

Cladding - A Way Forward

An insight into how the industry can move forward from the cladding crisis.



Welcome

We look at key issues facing the on-going cladding crisis.



Welcome

This report will offer insight into key issues that caused the cladding crisis, how it's affecting different groups of people, and how we can move forward towards brighter days.

Analysis post-Grenfell has exposed multiple failings and contributing factors, most of which – it's now clear – will take many years to resolve.

But we can't and shouldn't accept that as the only answer. The focus now should be on what must be done immediately to move construction, regulation, funding, insurance, remediation and the legal framework for UK housing to a better place.

In our recent panel discussion '[Cladding – A Way Forward](#)', we welcomed a series of guests from across the industry to share their expert opinion on the current cladding crisis.

The UK housing market is complex and heavily interconnected. If one significant section of it is blighted, there will be knock-on effects for all homeowners, and the economy will suffer too.

It's vital for people to be able to live in suitable accommodation in accessible locations for their work, education and other needs, and for them to be able to move quickly and easily if they don't.

Family and personal circumstances change constantly through life, and a flexible and affordable housing market is the bedrock of the country's future.

Even more importantly though, people need to be safe and secure in their own homes.

We hope this report and our work in the market will play a small but positive part in so doing.

Jeremy Raj

Partner and Head of Residential Property, Irwin Mitchell





Meet Our Experts

We brought together six industry leading professionals to contribute to this report.

Meet Our Experts - Irwin Mitchell



Jeremy Raj

Partner and National Head of Residential Property

Jeremy has 25 years' experience in the property sector, particularly in London and the South East. He specialises in portfolio acquisitions, investments, funding, developments, landlord and tenant issues, and conveyancing for family offices, collectives and individuals.



Clare Petricca-Riding

National Planning Partner and Head of Environment

Claire has considerable experience in all aspects of planning and environmental matters relating to a range of sectors. Most notably in the development (commercial, PRS and PBSA), retail, maritime and waste management sectors. She also specialises in property and corporate transactions in respect of bespoke due diligence.



Mark Clinton

Partner and National Head of Construction and Engineering

Mark works across the whole spectrum of construction and engineering disputes. He has considerable experience advising on, and drafting documents for, construction and engineering projects, and advising on procurement law.



Eyvind Andresen

**Head of Legal and Portfolio Services,
HomeGround Management Limited**

Eyvind has overall responsibility for HomeGround's legal, estate management and building safety compliance functions. He's previously been head of legal for a large managing agent, and another large freehold asset manager. Prior to taking up an in-house legal role, Eyvind spent 10 years as a property litigation solicitor.



Simon Allison

Barrister, Landmark Chambers

Simon is a leading expert on issues relating to cladding and other fire risks. He's widely recognised as a specialist in leasehold management, forfeiture and service charge matters, and relishes all forms of advocacy. He offers insight on the liability for cladding issues, what the solutions are, whether risks can be mitigated, and how leases might be improved by practitioners and future legislation.



Brendan Geraghty

Architect, Centred Architecture

Brendan is an architect, creative designer and strategic thinker with 25 years' of practice experience in the UK and internationally. His residential background includes private and affordable housing, residential and high-density mixed-use schemes. He's an advocate for Modern Methods of Construction and has a good track record in designing and delivering residential buildings using various offsite technologies.

Key Findings

We pick out some of the key issues you need to know.



Key Findings

537

buildings have **'waking watches'** in place to improve safety while they wait for remediation.

1.93m

people are now considered **'mortgage prisoners'**.

91%

Remediation work on buildings with ACM cladding has either been completed or started on 91% of residential buildings.

£5 billion has been made available by the government so far, but experts predict the figure needed is much more.

£5bn

4%

If the new **Development Levy** was applied to only the top 20 UK developers, the £200m required annually would equate to 4% of their total profits.

Over 600,000

people in England are currently living in high-rise buildings with dangerous cladding.

A Time for Change

We consider how the cladding crisis started, and where we are in dealing with it.



A Time for Change

Grenfell Tower: Four years on

On 14 June 2017, 72 people lost their lives in Grenfell Tower. A fire started on the fourth floor and accelerated up the building due to the façade designed out of aluminium composite material, better known these days as the notorious ACM cladding.

The events that night changed the landscape of construction, architecture, residential property, development, planning, and building regulations as we know them. But there was a sense of commitment and community amongst businesses to make sure this never happens again.

As an inquiry into the fire began, tenants in similar high-rise buildings began to question their own safety in their homes. Freeholders were also quick to review their properties to better understand if they were at risk.

