring surveyors.

“The mentees have been through a rigorous application process and are now working with their mentors to identify their goals for the forthcoming year (see publication date), I am looking forward to seeing the impact of this opportunity for them.”

Bridget Wells, UCEM careers and employability adviser, added: “UCEM recognises the positive impact of mentoring, and continues to offer a range of high-quality opportunities in Hong Kong which connects experienced professionals with UCEM postgraduate students.

“Our scheme encourages our students to take responsibility for a successful mentoring partnership which will set them up well as they plan their careers. DiverseCity Surveyors has been a fantastic and very professional partner to work with enabling us to offer this opportunity to our students.”

The mentoring scheme initially runs from this month until next summer, at which point, there will be a review before it is re-offered to UCEM students in September 2022.

Karen Ching, assistant director at Deloitte UK, and Abdul Thahid, senior development project manager at Quartz Project Services,

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are just two of the mentors signed up to the scheme.

Karen commented: "I am super excited to be a mentor on this programme and look forward to sharing my experience and journey. This is a great opportunity for students to gain real industry insights from working professionals."

Abdul shared: "I am really excited to be part of a scheme that is supporting those in the early stages of their career journey. We certainly need more schemes like this.

"The built environment sector is not the most diverse to do more in creating opportunities to attract and retain people from all walks of life to serve clients and wider society better.

"Diversity in through is a key component of high-performing teams, and bringing people in and through the ranks from different backgrounds and cultures is part of the solution."

If you are a UCEM student from a black, Asian or minority ethnic background and would like to be partnered with a mentor from DiverseCity Surveyors from September 2022, contact Nikkis on [n.bulsteel@ucem.ac.uk](mailto:n.bulsteel@ucem.ac.uk).

Access the article '[UCEM and DiverseCity Surveyors launch BAME mentoring scheme](#)' in full.

**Also:**

## **Reading Town Hall comes alive for UCEM's autumn graduations**

Reading Town Hall came alive as more than 300 graduates celebrated their academic achievements across three graduation ceremonies in December 2021.

Just shy of 1,000 guests in total descended upon the venue on Friday and Saturday (3 and 4 December) for UCEM's celebration of the class of 2021.

Attendees wore masks and graduates doffed their caps when called on stage in lieu of the traditional handshake with UCEM Principal, Ashley Wheaton, with the modifications made to make the events COVID-safe.

Processional and recessional organ music was played to accompany the procession of UCEM staff into and out of The Concert Hall, respectively, for each ceremony. The mace bearer leading the procession at Friday afternoon's ceremony was UCEM senior IT service desk engineer, Steven Blake, whilst UCEM student guidance officer, Sally Head, was mace bearer for Saturday's ceremonies in the morning and afternoon.

Ashley Wheaton addressed the graduands at each ceremony, with UCEM Chair of the Board of Trustees Amanda Clack, providing the guest speech on Friday and UCEM Trustee, Andrew Hynard, doing so on Saturday.

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UCEM Vice Chair of the Board of Trustees, Dr Stephen Jackson, delivered the introduction and close of ceremony on the Friday, with Amanda Clack taking on this role on Saturday.

UCEM Vice Principal – Learning and Teaching, Dr Wendy Finlay, announced the conferment of certificates, diplomas and degrees, and also announced the student prize winners and honorary doctorate recipients.

The student prize winners were recognised for their perseverance in completing their studies despite personal challenges, excellence in dissertation-writing themed on sustainability and attaining the highest score in their individual programmes, respectively.

Three honorary doctorates – given to individuals deemed worthy of special recognition, either for scholarly work or other contributions to society – were handed out to a founding director of Stirling Prize-winning architecture practice, dRMM, Sadie Morgan, emeritus professor at the Said Business School, University of Oxford, Andrew Baum, and real estate partner at law firm, Mischon de Reya, Susan Freeman.

UCEM Principal, Ashley Wheaton, commented: “It was a pleasure to see such a large group of graduands – the largest we have hosted since before the pandemic – join us for graduation.

“I am always astounded by the achievements of our graduates, often gained in tandem with full-time jobs and family and personal commitments, and, latterly, in the midst of the challenges posted by COVID-19. They all deserve their moment to reflect on their extraordinary accomplishments, and it was wonderful to see so many friends and family in attendance to celebrate together.

“Of course, the ongoing challenge of COVID-19 meant many were unable to attend, but I hope they took the time to mark their success, whether with family and friends, or by joining in virtually via our livestream and/or coverage on social media.

“Each student who completed their studies with us this year should be enormously proud of all they have achieved and, as ever, I look forward to seeing the inspiring contributions they continue to make in the built environment in future.”

Access the article '[\*\*Reading Town Hall comes alive for UCEM's autumn graduations\*\*](#)' in full.

**[To watch the livestream recording of the ceremonies, head to UCEM's YouTube Channel.](#)**

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## UCEM boosts its accessibility credentials with launch of course for staff



© UCEM 2021

Colleagues at UCEM are encouraged to become accessibility experts thanks to the launch of an internal CPD course.

The Accessibility Awareness course – created by UCEM learning technology researchers, Dr Tharindu Liyanagunawardena, in coordination with other members of the institution's online education department sits on the virtual learning environment (VLE) and is available for any staff member to take and gain open badges.

There are seven milestone badges to be gained before claiming the final 'Accessibility Awareness' badge upon submission of a reflection piece by the learner.

The seven milestones incl. (i) Accessible Images, (ii) Assistive Technologies, (iii) Web Accessibility and Standards, (iv) Accessible Tables, (v) Accessible Colour, (vi) Headings and Document Structure, and (vi) Accessible Video and Audio.

Dr Tharindu Liyanagunawardena reflects: 'I want as many people as possible to be aware of accessibility. Once you learn about accessibility, you can apply it to all digital content you create.'

"By having this course at hand, I hope UCEM staff will be able to increase their accessibility awareness and by doing so, will be able to provide more accessible material to our students. Also, they will be able to share the accessibility practices with their networks and hopefully create a snowball effect of spreading accessibility awareness."

Access the article '[\*\*UCEM boosts its accessibility credentials with launch of course for staff\*\*](#)' in full.

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## **UCEM apprentice's design and build project wins national offsite construction award**

A design and build project which a UCEM apprentice worked on won in its category at the 2021 Offsite Construction Awards.

Rio Nicolaou was the lead quantity surveyor on expansion works at Addington SEN School in Wokingham which was recognised as the Education Project of the Year.

The project saw the creation of a new sixth form block for 50 students, two multi-use games areas, a sensory path, and an expanded car park. The construction of the building was completed by modular construction specialists, Reds10, with 70% of the building work completed offsite at its factories and then transported to the school.

Rio, who is currently studying on UCEM's Chartered Surveyor apprenticeship (quantity surveying pathway) and is a quantity surveying apprentice at Faithful+Gould, commented: "It was great that the project was recognised like this, and for it to be my first project where I was involved from start to finish and took on that responsibility.

"Using modular construction methods reduces the number of vehicle trips required and cuts down on the amount of waste produced, contributing towards Wokingham's goal of becoming carbon neutral by 2030. Using modular buildings helps increase the speed at which the project was completed and reduces the disruption to the local community."

As to his future aims in the industry, Rio added: "I hope to keep providing my QS services to the same standards and hopefully work on more projects that will win awards like this!"

The Offsite Construction Awards recognise industry-leading innovation and expertise. For more, head to the [Offsite Construction Awards website](#).

Access the article '[\*\*UCEM apprentice's design and build project wins national offsite construction award\*\*](#)' in full.

## **UCEM and the Climate Framework launch free, online, short course to help built environment professionals be more sustainable.**

Built environment professionals can now sign up to a free, online, short CPD course to learn how to be more sustainable in their profession.

The 'Energy and Carbon in the Built Environment' course – created by UCEM in collaboration with the Climate Framework – explores how net zero carbon can be achieved through optimised building design, sustainable material selections, and efficient construction.

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It takes an estimated 25 hours to complete the course, which can be started and completed at your convenience and at your own pace. The course comprises an introduction and five topics, namely: (i) carbon in buildings, (ii) passive design, (iii) active design, (iv) sequestration and offsetting, and (v) energy and carbon assessments.

Aled Williams, UCEM Executive Director – Innovation and Partnerships, comments: “I am delighted to see the launch of this free course which aims to equip those working in the built environment with knowledge and skills on reducing carbon emissions which they can implement in their respective workplaces.

“The built environment is responsible for around 38% of all energy-related carbon emissions so, clearly, there is a lot of work to do for the sector to significantly reduce its carbon footprint. This course is a good starting point for anyone wondering what they can do to make a difference.

“The beauty of this course is that anyone working in the sector, at any level, can benefit from the resources included, working at a pace which suits them. It aligns with the support for the Construction Industry Council’s [Climate Action Plan](#) and Construction Leadership Council’s [Industry Skills Plan](#).

“A lot of hard work has gone into the course, and I truly hope that many people benefit from it as we all try to protect the planet for the good of ourselves and future generations.”

As well as the use of current research, data and case studies, there are interviews with industry experts to inform your learning. Assessment is in the form of quizzes with various interactive elements helping immerse you in the content.

To find out more about the course, head to our [‘Energy and Carbon in the Built Environment’](#) webpage.

Access the article [‘UCEM and the Climate Framework launch free, online, short course to help built environment professionals be more sustainable’](#) in full.

**Related Links:****[UCEM and The Prince’s Foundation launch free toolkit](#)**

Access the article [‘UCEM and The Prince’s Foundation launch free toolkit for rapidly growing cities or towns to develop sustainability’](#) in full. **Also:**

**[City 2040. The pressures on UK cities: An opportunity for change](#)**

- The days of clogged sweaty commutes, ferrying workers into a single city centre could be numbered, according to a new study.



*City 2040*, proposes how UK cities need to change post-pandemic enabling the real estate industry to flourish over the next 20 years, and use these changes to benefit both the environment and the wellbeing of people.



Key elements of this vision include adapting single city centres to broaden their appeal, and the addition of smaller hubs within a city's bounds. This will create more localised areas with unique identities and more widely accessible urban green space, all of which will benefit the environment.

The research, released by international law firm, Taylor Wessing, together with think tank, the Edge, and UCEM, harnesses ideas offered by 600 academics and experts drawing conclusions and new solutions for industry professionals to consider.

The trio of organisations created the research to deliver for the first time a holistic vision, informing best practice for cities across the UK to support government bodies and policy-shapers, property investors and developers, space creators and curators.

#### **City 2040 aims to:**

- assist policymakers by setting out a shared vision for UK cities looking ahead to 2040
- recommend a series of innovative approaches and solutions to support well-integrated city-making with lasting benefits for us all, and the industry.

Research included reviewed literature and also contributions from groups of expert industry leaders who came together to debate views and share ideas pre-launch.

To read the research report in full, head to the [UCEM 'Latest publications' webpage](#).

Access the article '[New research sets out vision for UK cities in 2040](#)' in full.

(Note: Further information is available within the 'Sustainability Hub' later on in *Knowledge Foundations*).

#### **Other UCEM News**

[UCEM alumna takes home asset and facilities management prize at RICS Matrics awards](#)

[UCEM adopts IHRA's definition of antisemitism](#)



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### 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](#)

**UCEM reasserts its commitment to organisational excellence with Advance HE membership**, ensuring continued access to vital resources and supporting valuable partnership across the Higher Education sector.

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

**AdvanceHE**

Affiliate Member 20-21

### **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 – [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](#) – and read our blog to keep updated on Building Environment industry insights, student case studies, and thoughts from UCEM Principal: Ashley Wheaton

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## Other News

**Things you need to know this week:** Aviva and Packaged Living to partner on rental house.

- Asset manager and build to rent developer aim to create rental portfolio of 1,000 sustainable family homes.

Aviva Investors and build to rent developer Packaged Living are joining forces to create a portfolio of up to 1,000 sustainable family homes. The partnership will acquire and forward fund homes directly from housebuilders in locations across the UK, including the south-west, south-east and Midlands. Properties acquired by

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the partners will be expected to have such sustainable features as electric vehicle charging stations, air source heat pumps and all-electric solutions, including photovoltaic solar panels. The partnership will target an initial portfolio of approximately £200 million, with a pipeline of investments expected to add a further £500 million in the coming months.

**Other developments include –**

- Developer Countryside and Sovereign Housing Association have completed a deal to buy a site in Swindon which has outline planning consent for up to 2,500 homes. The pair exchanged contracts with land company Ainscough Strategic Land to acquire the 147-hectare Lotmead Farm site, which is located in the Swindon New Eastern Villages urban extension development area. Under the outline plans, 30 per cent of the proposed scheme will be affordable and up to 400 homes will be for private rent.

- London mayor Sadiq Khan has secured £43.5 million of funding to provide specialised housing for older and disabled people in the capital. The funding is being provided through the government's care and support specialised housing (CASSH) programme, which is administered in London City Hall. It will be available for developers building specialised housing including assisted living, dementia care, retirement housing and wheelchair adapted homes. The programme has to date funded schemes totalling £112 million, with 1657 homes started and 850 completed, and is currently open for bidding.

- Estate regeneration specialist Place Capital Group (PCG) has signed its first major partnership, which is with housing association Together Housing Group (THG). The agreement, running initially for five years, will see the partners deliver a place shaping strategy across THG's 36,000-home portfolio in the north of England.

- Property company The Parklane Group, has sold its Bridge House site in Leeds to a Canadian pension fund, paving the way for the key site to be redeveloped with rental apartments.

**[Read the full 'Need to Know: Aviva and Packaged Living partner on rental housing' 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: Driving sustainability in affordable housing**

- A project to upgrade the energy efficiency of 108 Lancashire homes is one element on a developer's broader environmental, social and governance strategy.

Developer Places for People recently unveiled its annual environmental, social and governance (ESG) report, highlighting

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its efforts in driving sustainability in affordable housing across the country. Those efforts range from investing in existing stock, adding features to make homes perform better when it comes to energy, through to designing new homes built using modern methods of construction (MMC), all to better serve customers and communities for the long term.