And with all this in the public eye, the interest into Grenfell Tower, ACM cladding, and the companies who built these high-rise properties quickly gathered pace, with questions being asked of all parties.



Cladding is a sandwich composite of materials that's generally aluminium on the outside with a polyethylene strip in the middle. The reason it's so dangerous is because of the materials that go in the polyethylene. They're highly flammable and contributed significantly to the spread and intensification of fire in Grenfell Tower.

Brendan Geraghty

Centred Architecture



The problems with ACM cladding were known around the world. There have been dozens of cases across the Middle East, Australia and France where this cladding had shown itself to be dangerous. The certificate that was issued for the cladding on Grenfell Tower however gave it a zero, which is the best rating for fire spread.

Mark Clinton

Irwin Mitchell

Blame game

Today people are still asking who's responsible for the Grenfell Tower fire and the cladding scandal, with blame spread in all directions.

The government's come under scrutiny for what has been described as a massive regulatory failure. But questions are being asked of others too.

Jeremy Raj of Irwin Mitchell said: "Often in the national press things have been presented as black and white with a lot of finger pointing. It's easy to point fingers at different sectors and say all the blame is there, but it doesn't mean there isn't blame in other areas too."

Why would an architect design a building this way, and why would the construction industry allow a building to be built with such a dangerous material? Where does the planning system come into this? Were these industries simply abiding by the rules and building regulations set for them?

There are 600,000 people affected in high-rise buildings, and 56,000 of those are living in flats with ACM cladding, [according to Inside Housing](#). With so many people affected, should freeholders and building owners be expected to put their tenants' safety above all else? Many argue that their buildings passed all necessary steps at the time of instruction.

Leaseholders on the other hand are living in these at-risk properties, and are being asked by freeholders to share the cost of remedial work between them.

Alison Hills, a solicitor at Irwin Mitchell is caught up in the crisis. She lived on the third floor of an eight storey building with flammable high pressure laminate (HPL) cladding, along with other fire safety defects. Her building received an initial remediate quote of £7m, which works out at over £150,000 per flat. She described the situation as 'very worrying.'

This situation has had financial implications for her and her father who bought the flat after Alison's mother passed away. Alison has since moved out because of the strain this put on her mental health. Each day she was worried about how she would get out of the building if there was a fire, knowing she might have to take drastic action and jump off the balcony to try and survive. She added: "The situation was made worse by the coronavirus lockdown because I was forced to stay in a life-threatening home 24 hours a day."

The cladding crisis is having an effect on people's mental health. Almost one quarter (23%) of leaseholders have considered suicide or self-harm [according to a report by UK Cladding Action Group \(UKCAG\)](#).



We need to keep the pressure up on the government to help sort the funding. Leaseholders say building owners need to "do the right thing", but many of these high-rise buildings aren't owned by big pension funds and private equity firms. They're owned and managed by residents who don't have any commercial income and can't readily fund the remediation works without all leaseholders paying substantial sums up front. We need clear government direction on a practical solution.

Simon Allison

Landmark Chambers

Where we are

Remediation is either completed or underway on 91% of all residential and publicly owned high-rise buildings with ACM cladding, [according to the Ministry of Housing, Communities and Local Government](#).

Of the 422 high-rise residential and publicly owned buildings identified to have ACM cladding, 346 have had it removed. The remaining buildings either have a plan in place or have started remediation work, which includes student accommodation, hotels, and even some vacant buildings.