One example of the group's efforts in doing this is in Padiham, Lancashire, where it has refurbished a vibrant neighbourhood of 108 homes.

**Challenge**

The neighbourhood in Padiham once bore all the hallmarks of 1970s building of its kind. Defined by the aesthetic of its era, the homes had various design flaws, with damp, mould and draughts causing issues for residents. Heat was generated by old electric storage heaters and the majority of customers were using pre-payment meters. This resulted in high energy costs and, for most people, a struggle to stay warm.

Landlord Places for People planned a transformation; collaborating with European partners, as well as a specialist contractor and social science consultants, the group's large scale refurbishment project would improve energy efficiency and wellbeing for more than 100 customers in the community.

**Solution**

To tackle the issues, Places for People became a partner in the DREEAM project, an initiative aiming to demonstrate that renovating at a larger scale enables better integration of renewable energy and is more cost-effective. The neighbourhood became DREEAM's UK pilot project, with the overall aim being to reduce energy consumption by 75 per cent.

The homes were upgraded with the help of £2 million of European Union Horizon 2020 funding, which supported the highly efficient retrofit of all 108 properties while remaining sensitive to their surroundings. The energy saving measures added included highly efficient storage heaters, solar panels on the roof, Permarock external Rockwool thermal cladding, energy-efficient shower systems and LED lights. These technologies, products and materials all contribute to the project's success in meeting its objectives.

The improvements also had to be cost-effective and sustainable – gas heating was avoided to help futureproof the properties in line with the government's net zero carbon targets.

**Key achievements**

The project has embraced innovative processes, including assessing the real-world impact of the changes, with customers being consulted and educated in the addition of new energy saving features in their homes.

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As an innovative process, a social science consultant was deployed to measure the impact of the renovation on customers' lives before, during and after the work, including any changes in behaviour following completion. This exercise would ensure that tangible improvements were made, benefiting residents by helping them to use their electrical appliances more efficiently, and better manage their energy budgets.

The programme also provided residents with advice on how to use new equipment in their homes to further reduce energy consumption and increase quality. Customer energy champions were trained across the community, which resulted in highly engaged residents who are now capable of helping their neighbours make savings.

Home energy efficiency was boosted, as demonstrated by SAP rating increase from low D to B, the reduction of customer bills by up to 70 per cent, and the elimination most damp issues. Importantly, the eradication of fuel poverty for the poorest households has been achieved to make this a neighbourhood of choice for people in the area.

Describing the project's impact, one customer said: "Since completion, it's been a lot warmer and I'm saving more money. I was putting in £60 a week and now that's reduced to £25. Even without the heating on, it's still warm because of the new cladding and windows, and there are no draughts."

The success of the project has helped to produce a flexible model for significantly improving energy efficiency, which can be used by a housing company that manages large portfolios of residential buildings.

**Driving sustainable progress**

This is one of the initiatives featured in Places for People's 2021 ESG Report which has launched at its COP26 fringe event in London. The report details how the group is investing an ongoing basis to improve energy efficiency and affordability for its customers.

The group also committed to social value projects across the country, including supporting more than 20,000 customers through Covid-19 emergency response projects, helping 9,000 people who are homeless or at risk of being homeless, supporting 1,700 people into education, employment or training and helping 1,200+ customers get online.

During the launch event, pan-European consultancy RITTERWALD announced that Places for People has become the first UK placemaking and property company to align its ESG reporting with the Certified Sustainable Housing Label (CSHL). The developer is reporting against both the CSHL and the Sustainability Reporting Standard for Social Housing, a sector wide ESG standard created by housing providers and investors.

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**Read the Case Study entitled, 'Driving sustainability in affordable housing' 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').

**Advice: Repurposing department stores for social and leisure uses**

- Department stores becoming vacant as large multiples close down offer opportunities to bring social and leisure uses into urban centres, as the author of this article finds.

The closure of 91 Debenhams stores across the UK and of other large shops over the last year (see publication date) has posed a challenge to many town and city centres. "The large department store was clearly an outdated form of retailing, but many of the buildings which have become vacant over the last year are leaving dead space at the centre of the high street," says Matthew Sobic, director at planning consultancy Savills.

"Communities in the towns and cities value those buildings," says Daniel Morgans, associate director at architect Chapman Taylor. "If retained, many of them offer an opportunity to bring new uses into the area, which respond to their needs," he says. "The stores are reusable for social and leisure uses, and some owners are being imaginative about how they are adapted."

Here are three key points to consider when repurposing a large department store.

**1. Councils and owners need to take the long view**

Some of the stores are listed, so need to be retained, but there will be pressure from the owners to demolish others because of the costs of converting the spaces for other uses. Conversion can be economical and the new uses can add to the vitality of the town or city centre, says Ben Tricklebank, director of consultancy Arup.

The rents generated by leisure and other uses will be less than retailing and the covenants may not be quite so strong. "It's important to see the centre's offer as a whole," says Sobic. "The new leisure or social uses can support the other retailing in the shopping centre, by encouraging shoppers to stay longer or attract new users into the centre," he says.

The Debenhams store in the Southside shopping centre in Wandsworth, south London, was reopened last summer by the operator Gravity as an activity/entertainment centre with go-karting and other sports.

The company took over all four floors and has required only modest alterations to the building. According to the building's

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owner, developer Land Securities, “it has had a knock-on effect of increased footfall and sales at the centre, and a positive impact on leasing activity, with offers received from a range of potential brand partners for the surrounding units”.

James Cons, managing director at architect Leslie Jones, says some local authorities have purchased stores as part of their investment portfolio, using the preferential interest rates offered by the Public Works Loan Board. “These authorities appreciate the potential value to their town centres, and also the role the buildings can play in their communities,” he says. The Government’s Future High Streets Fund is also helping some local authorities purchase the buildings to improve their centres.

## **2. Locate public services in the new store**

The buildings are often in central locations with good access to public transport, so councils and other public services are looking to move their services into the stores. “The new social, medical and educational uses can support existing retails and leisure outlets in the centre by giving people an additional reason for going there,” says Sobic.

Cons highlights the example of Gloucestershire University, which has bought the 1930s art deco Debenhams building in Gloucester. The university has plans to create teaching space in the store.

Michael Whitney, head of development at the developer Ellandi, points to the new commitment from the NHS to open services in the high street. “This offers an opportunity for existing shopping centres to reuse some of their space for doctors, dentists and physiotherapists,” he says. He says that Ellandi is working with the NHS on possibly opening a healthy living entre on the first floor of the Pentagon Centre in Chatham, in Kent, which may be supported by Medway Council’s allocation from the Future High Streets Fund.

Not all stores are suitable for leisure and social uses. “Stores in fringe locations on the edge of town centres are more suitable for reuse as housing,” says Sobic.

## **3. Adapt the building’s structure to accommodate new uses**

“Many of the stores have wide open spaces and decent floor-to-ceiling heights which can be adapted quite easily for a large range of user,” says Morgans. “However, the sales floors tend to be very deep and getting sufficient natural light into them can be a challenge,” he adds.

“Some new uses, like laboratories and some educational uses don’t require much natural light and can fit ore easily into former department stores.” Tricklebank points out. For other uses requiring good natural light, he suggests an area-based approach. “It may be possible to clear the neighbouring buildings, if you want to cut windows into the side and back of the building,” he says. “This can have the added benefit of creating new streets through

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and round a town centre.”

Morgan suggests, “Another strategy is to cut an atrium in the centre of the store, which creates a lightwell throughout the height of the buildings.”

**Further information and read the article, ‘Advice: Repurposing department stores for social and leisure uses’ 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’).

## **UK sets ‘most ambitious’ climate target to cut emissions by 78% by 2035**



(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.

**Access further information and the *PBC Today* article, ‘UK sets ‘most ambitious’ climate target to cut emissions by 78% by 2035’, in full.**

## **BBC Latest – Climate**

**Climate change: Is the UK on track to meet its targets?**

- The UK has committed to reduce its greenhouse-gas emission to net zero by 2050.

Net zero is the point at which the country is taking as much of these climate-changing gases out of the atmosphere as it is putting in.

As part of this promise, the government has a target to cut emissions by 78% by 2035, compared with 1990 levels.

The Committee on Climate Change (CCC) – **a group of experts that advises the government** – says the net zero strategy is “ambitious and comprehensive” but “further steps will need to follow quickly ... if it is to be a success”.

**Access the BBC News, Latest Climate reality check**



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Areas covered within this article include

**Power generation; Heating and buildings; Cars, buses, trains and bikes, Flights, and shipping; Food; Trees; Hydrogen; Carbon capture and storage; Industry; and**

**More on climate change**

- [What does net zero mean?](#)
- [Simple guide to climate change](#)
- [What will climate change look like for you?](#)
- [How extreme weather is linked to climate change?](#)
- [COP26](#)

[Access the BBC article, 'Climate change: Is the UK on track to meet its targets?' in full and related articles.](#)

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

## **BBC Latest - Coronavirus – latest developments** **[December 2021]**

**Coronavirus pandemic – Your Coronavirus Stories incl.**

- Is Omicron more harmful than other Covid variants?
- Can the NHD boost the booster programme?
- Omicron: Will new measures against variant work?

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

**Related Link: 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.](#)

## **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.

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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 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 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 Manager\* 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.

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[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 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

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](#)
4. [The impact of Covid-19 on tourism](#)

**[Latest News: Construction Manager \(CM\)](#)  
**[December 2021]****

[Online game to help building designers and constructors spot security flaws](#)

- A new game that can help those designing, building, or maintaining infrastructure to spot and tackle security issues is being rolled out.

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The centre for the Protection of National Infrastructure (CPNI) **developed the game** with support from the Chartered Institute of Building (CIOB).

Players are challenged to pinpoint security sensitivities in two hypothetical scenarios – on the street and inside a building – determining which elements of an asset are sensitive and need protecting, and which are benign.

Where infrastructure is a potential target for hostile actors, CPNI advocates a “security-minded” approach. It said this attitude applies to the implementation of all digital engineering tools, as well as traditional hardware such as CCTV, and physical infrastructure like bollards and barriers.

Access and read the article in full, Gerrard N (2021) ‘Online game to help building designers and constructors spot security flaws’, *Construction Manager* [online], 1 December. Available at: <https://constructionmanagemagazine.com/online-game-to-help-building-designers-and-constructors-spot-security-flaws/> [accessed 23 December 2021]

**Latest News: Global Construction Review (GCR)**  
**[December 2021]****Masterplan complete for “15-minute city” in Moscow**

- **Dutch architect KCAP has completed its masterplan** for an ambitious scheme to renovate a 113ha industrial site in southern Moscow.

Access and read the article in full, Rogers D (2021) ‘Masterplan complete for “15-minute city in Moscow”’, *Global Construction Review* [online], 3 December. Available at: [www.globalconstructionreview.com/masterplan-complete-for-15-minute-city-in-moscow/](http://www.globalconstructionreview.com/masterplan-complete-for-15-minute-city-in-moscow/) [accessed 26 November 2021]

**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 **[December 021]** surrounding sectors such as **Real Estate** that include:

**Unlocking access to town centre property**

Across the UK, local people are creating businesses that could revitalise town centres – repair and sharing spaces, community bakeries, climate action hubs, genuinely affordable housing – services that development critical social, economics, and climate resilient infrastructure.

**What an interesting time to work in the Living sector**

- Plenty of recent highs and lows certainly but seeing the quality and variety of the schemes now coming to market – not to mention the attention given to sustainability, affordability, and community building – is truly heartening.

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### **UK Cities Investor Guide**

- With the UK climate change conference having taken place in Glasgow this year (2021), “collaboration” seems to be the watchword when to talk to anyone in the thick of the work going in to cut carbon emissions. And it’s a recurring theme across many of the pages in EG’s special climate action edition of *UK Cities* to mark COP26, of which Shoosmiths is a sponsor. Keywords – **Real estate, Doing business in the UK, COP26**

### **How real estate can make smart use of smart tech**

- As a smart city pioneer, Leeds has led the charge in developing new technologies in recent years to improve and enhance the experience of people visiting, living, and working in the city, giving it a fantastic platform from which to grow.

### **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 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

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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](http://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.

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 [[December 2021](#)] new [free CIRIA practice guidance](#) 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).

[Back to top](#)***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 [[December 2021](#)]**

**Phase 2 hearings** – Hearings will resume on Monday 6 December at 10:00. A timetable of the week is available via the [Grenfell Tower Inquiry website](#).

**Remote Hearings / COVID-19 information** – The Inquiry takes health and safety guidance extremely seriously. Following a full risk assessment, it has put in place arrangements to ensure social distancing is maintained in all parts of its venue.

**Drop-in sessions** – The next monthly drop-in sessions for BSRs and members of the public will be on **Thursday 27 January** from 16:30-17:30 at the Grenfell Tower Inquiry, 13 Bishop's Bridge Road, London, W2 6BU.

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

**Latest update from the Inquiry [[December 2021](#)]** - The Inquiry has published an update on the resumption of hearings. This update provides a digest of:

- **Hearings update** - The Inquiry has published an update on its plans to return to limited attendance hearings, • **November 2021 Newsletter** – The Inquiry has published an update on its work.

**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



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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](http://www.bbc.co.uk/news/uk-58584348) [accessed 17 September 2021]

### Related Topics

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

## 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.

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- 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**, announced on 14<sup>th</sup> 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 21<sup>st</sup> 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 21<sup>st</sup> Century](#).

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## Tomorrow's Engineers



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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

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

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

## 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.
- [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.
- [UK Construction and Infrastructure Survey](#) – The leading sentiment indicator of the UK construction and infrastructure markets.
- [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.
- [Global Commercial Property Monitor](#) – RICS global commercial property monitors are leading indicators of conditions in commercial property occupier and investor markets around the world.

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- **UK Commercial Market Survey** – A leading indicator of developments in the UK commercial property occupier and investor markets.