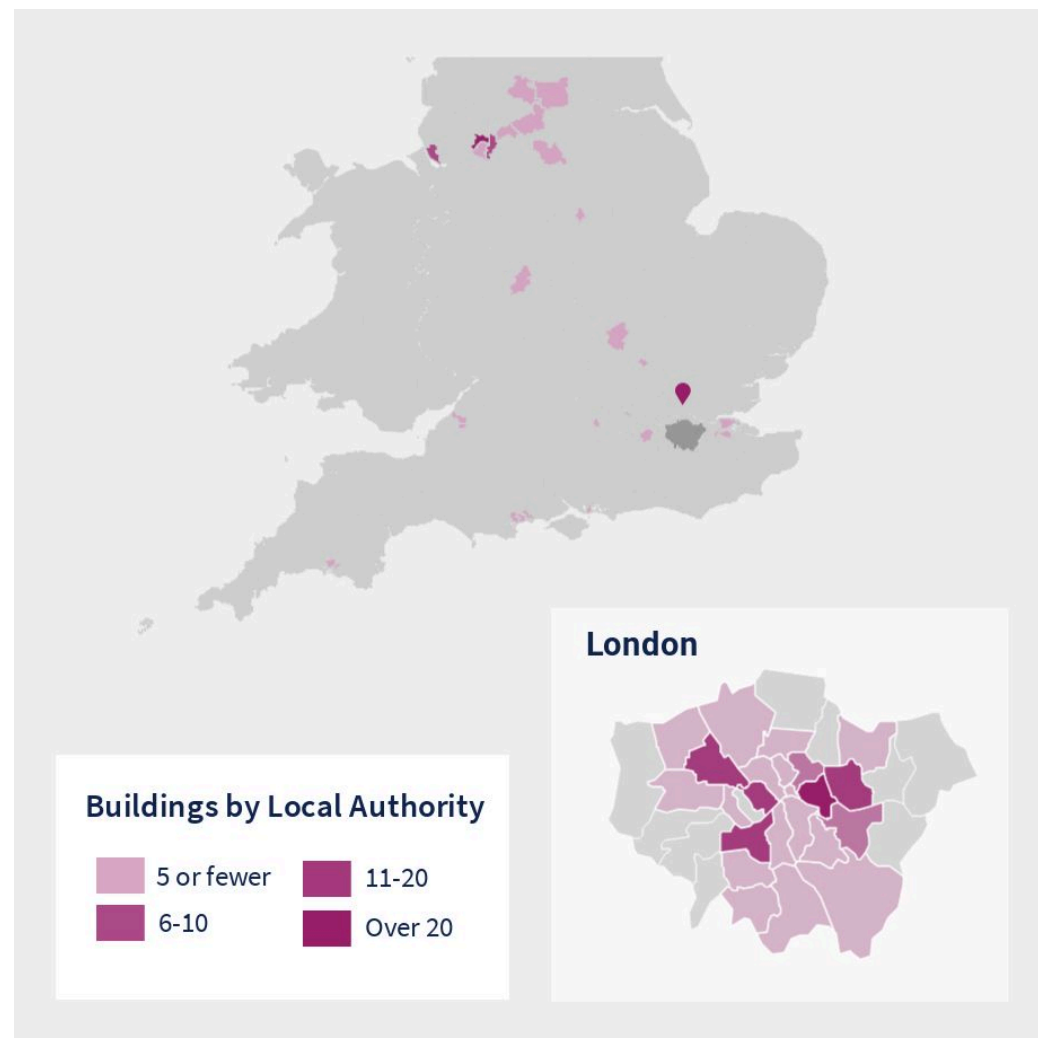
The cost for the remediation work is in many cases still falling on the leaseholder. MPs rejected the latest move to protect them from footing the bill for fire safety work, [as covered by The Guardian](#).

Greater London and Greater Manchester still have the highest number of at-risk buildings, with London's Tower Hamlets alone having 21. Salford is the only area outside of London with more than 10 as shown.

Some of these buildings have installed temporary measures to try to improve their safety whilst they wait for unsafe cladding to be removed and replaced. These are called Waking Watches, with 537 buildings appointing them. Several years on and the 'temporary measures' are still in place because buildings remain at risk, costing leaseholders £137 per month, or £246 in London, [according to the BBC](#).

The government has introduced a £30m Waking Watch Relief Fund. Housing Secretary Robert Jenrick said the fund was to help relieve the financial pressure on those residents and to ensure they are safe.

A breakdown of high-rise buildings with ACM cladding across England



Eyvind Andresen from HomeGround Management spoke about Waking Watches:

“A Waking Watch is a temporary safety measure for a building where fire safety issues have compromised the current fire strategy. The normal strategy for occupants of a building in the case of fire is they stay put in their flats and wait for the fire brigade to arrive to deal with the issue. Where there are fire safety issues the evacuation strategy normally changes to simultaneous evacuation meaning everyone has to get out.

“It’s a very controversial measure that’s come under a lot of scrutiny because of the cost. For some buildings it can amount to tens of thousands of pounds per week that would fall ordinarily through service charges. So in the long-term it’s unsustainable. An important point for high-rise buildings is the costs of that measure aren’t included in the current government funding. It’s a big issue that is still unresolved from the perspective of many residential occupiers.”





Historic building regulations and planning issues

In the mid-1980s Britain deregulated the building sector. This replaced the previously rigid steps, and gave developers the freedom to make the right calls, including regarding walls that would adequately resist the spread of fire. This was detailed on the [Which? Money Podcast 'Uncovering the UK's Cladding Scandal'](#).