## **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.

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

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- 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**

## **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.'

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**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.
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**

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](https://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 guidance on targeting, designing, and evaluating sustainable outcomes for buildings, defining concise measurable set of eight sustainable outcomes that correspond to key UN Sustainable

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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,
- Minimising or preventing all types of pollution and risk of flooding,
- Safeguarding important wildlife, landscape, and historic interests,



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- 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 RIBA Plan of Work was first published by the Royal Institute of British Architects (RIBA) 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.

It now provides a shared framework for design and construction, including both a process map and management tool.

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**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

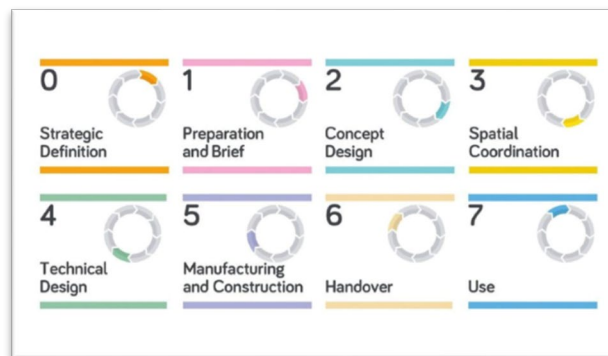
**4 – Technical design** – no change

**5 – Manufacturing and construction** – formerly Construction

**6 – Handover** – formerly Handover and close out

**7 – Use** – formerly in use

**RIBA Plan of Work 2020:**



*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](#)

## **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'](#)

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- 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 [December 2021] –**

- **How to implement a common data environment on a budget**, 23 November 2021.

- How do you implement a common data environment (CDE) when you're a small business and you've got more than enough on your hands running your business. Toby Adam, director at Gaunt Francis Architects, and author of this article, shares his experience.

CDEs are rarely ever delivered on a budget, and are traditionally procured as extranets, a controlled private network allowing customers, partners, vendors, suppliers, and other businesses to upload and download documents to and from a third-party technology provider, typically in the context of delivering a construction project, and do so without granting access to the organisation's entire network.

Gaunt Francis Architects is a medium-sized commercial practice of about 45 people, with two offices – one in London and another in Cardiff – that started in 1997 and has since built a reputation, originally for commercial projects and more lately as a leader in the retirement living sector.

Like many small businesses, we have ended up with a plethora of off-the-peg software solutions and subscriptions to deal with the various workflows – HR management, accounts, CAD, email, productivity, video conferencing, etc. Usually, this happens via incremental growth: a problem is identified, a solution is found, and yet another subscription is added to the list. We are not large enough to buy bespoke software solutions as the economies of scale just don't apply.

We wanted to find a pragmatic rather than a cost-prohibitive solution to deliver better information management and project record keeping (namely the identification, storage, and

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transmittal of formal project data in the form of letters, drawing, schedules etc) across all RIBA Stages, from inception to completion.

We had concluded that our historic system of data management, based on the use of files created in File Explorer – a replica of an old-fashioned filing cabinet type system – was no longer fit for purpose and that we needed to find a new solution.

We were aware of the growing use of CDEs and we knew that there were solutions out there that combined data management, CRM (customer relationship management), cost control, task scheduling and job costing, but we typically found they were too expensive, offered too many services and functions, or sometimes locked up data in a bespoke environment that might be difficult to exit from later.

**Also covered within this article are the following subject areas:**

- **Organising project data better** – The question was therefore how could we better organise our project data without adding to the long list of subscriptions we already owned and to a budget we could afford?
- **Integral to common data environment** – This contract database was not a standalone system and transpired to be an integral part of a new CDE system, Atvero, handily addressing another of our long-term business goals.
- **Not how but why** – We started by ignoring the “how to use it” questions and stuck to explaining “why we should use it”.
- **Architects get on board** – There is not denying that the system requires a much greater degree of planning, organisation, and discipline than our old way of working.

**Other BIM+ Projects include:**

- **Project: How Maber Associates brought a new BIM approach to hospital handover**, 1<sup>st</sup> October 2021.

- Maber Associates was brought on board as BIM manager when Balfour Beatty was appointed to finish the construction of the Midland Metropolitan University Hospital near Birmingham after the demise of PFI contractor Carillion. Denise Chevin, the author of this article, spoke to Maber’s head of BIM, Josh Chrystal, to hear how the practice refreshed the BIM strategy.

**Client:** Sandwell & West Birmingham NHS Trust; **Contractor:** Balfour Beatty; **BIM manager:** Maber Associates; **BIM tools:** Solibri, BIMcollab, OpenSpace, Glider BIM

- **Project: BIM software drives net zero social housing retrofit**, 23<sup>rd</sup> August 2021.

- Wide and varied use of BIM software from Graphisoft has played a key role in architecture practice Constructive Thinking’s part in the net zero retrofitting of social housing stock for Nottingham City Council.

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**Client:** Nottingham City Council; **Main contractor:** Constructive Thinking; **Consultant:** EnergieSprong

- **Project:** [BIM approach helps Stoke Council get utility project back on track](#), 25<sup>th</sup> June 2021.

- A local authority, and in line with public sector requirements to be carbon net-zero by 2050, Stoke-on-Trent City Council embarked on the construction of a city-wide low carbon heat network in 2017, which includes 18km of underground pipes.

- **Project:** [How 4D helped Mott MacDonald Bentley save 20 days on major pipeline project](#), 16<sup>th</sup> June 2021.

- 4D modelling was crucial on a major civils project for United Utilities in Cumbria, proving and improving upon a challenging construction programme that was 20 days quicker than the original plan.

**Client:** United Utilities; **Main contractor:** Mott MacDonald Bentley; **4D consultant:** 4D Freeform

- **Project:** [8 Bishopsgate: BIM and Hololens aid riser safety](#), 3<sup>rd</sup> June 2021.

- Digital technology and an innovative riser zone product helped make M&E installation safer on the City of London's latest skyscraper. BIMplus reports.

**Client:** Mitsubishi Estate London; **Main contractor:** Lendlease; **Specialist contractors:** AT. Clarke, MJL, Hall & Kay, Gardener & Co. Keltbray Structure, William Hare; **Architect:** Wilkindon Eyre

### **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 Stavanger Hospital.](#)

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**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, 2<sup>nd</sup> 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.

- **(2) Project: Finland's Hospital Nova uses VR to involve staff in building, 28<sup>th</sup> 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-

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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](#)**, 1<sup>st</sup> 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](#)**, 21<sup>st</sup> 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 – 10<sup>th</sup> annual BIM report 2020 available](#)**

**[NBS 10<sup>th</sup> National BIM Report 2020](#)** - The 2020 annual BIM report marks the 10<sup>th</sup> 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 [**December 2021**] of NBS CIS *Insights* focuses on – **Social equity and human-centred design**, and covers:

- Social inequality and disproportionate suffering amongst poorer communities,
- Urban green infrastructure and poverty reduction, and
- Social equity, sustainability, and human-centred design.

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## Property and Construction Statistics

**Latest Property and Construction Statistics from RICS:**



[Back to top](#)**Latest: Market Surveys - RICS [December 2021]****UK Economy and Property Market Update, November 2021**

- More positive trend in construction and real estate but rising inflation raises interest rate risk.

**Summary:**

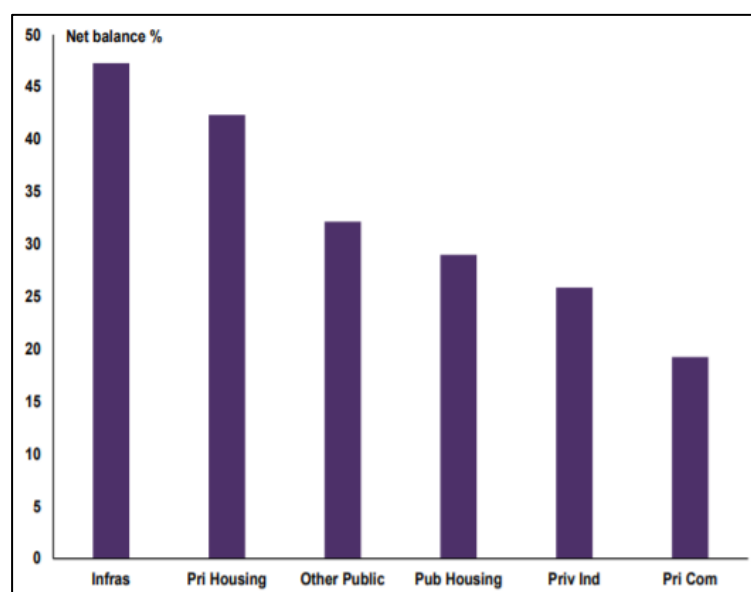
Concern around rising inflation has heightened over the past few months (see publication date) leading to a shift in expectations around interest rates. For now, the Bank of England (amongst others) continues to view the increase in cost pressures as likely to be temporary, rather than becoming embedded in expectations. Nevertheless, some tightening in monetary policy is still probable if only as a precautionary measure. That said, the scale of any move by the authorities seems unlikely at this point to derail the better tone coming through in parts of the commercial real estate market and the construction sector.

**Construction Sector –**

Official data suggests that while construction output is currently around 10% up on a year ago (August numbers), it is still around 3.5% lower than in the summer of 2019. The ONS often ends up revising this dataset and it would not be a surprise to see the current picture upgraded over the coming months. This is because, looking across the sectors, it shows sharp falls in output in new build private housing and r&m over the past quarter; this seems inconsistent with much of the anecdotal insight.

Indeed, as Chart 10 highlights, feedback to the Q3 RICS Construction Monitor shows infrastructure and private residential seeing the strongest uplift in workloads at the current time.

**Chart 10:** RICS Q3 Construction Monitor shows current workload momentum strongest in infrastructure and private housing



Source: RICS Economics Research: *RICS UK Economy and Property Market Update* (November 2021), London: RICS, p5 - Chart 10.

[Back to top](#)**Read the full piece of research 'RICS UK Economy and Property Market Update, November 2021****Also: UK Economy and Property Market Chart Book, Q4 2020**

- Output is likely to drop again in the last quarter of the year.

**UK Residential Market Survey: October 2021**

- Lack of stock continues to hold back activity

- Sales soften over the month (see publication date), but buyer enquiries return to positive growth,
- Lack of stock remains an issue, with new instructions falling once again, and
- House prices continue to rise across the UK.

The October 2021 RICS UK Residential Survey results point to another small dip in the volume of sales agreed over the month. That said, with demand picking up slightly and near-term sales expectations modestly positive, it looks as if sales will at least stabilise going forward. Still weighing on the market however, the lack of available supply continues to present would be buyers with limited choice and remains a key factor underpinning strong house price growth.

At the headline level, a net balance of +10% of contributors noted an improvement in new buyer enquiries over the latest survey period. This is up from a neutral reading of +1% previously and signals the first outright rise in buyer demand (albeit modest) since June 2021.

Although buyer enquiries picked up, this has yet to translate into an upturn in sales. Nationally, a net balance of -9% of respondents reported a reduction in agreed sales during October, marking the fourth consecutive negative reading for this metric (following strong growth cited earlier in the year during the Stamp Duty concession window). Nevertheless, the latest figure represents the least negative return throughout this stretch and is up from -13% in September.

Looking ahead, sales expectations for the coming three months remain slightly positive, with the net balance coming in at +10% (little changed from +12% previously). At the twelve-month horizon, the headline sales expectations net balance of +4% is indicative of a flat to marginally positive trend anticipated. When disaggregated, some parts of the UK are expected to see a firm rise in transactions, with the North of England, London, Scotland, and Northern Ireland all displaying a more upbeat twelve-month outlook than the headline average.

Back at the national level, the depressed flow of new instructions being listed on the market of late remains widely referenced as a factor holding back activity. Indeed, the new instructions series has now been stuck in negative territory for seven months in

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succession, with the latest net balance standing at -20% (compared to -33% last time). Given this, average stock levels on estate agents book have fallen from close to 42 in March to just 37 according to the latest feedback.

**Read the latest RICS UK Residential Market Survey: October 2021 in full.**

**RICS - SPACIOUS 千居 Hong Kong Residential Monitor / Market Survey: October 2021**

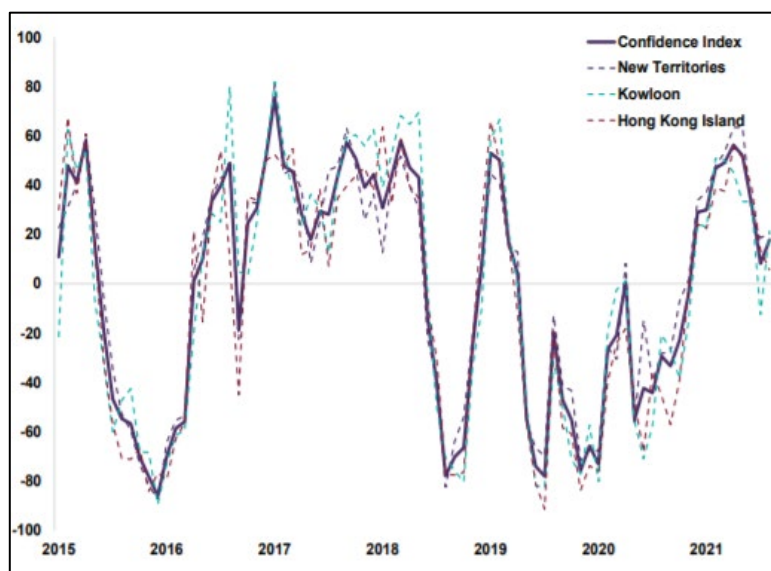
- Agreed sales dip slightly but are expected to regain some momentum going forward.

- Agreed sales indicator remains in modestly negative territory for a second consecutive month,
- Prices remain on an upward trajectory across all regions,
- Buyer enquiries from mainland China weaken noticeably.

The October 2021 RICS-Spacious Hong Kong Residential Monitor results again point to a somewhat subdued month for activity, with the agreed sales indicator remaining in slightly negative territory for a second consecutive report. Notwithstanding this, forward looking indicators did show some improvement, suggesting the recent lull in momentum is expected to prove relatively brief.

In keeping with this, the Confidence Index recovered to +18, having fallen back to +8 during September.

**Chart 1: Confidence Index\*:**



© RICS 2021

Source: RICS Economics Research: *RICS Hong Kong Residential Monitor – October 2021*, 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

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Rent Perceptions Index measures the perceived monthly change in rents as reported by survey respondents, where March 2019=100.

**[Read the latest RICS HK Residential Monitor: October 2021 in full.](#)**

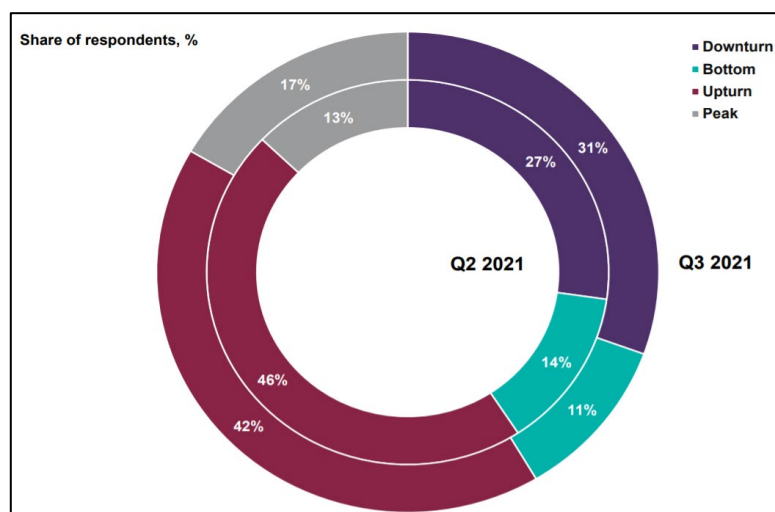
### Global Commercial Property Monitors, Q3 2021

- Commercial Property Sentiment Index posts fifth successive quarterly increase.

- Real estate sentiment edged up again in Q3, albeit only marginally compared with Q2,
- Headline index strongest for Europe and Americas but Middle East and Africa most improved,
- Occupier demand gaining some momentum on the back of macro-economic recovery.

The headline results of the Q3 RICS Global Commercial Property Monitor (GCPM) suggest that sentiment among professionals working in the real estate market has changed little compare with the preceding three-month period. The aggregated (global) Commercial Property Sentiment Index aggregated (CPSI) did actually rise for the fifth consecutive quarter, but only very marginally; it still remains in negative territory (-3).

#### Chart 7 Perceptions on Phase of the Cycle:



© RICS 2021

Source: RICS Economics Research: *RICS Global Property Monitors, Q3 2021*, London: RICS, p3 - Chart 7

#### Real estate entering an upturn phase

An indicator that is watched closely is the share of respondents who view markets to be in different phases of the real estate cycle. This is highlighted in Chart 7. At a global level, around 40% still believe the market to be either in a downturn or at the floor, while 60% view it as an upturn or in peak phase. Although these numbers are similar to last quarter, they do show a significant shift in thinking compare with the same period in 2019. At that point,

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around 70% felt the real estate market was in a downturn or at the floor. Consistent with other feedback, Europe and the Americas have the highest proportion of contributors taking a positive view of the market position in the cycle. In contrast, more than 50% of the feedback from the APAC suggests that the regional real estate market is in a downturn phase.

[Read the latest RICS Global Commercial Property Monitor, Q3 2021 in full.](#)

## **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: [October 2021](#).**

- Short-term measures of output by the construction industry, contracts awarded for new construction work in Great Britain.

#### **What's covered in the latest bulletin?**

- Construction output fell 1.8% in volume terms in October 2021 with the level of output now 2.8% below its pre-coronavirus (COVID-19) February 2020 level; new work fell 2.8% from September to October 2021 while repair and maintenance remained unchanged (0.0%); like recent months, anecdotal evidence from businesses continued to suggest that product shortages caused by supply chain issues leading to subsequent price rises in raw materials such as steel, concrete, timber and glass, were important reasons for the decline.
- At the sector level, the main contributors to the decline in monthly output in October 2021 were infrastructure and private new housing, which decreased 7.1% and 4.4% respectively; these decreases were partially offset by increases in private industrial and public other new work, 8.8% and 7.0% respectively.
- The level of construction output in October 2021 was 2.8% (£400 million) below the February 2020, pre-coronavirus level; new work was 6.2% (£592 million) below the February 2020 level, while repair and maintenance work was 3.9% (£193 million) above the February 2020 level.

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

## **Latest Statistics from HSE – Health and Safety Executive**

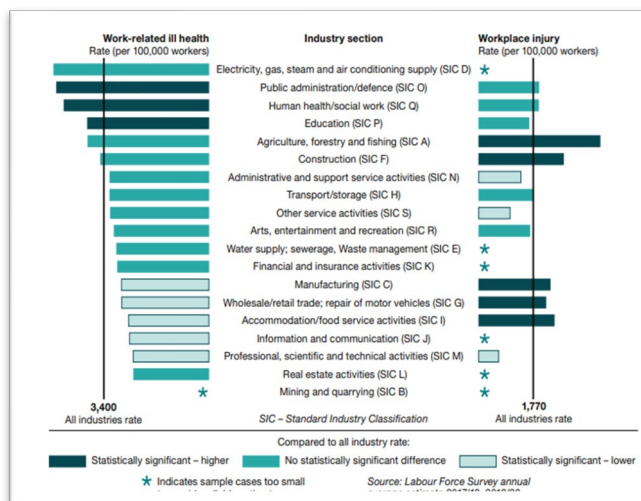
### **Latest Key figures for Great Britain ([2019/20](#))**

- **1.6 million** working people suffering from a work-related illness.
- **2,446** mesothelioma deaths due to past asbestos exposures (2018)
- **111** workers killed at work.

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- **693,000** working people sustain an injury at work according to the Labour Force Survey
- **65,427** injuries to employees reported under RIDDOR.
- **38.8 million** working days lost due to work-related illness and workplace injury.
- **£16.2 billion** estimated cost of injuries and ill health from current working conditions (2018/19)

**From the Health and Safety Executive (HSE), '[Rate of self-reported work-related health and non-fatal injury by industry](#)':**



© Crown copyright 2021

Source: HSE (2020) 'Health and safety at work: Summary statistics for Great Britain 2020', Bootle: HSE, p9.

More detailed statistics on selected industry groups (that include 'construction' can be found from [the suite of health and safety statistics tables](#) and '[Summary Statistics 2020](#)'.

**[Access further information on health and safety statistics from HSE – Health and Safety Executive.](#)**

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## Built Environment Research

### Latest Policy and Research from:

#### **1) Savills Impacts – The total value of global real estate**

##### **- Market Trends: Savills.com**

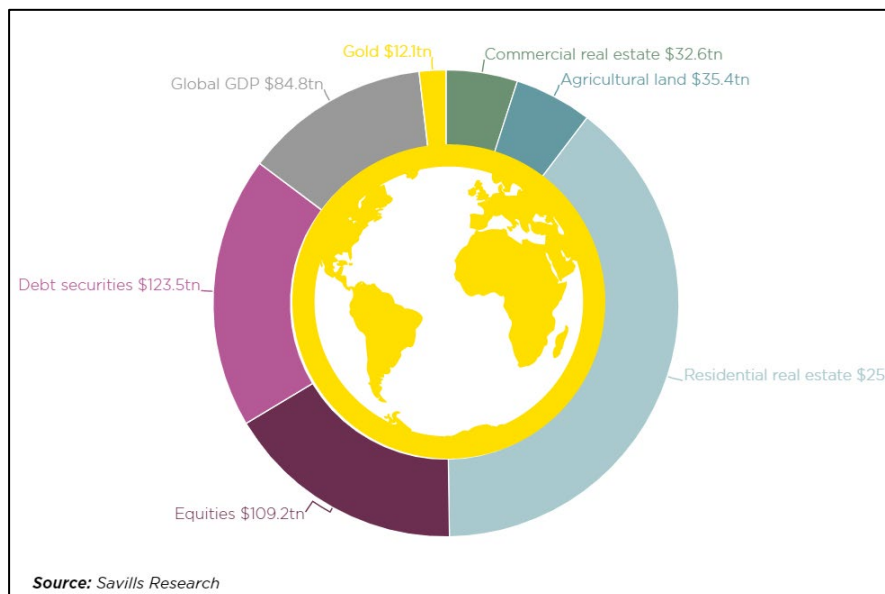
The value of all the world's real estate reached \$326.5 trillion in 2020, a 5% increase on 2019 levels and a record high. Growth was driven by residential which is by far the largest real estate sector, accounting for 79% of all global real estate value. It saw its value increase by 8% over the year, to some \$258.5 trillion.

The world's most significant store of wealth, real estate is more valuable than all global equities and debt securities combined, and

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almost four times that of global equities and debt securities combined, and almost four times that of global GDP. The value of all gold ever mined pales by comparison at \$12.1 trillion, at just 4% the value of global property.

**2020 Global real estate universe in comparison**



Source: Savills (2021) *Market Trends: The total value of global real estate* [online]. Available at: [www.savills.com/impacts/market-trends/the-total-value-of-global-real-estate.html](http://www.savills.com/impacts/market-trends/the-total-value-of-global-real-estate.html) [accessed 10 December 2021]

**Residential real estate** - China, home to 1.4 billion people, is the world's most valuable residential market and now accounts for 30% of total global residential value. Total residential value here grew by 13% in 2020, driven by strong price growth coupled with the delivery of new supply.

The US follows, accounting for 11% of world residential value, while just ten countries – China, US, Japan, Germany, UK, France, South Korea, Canada, Italy, and Australia – make up 75% of the global residential total.

At a regional level, significant residential wealth is concentrated in Europe and North America, accounting for 43% of value combined, despite being home to just 17% of the global population.

**Commercial real estate** - The total value of global commercial property fell by 5% in 2020, to \$32.6 trillion, at a time when global economic output contracted by more than 3%.

This fall was only 'on paper', however, as commercial property owners held firm during the first wave of the pandemic, and best in class assets continued to trade with values sustained.

The United States is the largest global commercial property market, accounting for 27% of global commercial real estate value. It is followed by China, at 16% and Japan at 6%, together making up



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Just under half of all commercial property value.

Supported by renewed global economic growth, our forecasts indicate that commercial property will once again reach new highs by the end of this year (see publication date), with value growth of 5% anticipated in 2021. This will reverse the falls of 2020 and push total commercial value to \$34.3 trillion by the end of 2021, a new peak.

**Agricultural land** - Valued at \$35.4 trillion, agricultural land is now more valuable than all commercial real estate, following a period of exceptional growth in the years after the global financial crisis.

Total value declined, by 7% in 2020, however, led by land price falls in South American where political and the wider impact of the pandemic have taken their toll.

**How does performance compare to other asset classes?**

Growth in the value of global real estate, at 5% in 2020, was lower than the total value of securitised debt (+17%), equities (+20%), or gold (+29%).

But capital growth only tells part of the story. Real estate has come into its own in global investors' search for income in a low interest rate environment. Government stimulus in the wake of the pandemic means there is plenty of capital at large, and real estate is viewed as a safe store for it. All this means more money seeking both capital appreciation and, importantly, income.

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

**Also:**

[Read the Market Trends – 'Real estate investment in 2021: global outlook', 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](#)

[Read Issue – 3, 2020 of \*Impacts: The Future of Global Real Estate\*, in full.](#)

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**.

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[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](#)

[Savills \(2020\) 'The impacts of the US-China trade war', \*Impacts\*, May, Savills \[online\]. Available at Savills.com](#)

**[Savills Covid-19 Resource Hub](#)****[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 2020/21**

**Related topics** – Housing; Work; Income and benefits

- This is the 2020/21 edition of the JRF's annual report on the nature and scale of poverty across the UK, and how it affects people struggling to stay afloat.

We are in the midst of the coronavirus storm – a turbulent time when all of us have felt insecurity and instability. But our analysis shows too many of us entered the pandemic already at risk of being cast adrift into poverty, while often lacking secure housing, a reliable income or adequate support. It also shows that those of us already struggling to keep our heads above water have often been hit the hardest. Our response to the pandemic should be measured by how just and compassionate it is to people in poverty, whether they were already experiencing hardship or have been swept into it.

This report highlights early indications of how poverty has changed in our society since the start of the coronavirus outbreak, as well as the situation revealed by the latest poverty data, collected before the outbreak. It examines overall changes to poverty, with sections looking at the impact of work, the social security system and housing. It also benefits from powerful insights from members of our Grassroots Poverty Action Group, who have direct experience of living on a low income.

**Recommendations:**

- We need as many people to be in good jobs. Unemployment is expected to rise in the coming months, and we need to see further bold action to retrain workers and create good quality new jobs
- We need to improve earnings for low-income working families and ensure more people are in secure, good quality work. Government must support people in the lowest-paid jobs, or people working part-time, to move into higher pay and access sufficient and secure working hours, including bringing forward the Employment Bill.

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- We need to strengthen the benefits system. At a minimum, we need the temporary £20 per week increase to Universal Credit and Working Tax Credit to be made permanent, extending this same lifeline to people on legacy benefits such as Jobseeker's Allowance and Employment and Support Allowance.
- We need to increase the amount of low-cost housing available for families on low incomes and increase support for households who have high housing costs.

[Read the JSR report entitled, 'UK Poverty 2020/21' in full](#)**Related Links:**[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, lectures, 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:

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

[Back to top](#)**Planning for the recovery and the shift towards homeworking: implications for poverty in outer London**

Hunter P (2021)

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

This report was commissioned by Southwark Council, 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.

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

### **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

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

## **5) CABE – Chartered Institute of Building Engineers**

Two new publications have been launched from the Competence Steering Group (CSG) in 2020 with the view to improving competence and driving culture change throughout the industry.

***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.

*Setting the Bar* is the second and final report of the CSG and is an update of its Interim Report, *Raising the Bar* published in August 2019. The work was initiated by the recommendations in Dame Judith Hackitt's review *Building a Safe Future*.

[Access \*Setting the Bar\* – Final Report](#)

### **Competence Requirements for new role of Building Safety Managers**

The competence requirements for the proposed new role of the Building Safety manager have been set out in a new 2020 report ***Safer people, safer homes: Building Safety Management***.

Under new legislation being introduced in the *Draft Building Safety Bill* published in July 2020, those deemed responsible in law for the safety of higher-risk building, such as the landlord, will be required to appoint a Building Safety Manager.

The role of the Building Safety Manager will be to look after the day-to-day management of fire and structural safety in higher-risk buildings and establish a clear point of contact for residents for fire and safety related issues.

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

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

[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.



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

As of **December 2021**, the [latest news & insights](#) include:

- Powerful machine learning and big data used in Commercial Real Estate,
- Scottish Government delivers Budget for 2022-23
- Construction Design Management, Quantity Surveying, and digital compliance
- How RICS professionals are involved in digitising the built environment
- Tech is connecting homebuyers, and built environment professionals
- [BCIS five-year forecast](#),
- [UK guidance note on residential properties with cladding](#)
- [Celebrating the contribution of female surveyors to construction](#)

## **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 **December 2021**, 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 – November 2021](#) (12<sup>th</sup> November 2021)
- **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* (22<sup>nd</sup> April 2021)
- **Education and skills research** – *Exploring the impact of the ageing population on the workforce and built environment*
- **The Wider Built Environment** – *Understanding the Value of Professionals and Professional Bodies*.

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

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## **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 **December 2021**, 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 **December 2021**, the latest House of Commons Library, **Research publications** incl.

1. British support for Ukrainian membership of NATO
2. Frequently Asked Questions (FAQs): Demonstrating Covid-19 and vaccination status, and
3. Consular support for British citizens.

### **Review House of Commons Library, Research for this week**

As of **December 2021** the latest **House of Commons Research**:

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

1. Student loan statistics,
2. University Strikes 2021 FAQs,
3. Universities Superannuation Scheme,
4. Teacher recruitment and retention in England,
5. Further Education funding in England,
6. Education (Careers Guidance) in Schools Bill – An overview of the Education (Careers Guidance in Schools) Bill currently before Parliament, and related issues.
7. Skills and Post-16 Education Bill [Bill No 176 of 2021-22] HL
8. School inspections in England: Ofsted.
9. Inclusion of sustainability and climate change in the national curriculum.

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

1. Housing Market: Key Economic Indicators,
2. Support exempt accommodation (England),
3. Leasehold Reform (Ground Rent) Bill 2021-22,
4. The UK Shared Prosperity Fund,
5. Local authority data: housing supply,
6. Households in temporary accommodation (England).

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

1. **COP26: Briefings for the 2021 conference.** Also -
2. What role does trade policy have in addressing climate change? and Global net zero commitments,
3. Wellbeing Economy approach to meeting climate goals,
4. Empowering community energy schemes,
5. Energy intensive industries,
6. Petrol and diesel prices.

**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, December 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 constructions 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'](#)**

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## 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** (**December 2021**), RICS takes a look at 'How will we run the high-tech factories of the future?' – The World Economic Forum has designated certain factories 'Global Lighthouses' for their use of fourth industrial revolution technology that improves energy efficiency and productivity.

Subject Terms/Keywords: Energy; Technology; Sustainability.

#### **Latest articles within Modus:**

- **'My first visit to the UK as RICS President'** – 'Meeting so many passionate professionals who are committed to creating a more sustainable built environment was a highlight for me,' says RICS President Clement Lau in his monthly column.

Subject Terms/Keywords: RICS standards and guidance; Projects and people; Sustainability.

- **Can smart cities offer a better quality of life?** – Experiments with high-tech, data-led cities are happening all over the world but there are obstacles to overcome, including concerns about intrusive surveillance.

Subject Terms/Keywords: Technology; Cities and placemaking; Infrastructure and services.

- **Buildings that elevated cities: Dubai's Burj Khalifa**

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The unapologetic show-off grandeur of the world's tallest tower is an 'exclamation point' on the city's skyline that made it an instant icon in the Middle East.

Subject Terms/Keywords: Cities and placemaking; Projects and people

**- Is America finally on board with mass timber buildings? –**

The International Building Code's approval of mass timber in buildings up to 18 storeys could be the catalyst for its widespread adoption in the US.

Subject Terms/Keywords: Economics; Materials and resources; Cost management.

**- What's in a tree: how effective is carbon offsetting? –**Tree planting on a massive scale could suck millions of tons of carbon from the atmosphere, but dubious offsetting schemes and poor land management threaten to derail the programme.

Subject Terms/Keywords: Environmental management; Materials and resources; Housing.

**- Can we overcome our dependence on fossil fuels? –** Almost 85% of global energy still comes from coal, gas, or oil but we need to move the needle towards renewables fast if we are to achieve our climate goals.

Subject Terms/Keywords: Energy; Materials and resources; Sustainability.

**- The race to decarbonise building heating –** Is hydrogen the future of keeping our buildings warm or do heat pumps hold the key? Governments and the global building industry are weighing up the options.

Subject Terms/Keywords: Energy; Technology; Sustainability.

**- Can every country transition to clean energy? –** The World Energy Council's Dr Angela Wilkinson tells *Modus* why the politics of clean energy can sometimes be its biggest obstacle.

Subject Terms/Keywords: Energy; Materials and resources; Sustainability.

**- Can bricks power buildings? –** From supercapacitor bricks to concrete batteries and microbial fuel cells powered by urine, researchers are devising some ingenious ways to generate power.

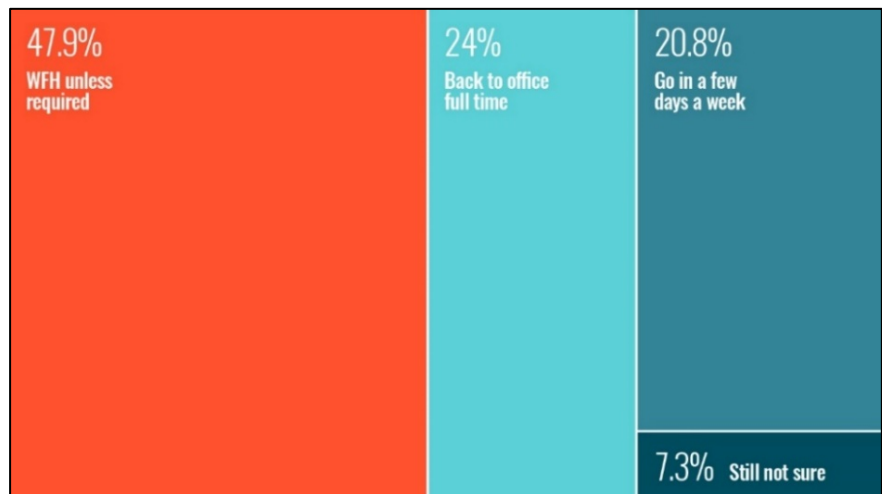
Subject Terms/Keywords: Energy; Technology; Sustainability.

**- Working from home: how was it for you?** Companies are calling for staff to get back to the office but the data (as shown overleaf) suggests that employees aren't all ready to return to the commute just yet.

Subject Terms/Keywords: Running your business.

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### Working from home, how was it for you?



Source: RICS (2020) 'The results of the RICS Modus Twitter poll on home working', *Modus*, 1 October, London: RICS.

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, **December 2021 - Issue 457** focusing on – New COVID-19 Measures Introduced; Government Publishes Final Events Research Programme Reports. 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 your digital activities & how to encourage your audience to create user-generated content.

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Institute of Workplace and Facilities Management (IWFM) [Facilitate](#), the latest **November/December** edition focusing on ‘A profession’s progress’ – The IWFM Impact Awards is like the festive season for the Workplace and Facilities Management profession. Everyone comes together to celebrate. Those whose best practice, innovation and great service make it onto the ‘excellent list’ raises the bard on what can be achieved.

[Contractors World International](#),

[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 2021](#). The Latest Edition [**December 2021**] focuses on – **Social equity and human-centred design**, and covers -

- **Social inequality and disproportionate suffering amongst poorer communities,**
- **Urban green infrastructure and poverty reduction, and**
- **Social equity, sustainability, and human-centred design.**

[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.

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

**Editorial:** Safeguarding social wellbeing in the foreseen future of hybrid working.



**[Back to top](#)****Editorial thought pieces**

1. The end of corporate real estate - revisited
2. The workplace post-COVID-19: Embrace the new normal or back to the future?
3. Diversity, inclusion, and effective business transactions

**Practice papers**

4. Workforce segmentation: Connecting workplace supply and demand,
5. Corporate headquarters leasing: Key considerations for a post-pandemic workplace,
6. New data sources in the age of hybrid work
7. Real estate-as-a-service: The servitisation-led transformation of corporate real estate
8. Change from crisis: CRE and smart building technology – the power duo supporting the hybrid work model
9. The innovation deficit: The importance of the physical office post-COVID-19.

**Book review:**

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

**Other articles from *Corporate Real Estate Journal* (2021)**

11. Information strategy in view of FM-futures: The evolving role of information systems in FM,
12. Why and how Skanska applied for a WELL Health Safety Rating,
13. Future proofing legal workplace strategies and real estate footprint,
14. Strategy and portfolio planning and whether a hub and spoke model is realistic,
15. A real estate investment perspective on value-added tools for corporate real executives,
16. Hybrid space making: Rethinking the bank branch experience for the digital age,
17. Corporate headquarters leasing: Key considerations for a post-pandemic workplace,
18. Ways to turn uncertainty into opportunity in corporate real estate,
19. Experiences of work from home: The future of distributed work locations – A comparative empirical analysis between the U.S. and Germany,
20. How data analytics and change management are transforming the future of workplace,
21. A practical approach to transforming the workplace,
22. Formal relational contracts: Why you should consider using them for your next outsourcing deal
23. Strategies for employee happiness and real estate optimisation in the post COVID office,

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24. Best practices of commercial management of parking assets for corporate real estate investors, and  
The innovation deficit: The importance of the physical office post COVID-19.

**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

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 60 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.



This work is licensed under a **[Creative Commons Attribution 3.0 Unported License \(CC BY 3.0\)](#)**.

This second Open Praxis issue in 2021 includes seven research papers. Keywords/subject terms covered include – MOOC, Online Learning, Distance Education, Teachers Education, micro-credential, online teaching, OER. It also introduces -

**Vol 13(2)**, that includes 7 research papers.

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The first four papers focus on learners' experiences in online settings, from different perspectives,

The next paper relates to the role of teachers in online environments, and

The final two research papers cover geographically wider experiences, one in relation to OER and the other in relation to micro-credentials.

**Research articles include:**

1. 'Making Barriers to Learning in MOOCs Visible. A Factor Analytical Approach',
2. 'Using Grounded Theory Approach for Examining the Problems Faced by Teachers Enrolled in a Distance Education Programme',
3. 'On Becoming an Online University in an Emergency Period: Voices from the Students at a State University',
4. 'Designing for Wellbeing: An Inclusive Learning Design Approach with Student Mental Health Vignettes',
5. 'Development of an Online Teaching Competency Scale for University Instructors',
6. 'Say no to Reinventing the Wheel: How other Countries can Building on the Norwegian Model of State-Financial OER to Create More Inclusive Upper Secondary Schools',
7. 'The State of Micro-Credentials Implementation and Practice in Australasian Higher Education'.

**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',
- **'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)**

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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 2021 Vol 25(4)**.

This special issue includes a selection of papers submitted to the American Educational Research Association (AERA) annual meeting. The AERA comprises an international membership spanning more than 96 countries. AERA's mission is to advance knowledge, scholarly inquiry, and the use of research to improve education practice and policy.

The ten research articles in this year's special issue highlight research devoted to advancing high-quality online learning around four themes: learner engagement, the use of synchronous video-based communication to support teaching, instructors' perspectives and experiences, and pedagogical recommendations. In addition to our special issue on papers from the AERA OTL-SIG, this issue also contains ten studies from our regular submission process. These papers examine a range of issues including learner perceptions of new technologies and experiences with online learning, personalization, and analytics for optimizing online learning opportunities, and strategies for student support during the COVID-19 pandemic.

Some of the articles include:

- 'What We Learned When We Compared Discussion Posts from One MOOC Hosted on Two Platforms',
- 'A Multiple-Case Study of Learners' Engagement in Mobile Learning Applications',
- 'Learning presence and the reconceptualisation of language and literacy teachers' online professional development',
- 'Faculty Perceptions of Using Synchronous Video-based Communication Technology',
- 'Coaching from a Distance: Exploring Video-based Online Coaching',
- 'Building a Holistic Online Community: Successful Strategies',
- 'Teaching Presence in Online Courses: Similar Perceptions but Different Experiences from Multiple Instructor Perspectives',
- 'Teaching Presence in Online Courses: Similar Perceptions but Different Experiences from Multiple Instructor Perspectives',
- 'Exploring Online Pedagogical Practices for Enhancing Transfer of Learning in Higher Education'.
- 'An Exploratory Examination of Student-Led, Asynchronous Collaborative Online Discussion in Fostering Higher-Order Cognitive Skills and Ethical Leadership Learning',
- 'Student Participation and Interaction in Online Case-Based Discussions: Comparing Expert and Novice Facilitation'.

**[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)

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## 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. It presents a practical and easy-to-read guide that can help organisations and their leaders engage with and apply this agenda to win the war for talent in real estate and construction.

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.

### **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

As this book states, “Motivation is central to all things human” and Online teaching and learning are no different. The authors of this free online book propose the TEC-VARIETY framework as a solution to the lack of meaningful engagement.

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It can shift learners from nearly comatose states to actively engaged ones. *Adding Some TEC-VARIETY* helps instructors focus on how to motivate online learners and renew their own passion for teaching. Using 10 theoretically driven and proven motivational principles, TEC-VARIETY offers over 100 practical yet innovative ideas based on decades of author experience teaching in a variety of educational settings.

**[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](#)**.

**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 third 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 an expanded further resources section.

**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 CO<sub>2</sub> 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 16 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.

**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 \(DOAB\)](#)**



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## UCEM e-Library Portrait

### The aim of the e-Library

The aim of the e-Library is to:

- disseminate information, share good practice, 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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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 11 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.



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### 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, JustisOne, Westlaw EDGE UK, EBSCO Business Source Premier, Emerald Insight - access to around 2600 eBook 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* digital journal and Estates Gazette Interactive (EGi), 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.

**Supported by: Emerald Publishing Ltd**  
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**Emerald Publishing Ltd**

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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 300 journals, including a 'Property Management and the Built Environment' collection that UCEM subscribes to.



© Emerald Publishing 2021

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.

**[December 2021]** - Here are some Open Access Journal articles available via Emerald, all around the theme of '**Digital Education**'.

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

1. Iivari N. (2020), 'Empowering children to make and shape our digital futures – from adults creating technologies to children transforming cultures', *International Journal of Information and Learning Technology*, Vol. 37 No. 5, pp. 279-293., Emerald Publishing Ltd.
2. Brunetti F, Matt, D T, Bonfanti A, De Longhi A, Pedrini, G, and Orzes, G. (2020), 'Digital transformation challenges: strategies emerging from a multi-stakeholder approach', *The TQM Journal*, Vol. 32 No. 4, pp. 697-724., Emerald Publishing Ltd.
3. Rizvi, Y.S. and Nabi, A. (2021), 'Transformation of learning from real to virtual: an exploratory-descriptive analysis of issues and challenges', *Journal of Research in Innovative Teaching & Learning*, Vol. 14 No. 1, pp. 5-17., Emerald Publishing Ltd.

### 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](mailto:library@ucem.ac.uk) email address.

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## 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 UCEM Career Services](#)

## Building Better Property Professionals



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.

### This month [**December 2021**] the **Hot Top Highlight – First Homes Scheme**

In this latest blog article, Property Elite take a look at the Government's First Homes scheme.

This is essential reading for any candidates with Planning or Purchase & Sale as a technical competency, as well as any candidates who are involved with affordable housing or the wider residential property market.

**When was the scheme launched?** The scheme was launched in England in June 2021 to help first time buyers purchase their first home by reducing the amount of deposit and mortgage funding required.

The scheme sits alongside Help to Buy Equity loans, shared ownership properties and the Government's 95% mortgage guarantee scheme.

**What is a First Home?** A First Home is a type of discounted market sale housing, meeting the following requirements:

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- It must be a new build
- It must be discounted by a minimum of 30% against Market Value
- It must be sold to a person or persons meeting the First Homes eligibility criteria
- On first sale, a restriction must be registered on the Title Register to ensure that the discount to Market Value and other certain restrictions are transferred at future sale
- After the discount has been applied, the first sale must be at no more than £250,000 (or £420,000 in Greater London). Subsequent sales are not subject to this cap.

**Also covered within this blog incl.**

• **How are First Homes considered under planning policy;** • **What are the eligibility requirements to purchase a First Home?** and • **What are the issues facing the scheme?**

**[Further details and access to the Property Elite Hot Topic Highlight blog: First Homes Scheme.](#)**

**Lucy's Top Tip** – 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 packs, revision quizzes and e-mock interviews.

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

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.

**[Access Property Elite's 'Building Better Property Professionals', Latest Blogs](#)**

## **Other related web-links**

**[GoConstruct.org](#)** website showcases 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.

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## Building People

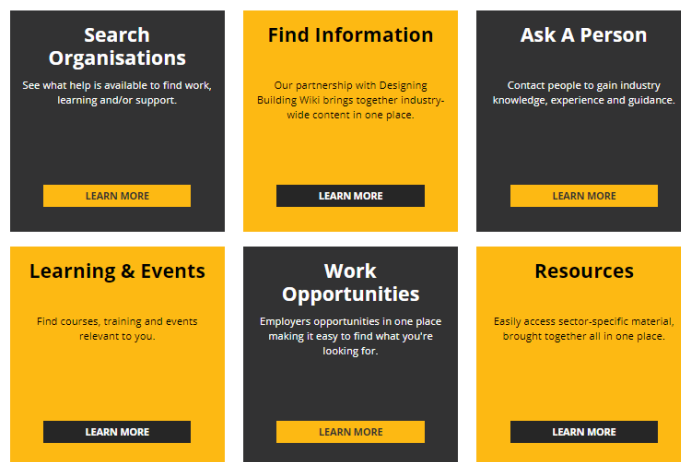
Enabling connections for a competent, diverse, and valued built environment workforce



The aim of 'Building People' was to create a technology platform and collaborative network, that 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.

### 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.

[Back to top](#)**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.

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## **UCEM Sustainability Hub**

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.

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.

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## **Building Research Establishment (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**

## **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.

The document, entitled ‘Carbon Zero: the professional institutions’ climate action plan’, was released last week and coordinates the



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efforts of built environment institutions in meeting the UK government's 2050 net zero emissions target.

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



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



(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)** 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

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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’**

Prime minister Boris Johnson said: “We want to continue to raise the bar on tackling climate change, and that’s why we’re setting the most ambitious target to cut emissions in the world.

“The UK will be home to pioneering businesses, new technologies and green innovation as we make progress to **net zero emissions**, laying the foundations for decades of economic growth in a way that creates thousands of jobs.

“We want to see world leaders follow our lead and match our ambition in the run up to the crucial **climate summit COP26**, as we will only build back greener and protect our planet if we come together to take action.”

**‘Government must clearly map out how it plans to tackle the carbon emissions’**

Ben Harris, UK climate change & sustainability director at Arcadis, and Catherine Greaves, managing director of environment, safety & industry, said: “We welcome the news from the UK Government this morning on the adoption of the 78% reduction in carbon emissions by 2035 on the advice of the Committee on Climate Change.

“If we are to take this new target seriously, Government must clearly map out how it plans to tackle the carbon emissions attributable to the built environment, which account for approximately 40% of UK emissions.”

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

**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:

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### 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

**Goal 8 & 10:** Decent work, economic growth, reducing inequality

**Goal 16:** Access to information



(UN.org 2021)

Source: Designing Buildings .co.uk Wiki (2019) 'Forgetting the big picture when considering sustainability' [online], last edited 31 March. Note: "The Sustainable Development Goals icons and colour wheel are free to use" (UN.org 2021)

**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 include 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 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.

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## 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,

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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 [[December 2021](#)]

#### **BBC News: Government fined £500,000 over honours data breach**

- The government has been fined £500,000 for mistakenly sharing the postal addresses of more than 1,000 New Year Honours recipients online. **Related topics** include – [Data Breaches](#).

[Access the BBC News article, 'Government fined £500,000 over honours data breach', in full.](#)

#### **ICO Latest News [[December 2021](#)] -**

27 October 2021 – [Joint statement on global privacy expectations of Video Conferencing companies](#)

14 September 2021 - ICO Blog: [Sharing personal data in an emergency – a guide for universities and colleges.](#)

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[G7 data protection and privacy authorities' meeting: communiqué and ICO to call on G7 countries to tackle cookie pop-ups challenge](#) (ICO, September 2021)

11 August 2021 – [ICO consults on how organisations can continue to protect people's personal data when it's transferred outside of the UK](#)

6 May 2021 – [Five things we learned from DPPC 2021](#) – The ICO's Data Protection Practitioners' Conference 2021 brought together more than 3,000 data protection professionals from across the country. Here are the five headlines from the day:

1. UK SCCs (standard contract clauses) to go out for consultation in the summer,
2. A challenging year has brought positives,
3. Data protection can be a balancing act,
4. Data protection made easy for SMRs, and
5. Unlocking the benefits of data sharing.

[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? [December 2021]**

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](#).

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March 2021 – The ICO have published new guidance on the [national security exemption](#) in Part 2 of the DPA18.

January 2021 - The ICO have published an 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 - The ICO published the new [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

“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 21<sup>st</sup> Century***

Computers and the Internet have transformed the way we produce and distribute information and entertainment. And copyright is struggling to keep pace with these changes. This book was written for those who want to learn about copyright in the 21st century. It 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 and (iv) copyright protection for works of traditional knowledge.

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



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



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## **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**

### **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'](#)

[Read the latest 'BBC Copyright News'](#)

### **Government Guidance – Changes to copyright law from 1 January 2021**

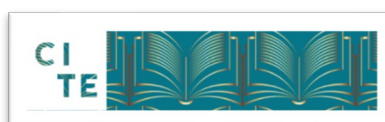
- This guidance covers the impacts on UK right holders, businesses, cultural heritage institutions and consumers. Note: It is not legal advice.



[Access the GOV.UK 'Changes to copyright law from 1<sup>st</sup> 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](https://www.youtube.com/watch?v=GmuENZHeGO0&feature=youtu.be) [accessed 1 December 2021]. **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 2021**

This national conference was held on 10<sup>th</sup> May and in association with Naomi Korn Associates, as well as great speakers and further experts in the field in attendance. This conference provided an opportunity to delve deeper into copyright issues and gain a better

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understanding of how policy impacts on libraries and the information sector and covered the following:

- The impact of Brexit on the copyright law in the UK.
- Responses to Covid in the provision of access and use of copyright resources.
- The crucial role of the copyright exceptions.
- Familiarised with key issues on the horizon such as Plan S.
- Current legislative, licensing and publishing related landscape and the latest copyright research and how these might impact your day-to-day work.

Sessions covered broad copyright impact for the profession incl.

- **Keynote: Who's afraid of the copyright wolf: research, access, and respect**

Much of the digitisation landscape is dictated by copyright, particularly for 20th century content. For researchers, this can create complex barriers to access to either individual collections item, or aggregated collections data, that are often confusing to navigate. For researchers working in the Digital Humanities, access to materials can dictate project direction, or the questions that can be asked via digital methods. In this talk, *Professor Melissa Terras*: Professor of Digital Cultural Heritage, University of Edinburgh reflected on how copyright has shaped her research projects - and also, how the perceived boundaries of copyright affect the research environment. The fear of copyright affects both researchers and institutions: Terras asks if the framing of forceful copyright restrictions can also be replaced with stressing the contribution institutions make to safeguarding and stewarding collections for ongoing research access.

- **Brexit, orphan works, and your next steps**

*Naomi Korn*: Naomi Korn Associates analyses the UK Government response to leaving the EU and its position on orphan works. Based on key questions Naomi is answering as part of her part-time PhD research at the University of Edinburgh, Naomi will outline next steps and suggest what you might want to think about doing next.

- **Exceptions to Copyright**

In this talk, *Dr Jane Secker*: Senior Lecturer in Educational Development, City, University of London, and *Chris Morrison*: Copyright and Licensing Manager, University of Kent spoke about the ways in which educational establishments have addressed copyright issues associated with the shift to online learning. They discussed the importance of educational exceptions as a vital supplement to the use of licensed resources to enable the use of images, printed materials, and audio-visual content to teach online.

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- **Open Access and Plan S**

The open access debate of the past two decades has raised issues around long-standing assumptions regarding copyright in scholarly journal articles. This has intensified as funders have looked to using rights as a way to promote greater open access. This talk by **David Prosser**: *Executive Director, RLUK* looked at the current state of the debate through the lens of recent policy from cOAlition S.

- **Bumps in the road: copyright responses to COVID in Higher Education**

Many aspects of our daily lives have been disrupted in some way over the course of the pandemic and copyright services are no exception. For those of us working in higher education institutions the sudden shift to online resource provision has meant that we need to work to adapt and enhance our provision in response to the lack of access to physical materials. At the same time, we need to manage expectations in terms of the availability of online materials and educate both users and staff in a constantly changing environment.

This talk by **Claire Sewell**: *Research Support Librarian for Physical Sciences, Cambridge University*, and **Kate Faulkner**: *Law Faculty Librarian, Cambridge University*, looked at the copyright journey taken by Cambridge University Libraries over the course of the last year. It will highlight how the initial response to the emergency was developed into a successful service, the challenges we faced as a university library with legal deposit responsibilities and the potential legacy of these changes for our copyright service. It will conclude with some of the lessons learnt and planned next steps to ensure that we build a copyright service useful to all.

- **Share Copies Not COVID: Update on CLA Developments**

**James Bennett**: *Head of Rights and Licensing, Copyright Licensing Agency* provided an overview of CLA's latest initiatives in response to the pandemic, looking at developments since the 2020 CILIP Copyright Conference, including licence enhancements to help with online teaching in schools and universities, and CLA and PLS's support for the process of REF submission by HEIs.

- **Europeana's licensing framework: a standardised approach to deal with unharmonised copyright frameworks**

Europeana aggregates and displays digital cultural heritage from across Europe and beyond, and as such, is in touch with the diverse copyright challenges faced at the national level by cultural heritage institutions. During this session, **Ariadna Matas**: *Policy*

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*Advisor, Europeana Foundation.* will briefly introduce how Europeana showcases and uses digital cultural heritage, its central licensing system, the standardised tools that Europeana relies on, what the coming changes such as the CDSM Directive might bring to challenges that are left to be solved.

- **Brexit and Copyright - what does the future hold?**

In 2020, the UK was in a holding pattern with respect to Brexit. Although it had left the EU, the transition period meant that EU law continued to apply. With the expiry of the transition period on 31 December 2020, copyright stakeholders and policymakers are now experiencing the full implications of Brexit, both in terms of day-to-day practices and the longer-term vision for copyright law in this country. This presentation by *Dr Emily Hudson: Reader in Law, King's College London* does not seek to reventilate questions about whether Brexit was desirable. Rather, it asks what the future of copyright might look like. To answer this, it starts by explaining the current legal position in relation to the status of EU instruments and case law in the UK. It then identifies areas where EU harmonisation has been particularly significant and makes some predictions about the likely direction of UK copyright law over the coming years. Finally, it offers some views about the sort of copyright reforms that the UK should consider.

- **The Open University - challenges and opportunities with copyright and licensing**

In this talk *Priya Haria: Content, Licencing, and Intellectual Property Assistant, The Open University* will talk about the opportunities and challenges to The Open University in relation copyright and licencing. The effect of Covid19 has led other organisations to consider delivering courses online. Priya will be able to provide a unique perspective in this area because, The Open University is a worldwide leader in teaching and delivering courses online for a number of years. Priya will also discuss how copyright and licencing opportunities allow an organisation like The Open University to expand their reach in delivering courses.

**#CILIPCopy21 / #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.

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](#).

[Back to top](#)**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 handled at all times in a way that is compliant with data protection law and our Data Protection and Privacy policies. While we have to 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 emphasise 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.

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).

[Back to top](#)**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 / #NASAPerserver



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## A to Z of useful references and web-links:

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### 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](http://www.advance-he.ac.uk) [accessed 23 December 2021]

**American Society of Civil Engineers** (ASCE) Civil Engineering database provides free access to over 80 thousand abstracts taken from ASCE publications since 1973. ASCE [online]. Further information is available at: [www.asce.org](http://www.asce.org) [accessed 23 December 2021]

**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](http://www.arcom.ac.uk) [accessed 23 December 2021]

**AJ Buildings Library** (AJBL) – The AJ Buildings Library showcases thousands of exemplar projects, most from the last 20 years but including major projects back to 1900. Available at: [www.ajbuildingslibrary.co.uk](http://www.ajbuildingslibrary.co.uk) [accessed 23 December 2021] (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.

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### B

**BBC Education** [online]. Further information available at: [www.bbc.co.uk/news/education](http://www.bbc.co.uk/news/education) [accessed 23 December 2021]

**BBC Search** [online]. Further information available at: [www.bbc.co.uk/search](http://www.bbc.co.uk/search) [accessed 23 December 2021]

**BIDSTATS** [online] – Free UK tenders' portal. Find UK public sector contracts and further information available at: <https://bidstats.uk/> [accessed 23 December 2021]

**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.cdbb.cam.ac.uk/AboutDBB/FAQs](http://www.cdbb.cam.ac.uk/AboutDBB/FAQs) [accessed 23 December 2021]. 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 23 December 2021]

**BOMA International** (Building Owners and Managers Association International) – a federation of 91 BOMA U.S. associations and 17 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](http://www.boma.org/BOMA/Research-Resources) [accessed 23 December 2021]

**British and Irish Legal Information Institute** (BAILLI) Case Law Search [online]. Further information available at: [www.bailii.org/form/search\\_cases.html](http://www.bailii.org/form/search_cases.html) [accessed 23 December 2021]

**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 23 December 2021]

**Building Conservation.com** [online] – Information resources for conservation, restoration, and repairs. Further information is available at: [www.buildingconservation.com](http://www.buildingconservation.com) [accessed 23 December 2021]

**Building Conservation.com Articles directory by subject** [online]. Available at: [www.buildingconservation.com/articles/articles.htm](http://www.buildingconservation.com/articles/articles.htm) [accessed 23 December 2021]

**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](http://www.buildingdesign.co.uk) [accessed 23 December 2021]

**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/](http://www.buildingengineer.org.uk/) [accessed 23 December 2021]

**Building People** - a technology platform and collaborative network, that 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](http://www.buildingpeople.org.uk) [accessed 23 December 2021]

**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 23 December 2021]

**BRE A-Z of BRE Services** (from Accreditation to Zero Carbon) [online]. Further information is available at: [www.bregroup.com/a-z](http://www.bregroup.com/a-z) [accessed 23 December 2021]

**BRE Case Studies** [online]. Further information is available at: [www.bre.co.uk/podpage.jsp?id=1744](http://www.bre.co.uk/podpage.jsp?id=1744) [accessed 23 December 2021]

**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](http://www.bsria.co.uk) [accessed 23 December 2021]

**Building talk** [online]. Available at: [www.buildingtalk.com](http://www.buildingtalk.com) [accessed 23 December 2021] *Building Talk* is an email newsletter for Architects, Civil Engineers and Building Services Contractors.

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## 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](http://www.cpre.org.uk) [accessed 23 December 2021]

**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](http://www.cbre.com/research-and-reports) [accessed 23 December 2021]

**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](http://www.cpre.org.uk/resources) [accessed 23 December 2021]

**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](http://www1.uwe.ac.uk/et/research/caber.aspx) [accessed 23 December 2021]

**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](http://www.cpwr.com) [accessed 23 December 2021]

**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.cdbb.cam.ac.uk/AboutDBB](http://www.cdbb.cam.ac.uk/AboutDBB) [accessed 23 December 2021]

**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](http://www.cse.org.uk/local-energy/resources) [accessed 23 December 2021]

**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 23 December 2021]

**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](http://www.ciob.org) [accessed 23 December 2021]

**Chartered Institution of Building Services Engineers** (CIBSE) – the prime source of expertise in the Building Services Industry. CIBSE [online]. Available at: [www.cibse.org](http://www.cibse.org) [accessed 23 December 2021]. 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](http://www.chinadialogue.net) [accessed 23 December 2021]

**CIBSE Journal** [online]. Available at: [www.cibsejournal.com](http://www.cibsejournal.com) [accessed 23 December 2021].

**CIOB Library** Incl. Library and Information Services [online]. Available at: [www.ciob.org/library](http://www.ciob.org/library) [accessed 23 December 2021]

**CIOB BIM+** online newsletter [online]. Available at: [www.bimplus.co.uk](http://www.bimplus.co.uk) [accessed 23 December 2021]

**CIOB's Construction Manager journal** [online]. Available at: [www.constructionmanagemagazine.com](http://www.constructionmanagemagazine.com) [accessed 23 December 2021]

**CIOB's Global Construction Review journal** [online]. Available at: [www.globalconstructionreview.com/](http://www.globalconstructionreview.com/) [accessed 23 December 2021]

**CIOB's Policy and Public Affairs portal** [online]. Available at: [www.ciob.org/industry/policy-research](http://www.ciob.org/industry/policy-research) [accessed 23 December 2021]

**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 23 December 2021]

**Cities / buildings images database** [online]. Available at: [www.washington.edu/ark2](http://www.washington.edu/ark2) [accessed 23 December 2021] 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](http://www.C-Link.com) [accessed 23 December 2021]

**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](http://www.cbre.co.uk) [accessed 23 December 2021]

**Community-Led Housing** (CLH) Toolkit: a resource for local authority and housing professionals' [online]. Available at: <https://clhtoolkit.org/> [accessed 23 December 2021]. 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](http://www.cbi.org.uk) [accessed 23 December 2021]

**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 23 December 2021]

**COTAC Digital Bibliography** [online]. Available at: [http://cotac.global/digital\\_bib/](http://cotac.global/digital_bib/) [accessed 23 December 2021]

**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 23 December 2021]

**Construction Enquirer** is a news website in construction. Construction Enquirer [online]. Available at: [www.constructionenquirer.com](http://www.constructionenquirer.com) [accessed 23 December 2021]

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](http://www.theconstructionindex.co.uk) [accessed 23 December 2021].

**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 23 December 2021]

The **Construction Industry Research and Information Association** (CIRIA) [online]. Further information and resources are available at: [www.ciria.org/default.aspx](http://www.ciria.org/default.aspx) [accessed 23 December 2021]

**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](http://www.citb.co.uk) [accessed 23 December 2021]

**Construction Manager** is the magazine of the Chartered Institute of Building (CIOB) [online] and available at: [www.constructionmanagemagazine.com/](http://www.constructionmanagemagazine.com/) [accessed 23 December 2021]

**Construction News** [online]. Available at: [www.constructionnews.co.uk](http://www.constructionnews.co.uk) [accessed 23 December 2021]

**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](http://www.constructionproducts.org.uk) [accessed 23 December 2021]

**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](http://www.cpic.org.uk) [accessed 23 December 2021]

**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 23 December 2021].

**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**.

**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 23 December 2021]

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## 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](http://www.designingbuildings.co.uk/wiki/Home) [accessed 23 December 2021] 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](http://www.designingbuildings.co.uk/wiki/Student_resources) [accessed 23 December 2021] 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](http://www.designingbuildings.co.uk/wiki/Construction_industry_acronyms) [accessed 23 December 2021] 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](http://www.designcouncil.org.uk) [accessed 23 December 2021]. 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](http://www.doabooks.org/doab) [accessed 23 December 2021]

**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 23 December 2021]

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## 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](http://www.educationandemployers.org/research-type/research-library) [accessed 23 December 2021]



**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](http://www.economicsnetwork.ac.uk) [accessed 23 December 2021]

**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](http://www.engineeringuk.com) [accessed 23 December 2021]

**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](http://www.epsrc.ac.uk) [accessed 23 December 2021]

**English Heritage** cares for over 400 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](http://www.english-heritage.org.uk) [accessed 23 December 2021]. 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](http://www.egi.co.uk) [accessed 23 December 2021] 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](http://www.eres.org) [accessed 23 December 2021].

**ERES Digital Library** [online] and available at: [www.eres.org/index.php/activities/libraryeres](http://www.eres.org/index.php/activities/libraryeres) [accessed 23 December 2021]

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## G

**Great Buildings** [online]. Available at: [www.greatbuildings.com](http://www.greatbuildings.com) [accessed 23 December 2021] 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](http://www.glenigan.com) [accessed 23 December 2021] 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](http://www.cbre.com/research-and-reports) [accessed 23 December 2021]

**Global Construction Review** – An online journal from the Chartered Institute of Building (CIOB) [online]. Available at [www.globalconstructionreview.com](http://www.globalconstructionreview.com) [accessed 23 December 2021]

**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 23 December 2021]

**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](http://www.guardian.co.uk/housing-network) [accessed 23 December 2021]

**The Guardian, Higher Education / Universities** [online]. Further information is available at: [www.guardian.co.uk/higher-education-network](http://www.guardian.co.uk/higher-education-network) [accessed 23 December 2021]

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## 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](http://www.hse.gov.uk/index.htm) [accessed 23 December 2021]

**HSE, Health & Safety in the construction industry** [online]. Further information is available at: [www.hse.gov.uk/construction](http://www.hse.gov.uk/construction) [accessed 23 December 2021]

**HSE Publications** [online]. Available at: [www.hse.gov.uk/pubns/index.htm](http://www.hse.gov.uk/pubns/index.htm) [accessed 23 December 2021]

**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](http://www.theheritagealliance.org.uk) [accessed 23 December 2021]

**Heritage Update: the online edition** of the fortnightly Heritage Alliance's **Heritage Update** e-bulletin [online] and available at: [www.theheritagealliance.org.uk/update](http://www.theheritagealliance.org.uk/update) [accessed 23 December 2021]

**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 23 December 2021]

**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](http://www.srhe.ac.uk/links/higher_education_statistics_and_research.asp) [accessed 23 December 2021]

**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](http://www.historicengland.org.uk) [accessed 23 December 2021]

**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 23 December 2021].

**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](http://www.hbf.co.uk) [accessed 23 December 2021]

**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 23 December 2021]

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**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](http://www.designcouncil.org.uk/projects/inclusive-design-hub-built-environment) [accessed 23 December 2021]

**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](http://www.infabode.com) [accessed 23 December 2021]

**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](http://www.ice.org.uk) [accessed 23 December 2021]

**ICE Virtual Library** [online]. Available at: [www.icevirtuallibrary.com](http://www.icevirtuallibrary.com) [accessed 23 December 2021] 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](http://www.icde.org) [accessed 23 December 2021]

**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 the Republic of Ireland. IHBC [online]. Available at: [www.ihbc.org.uk](http://www.ihbc.org.uk) [accessed 23 December 2021]

**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](http://www.iwfm.org.uk) [accessed 23 December 2021]

**IWFM Insight** – discover leading research and resources for the workplace and facilities management profession. IWFM Insight [online]. Available at: [www.iwfm.org.uk/insight](http://www.iwfm.org.uk/insight) [accessed 23 December 2021]

**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](http://www.iwfm.org.uk/news) [accessed 23 December 2021]

**IWFM Digital Magazine, facilitate** - Informing workplace and facilities management professionals. IWFM *facilitate* [online]. Available at: [www.facilitatemagazine.com/](http://www.facilitatemagazine.com/) [accessed 23 December 2021]

**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](http://www.itcon.org) [accessed 23 December 2021]

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## 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 23 December 2021].

**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](http://www.jisc.ac.uk/website/legacy/jorum) [accessed 23 December 2021] 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](http://www.journaltoCs.ac.uk/index.php) [accessed 23 December 2021]

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## K

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## 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](http://www.leedsbeckett.ac.uk/school-of-built-environment-engineering-and-computing/research) [accessed 23 December 2021]

**Leeds Beckett University's - Leeds Sustainability Institute** [online]. Further Information is available at: [www.leedsbeckett.ac.uk/leeds-sustainability-institute](http://www.leedsbeckett.ac.uk/leeds-sustainability-institute) [accessed 23 December 2021]

**Leeds Beckett University – The Library** [online]. Available at: <http://libguides.leedsbeckett.ac.uk/home> [accessed 23 December 2021]

**Lexology** is a comprehensive source of international legal updates, analysis, and insights. Lexology publish in excess of 450 articles every day from over 1,100 law firms and service providers worldwide across 50 work areas in 25 languages. Lexology [online]. Available at: [www.lexology.com](http://www.lexology.com) [accessed 23 December 2021]

**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](http://www.local.gov.uk) [accessed 23 December 2021]

**LGA Knowledge Hub** - Knowledge Hub is the public sector's professional social network which helps people in local government connect and share online in a secure environment [online]. Available at: <https://khub.net> [accessed 23 December 2021]

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## M

**Multimedia Educational Resource for Learning and Online Teaching** (MERLOT). The MERLOT project began in 1997, when the California State University Center for Distributed Learning (CSU-CDL) developed and provided free access to MERLOT [online]. Available at: [www.merlot.org/merlot](http://www.merlot.org/merlot) [accessed 23 December 2021]. MERLOT is a curated collection of free and open online teaching, learning, and faculty development services contributed and used by an international education community.

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## N

**Naomi Korn Associates – Copyright Resources** has developed free and openly licensed copyright, licensing and data protection help resources. Naomi Korn Associates [online]. Available at: <https://naomikorn.com> [accessed 23 December 2021]

**National Building Information Modelling (BIM) Library**, the construction industry's free-to-use resource of the NBS (trading name of RIBA Enterprises Ltd) standard BIM content [online]. Available at: [www.thenbs.com/our-tools/nbs-national-bim-library](http://www.thenbs.com/our-tools/nbs-national-bim-library) [accessed 23 December 2021]

**National Building Specification** (NBS) is an integrated global platform for everyone involved in the design, supply, and construction of the built environment. NBS [online]. Available at: [www.thenbs.com](http://www.thenbs.com) [accessed 23 December 2021]

**NBS Knowledge** [online] is available at: [www.thenbs.com/knowledge](http://www.thenbs.com/knowledge) [accessed 23 December 2021]

**NBS Publication Index** [online] - this index provides information about key industry documents which are or have been available in The Construction Information Service (CIS), or cited in NBS Guidance. Further information is available at: [www.thenbs.com/Publicationindex](http://www.thenbs.com/Publicationindex) [accessed 23 December 2021]

**NBS Digital Construction Conversations podcasts** – New to 2021, NBS are talking to inspirational industry leaders about the trends and technologies impacting the construction industry – from sustainability to regulations to change management. NBS Digital Construction Conversations [online]. Available at: [www.thenbs.com/podcast](http://www.thenbs.com/podcast) [accessed 23 December 2021]

**National Skills Academy for Construction** (NSAfc) is an industry-led framework supporting clients and contractors to identify, develop and realise employment and skills solutions across construction projects. CITB, NSAfc [online]. Available at: [www.citb.co.uk/national-skills-academy-for-construction](http://www.citb.co.uk/national-skills-academy-for-construction) [accessed 23 November 2021]. Note: It is facilitated by the Construction Industry Training Board (CITB).

**The National Trust** protect historic houses, gardens, mills, coastline, forests, woods, fens, beaches, farmland, moorland, islands, archaeological remains, nature reserves, villages, and pubs. The National Trust [online]. Available at: [www.nationaltrust.org.uk](http://www.nationaltrust.org.uk) [accessed 23 December 2021]

**National Trust's Land & landscape** [online]. Available at: [www.nationaltrust.org.uk/land-and-landscape](http://www.nationaltrust.org.uk/land-and-landscape) [accessed 23 December 2021]

**New Civil Engineer** (NCE) a weekly magazine published for the Institution of Civil Engineers (ICE). NCE [online]. Available at: [www.nce.co.uk](http://www.nce.co.uk) [accessed 23 December 2021]

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## O

**Online Learning Consortium** (OLC) is devoted to advanced quality online learning by providing professional development, instruction, best practice publications and guidance to educators, online learning professionals and organisations around the world. Online Learning Consortium [online] and further information is available at: <http://onlinelearningconsortium.org/> [accessed 23 December 2021]

**OLC's Online Learning** – the official journal of the Online Learning Consortium. *Online Learning* [online]. Available at: <http://onlinelearningconsortium.org/read/> [accessed 23 December 2021]

**Open Education Resources, Research Hub** – OER Hub gathers research on the impact of open education resources (OER) on learning and teaching practices. OER Hub [online]. Further information is available at: <http://oerhub.net/> [accessed 23 December 2021]

**Open Praxis** – published by the International Council for Open and Distance Education – ICDE, *Open Praxis* is a peer-reviewed open access scholarly journal focusing on research and innovation in open, distance and flexible education. *Open Praxis* [online]. Available at: <https://openpraxis.org/> [accessed 23 December 2021]

**Open University (OU) UK** [online] and available at: [www.open.ac.uk](http://www.open.ac.uk) [accessed 23 December 2021]

**Open University (OU) UK, Institute of Education Technology** [online] and available at: [www.open.ac.uk/iet/main](http://www.open.ac.uk/iet/main) [accessed 23 December 2021]

**Organisation for Economic Cooperation and Development (OECD) iLibrary** is the online library of the OECD, featuring its books, papers and statistics and is the gateway to OECD's analysis and data. Note: It replaced SourceOECD. OECD iLibrary [online]. Available at: [www.oecd-ilibrary.org](http://www.oecd-ilibrary.org) [accessed 23 December 2021]

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## P

**Parliament.uk, Research briefings** produced by the House of Commons Library, the House of Lords Library and the Parliamentary Office of Science and Technology (POST). Parliament, Parliamentary business, Publications and records, Research briefings. Parliament.UK [online]. Further information is available at: <http://researchbriefings.parliament.uk> [accessed 23 December 2021]

**Planning, BIM & Construction Today** – The PBC Today website has compelling and informative features, news and products for a diverse audience serving a wide construction sector. PBC Today [online]. Available at: [www.pbctoday.co.uk/news](http://www.pbctoday.co.uk/news) [accessed 23 December 2021]

**Planning Advisory Service** (PAS) provide consultancy and peer support, training sessions and online resources to help local authorities understand and respond to planning reform. PAS [online]. Available at: [www.local.gov.uk/pas](http://www.local.gov.uk/pas) [accessed 23 December 2021].

**Planning Officers Society** (POS) is the voice for public sector planning practitioners, pursuing good and effective planning practice within local government [online]. Available at: [www.planningofficers.org.uk](http://www.planningofficers.org.uk) [accessed 23 December 2021]

**The Planning Portal** is the UK Government's online planning and building regulations resource for England and Wales [online]. Available at: [www.planningportal.co.uk](http://www.planningportal.co.uk) [accessed 23 December 2021]

**The Prince's Foundation** was created by the merging of The Prince's Foundation for Building Community, The Prince's Regeneration Trust, The Great Steward of Scotland's Dumfries House Trust and The Prince's School of Traditional Arts in 2018. This combined force enables the charity to achieve HRH's goal of creating harmonious communities, through three core tiers. The Prince's Foundation [online]. Available at: <https://princes-foundation.org> [accessed 23 December 2021]

**Property People's Network** (PPN) is open to all interested in land and property and provides a forum to network through a range of social activities and visits [online]. Available at: [www.ucem.ac.uk/student-community/property-peoples-network](http://www.ucem.ac.uk/student-community/property-peoples-network) [accessed 23 December 2021]

**Property Week** – Commercial property news. *Property Week* [online]. Available at: [www.propertyweek.com](http://www.propertyweek.com) [accessed 23 December 2021]

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## R

**Regeneration and Renewal – Placemaking Resource incorporating Regeneration & Renewal magazine** [online]. Available at: [www.placemakingresource.com](http://www.placemakingresource.com) [accessed 23 December 2021]

**Residential Landlord** – an online resource providing Landlord Resources, a Document Download Centre (containing templates and free tenancy agreements to amend and use as required), news and views, advice, and guidance [online]. Further information is available at: [residentiallandlord.com](http://residentiallandlord.com) [accessed 23 December 2021]

**Revo – Retail. Property. Community** (formerly BCSC (British Council of Shopping Centres)) is the professional body and authoritative voice for retail property and placemaking-led regeneration and for the management of and investment in shopping places [online]. Further information is available at: [www.revocommunity.org](http://www.revocommunity.org) [accessed 23 December 2021]

**The Royal Institute of British Architects** (RIBA) is a global professional membership body driving excellence in architecture [online]. Further information is available at: [www.architecture.com](http://www.architecture.com) [accessed 23 December 2021]

**RIBA Library** – Visit the RIBA Library [online]. Available at: [www.architecture.com/contact-and-visit/riba-library](http://www.architecture.com/contact-and-visit/riba-library) [accessed 23 December 2021]

**RIBA Home > Knowledge and resources > Resources > RIBA Plan of Work** [online]. Further information is available at: [www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work](http://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work) [accessed 23 December 2021]

**Royal Institution of Chartered Surveyors** (RICS) is an independent body committed to setting and upholding the highest standards of excellence and integrity in land, property, and construction. RICS [online]. Available at: [www.rics.org/uk](http://www.rics.org/uk) [accessed 23 December 2021]

**RICS > News & Insights** [online]. Available at: [www.rics.org/uk/news-insight](http://www.rics.org/uk/news-insight) [accessed 23 December 2021]

**RICS > Upholding Professional Standards** [online]. Available at: [www.rics.org/uk/upholding-professional-standards](http://www.rics.org/uk/upholding-professional-standards) [accessed 23 December 2021]

**RICS Publications** - RICS publishes a range of journals that are **free** to view online. Available at: [www.rics.org/uk/news-insight/publications/](http://www.rics.org/uk/news-insight/publications/) [accessed 23 December 2021]

**RICS Library Services and Online catalogue** - 2500 electronic documents selected and catalogued, plus books, magazine articles, law reports and transcripts [online]. Available at: <https://library.rics.org/> [accessed 23 December 2021]



**Royal Town and Planning Institute** (RTPI) is the UK's leading planning body for spatial, sustainable, and inclusive planning and is the largest planning institute in Europe with over 23,000 members. In 2014 they celebrate their Centenary. RTPI [online]. Available at: [www.rtpi.org.uk](http://www.rtpi.org.uk) [accessed 23 December 2021]

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## S

**Savills Research** – Savills Research, Insight & Opinion provides advice and analysis to clients across the UK, with specialists in commercial, residential, and rural property research [online] and available at: [www.savills.co.uk/insight-and-opinion/research.aspx](http://www.savills.co.uk/insight-and-opinion/research.aspx) [accessed 23 December 2021]

**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](http://www.shoosmiths.co.uk/insights) [accessed 23 December 2021]

**Specification Online** – the free to use news and online products resource for specifiers working across the architectural and building sector [online] and available at: <http://specificationonline.co.uk> [accessed 23 December 2021]

**Supply Chain Sustainability School** represents a common approach to developing sustainability competence in the supply chain. It is a free resource available to any supplier and is part of their continued commitment to lead the industry into a brighter, more sustainable future. Supply Chain Sustainability School [online]. Further information is available at: [www.supplychainschool.co.uk/uk/default-home-main.aspx](http://www.supplychainschool.co.uk/uk/default-home-main.aspx) [accessed 23 December 2021]

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## T

**The Telegraph – Property and construction industry** - The latest news, analysis and share prices on Britain's biggest construction and property companies. The Telegraph, Property and Construction Industry [online]. Available at: [www.telegraph.co.uk/property-and-construction-industry](http://www.telegraph.co.uk/property-and-construction-industry) [accessed 23 December 2021]

**Tomorrow's Engineers** brings together resources and evidence to support the engineering community in getting the most out of their engagement activity. Tomorrow's Engineer [online]. Available at: [www.tomorrowsengineers.org.uk](http://www.tomorrowsengineers.org.uk) [accessed 23 December 2021]

**Trust in Digital Repositories** (TrustDR) – a research project that examined how to effectively manage the legal aspects of digital collections of learning resources and produced a policy development toolkit. TrustDR [online]. Available at: <https://trustdr.digitalinsite.co.uk> [accessed 23 December 2021]

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## U

**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](http://www.ukbimframework.org) [accessed 23 December 2021]

**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](http://www.ucem.ac.uk) [accessed 23 December 2021]

**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](http://www.ucem.ac.uk/e-library) [accessed 23 December 2021]

**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](http://www1.uwe.ac.uk/et/research/caber.aspx) [accessed 23 December 2021]

**UWE Educational Resources for the Built Environment (ERBE)** produces unique and highly respected educational resources for academic and professional use and incorporates the **Video Project** and the **Construction Website**. Further information can be found on the ERBE website [online] and available at: [www1.uwe.ac.uk/et/cp/erbe.aspx](http://www1.uwe.ac.uk/et/cp/erbe.aspx) [accessed 23 December 2021]

**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 100 years. ERBE Construction Films [online]. Further information is available at: [www1.uwe.ac.uk/et/cp/erbe/constructionfilms.aspx](http://www1.uwe.ac.uk/et/cp/erbe/constructionfilms.aspx) [accessed 23 December 2021]

**UWE, ERBE, The Construction Website** is an interactive encyclopaedia covering construction, conservation and building history. It is expanded and revised on an annual basis [online]. Further information is available at: [www1.uwe.ac.uk/et/cp/erbe/constructionweb.aspx](http://www1.uwe.ac.uk/et/cp/erbe/constructionweb.aspx) [accessed 23 December 2021]

**UWE, Library, Search for things: A-Z** [online]. Available at: [www1.uwe.ac.uk/library/searchforthingsa-z.aspx](http://www1.uwe.ac.uk/library/searchforthingsa-z.aspx) [accessed 23 December 2021]

**UWE, Research publications and reports** – Providing immediate world-wide open access to all UWE's research output. Research at UWE Bristol [online]. Available at: [www1.uwe.ac.uk/research.aspx](http://www1.uwe.ac.uk/research.aspx) [accessed 23 December 2021]

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## 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**.

## 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 23 December 2021]

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## Z

**Zetoc: Informing Research** - The monitoring and search service for global research publications, providing access to over 36,000 journals and more than 59 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 23 December 2021]

(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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**University College of Estate Management** (UCEM), Horizons, 60 Queen's Road, RG1 4BS, UK – UK (Free): 0800 019 9697, International: +44 (0)118 921 4696, Email: [library@ucem.ac.uk](mailto:library@ucem.ac.uk)

**UCEM Social media:** [Facebook](#), [Twitter](#), [LinkedIn](#), [YouTube](#)

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