These changes reduced 306 pages of building regulations to just 24. The guidance on external fire spread read:

External Fire Spread

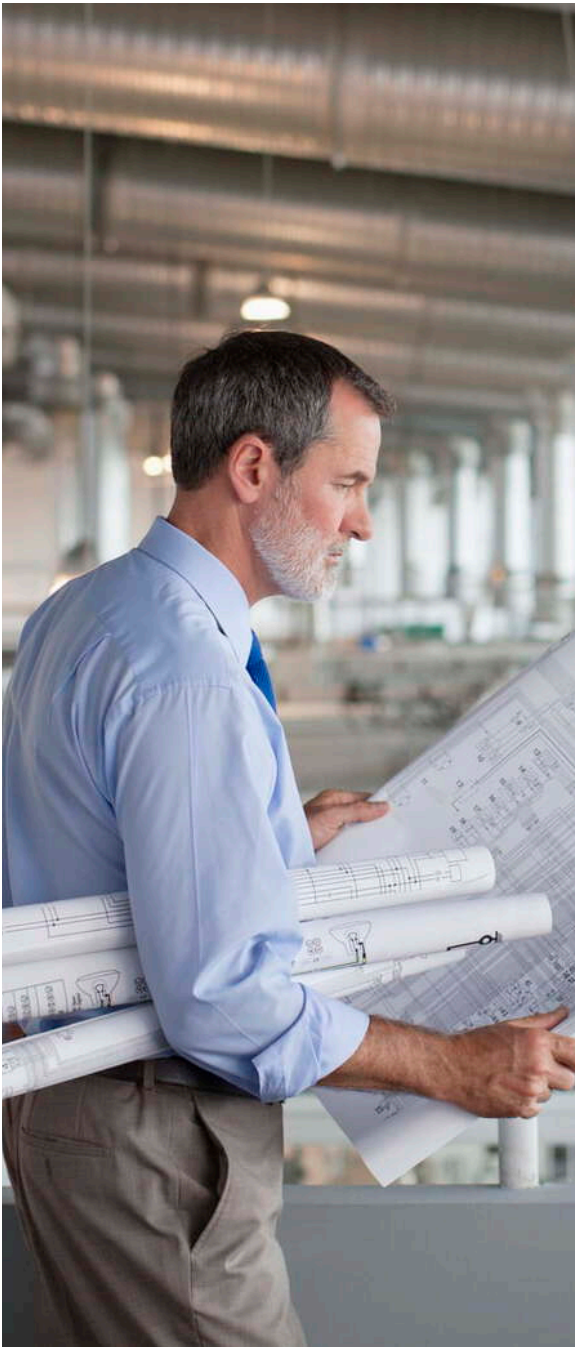
B4.—(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

The guidance on external walls is covered in just one sentence, as [Inside Housing explain](#).

The industry received a wake-up call in August 2016 when Shepherd's Bush tower block in London caught fire because of a faulty tumble dryer. The internal structure contained the flames, and fortunately no-one was hurt.

But the Shepherd's Bush fire spread up the side of the building in a similar style to Grenfell Tower. A review concluded that the external materials used (plywood board and polystyrene foam) were at fault.

In the wake of Grenfell Tower, the government has responded with plans to update the Building Safety and Fire Safety Bills. Read on for details and expert opinion on this.



The reforms and public safety

The Building Safety Bill 2019-20 was announced in the Queen's speech on 19 December 2019. It aims to put in place new and improved regulatory systems for building safety and construction products.

The draft bill takes forward the recommendations from Dame Judith Hackitt's review of building safety. The bill was summarised by [The Construction Index](#):

- A new building safety regulator
- New government powers to regulate construction materials and products
- Residents panels
- Complaints ombudsman
- Roles to be created for an 'accountable person' and 'building safety manager'
- Duty holders to be responsible for keeping safety information.

The British Safety Council has questioned the bill's lack of detail.

Irwin Mitchell's Claire Petricca-Riding spoke on the lack of continuity between building regulations and planning:

"Building regulations used to be part of the planning process and over time this hasn't been the case as the two regimes diverged. There needs to be a greater interplay between planning and building regulations because building safety is not necessarily a key element of the planning regime as that is left to building regulations to manage.

"Planning is about aesthetics and whether a particular development is in accordance with the local plan. We're having greater discussions at the moment about the planning

system and how this can contribute to creating safe spaces and safer communities. It's just trying to educate both developers large or small and also the sector of what that looks and feels like for them."

In April 2020, Housing Secretary Robert Jenrick also announced steps to introduce mandatory sprinkler systems and consistent wayfinding signage in all new high-rise blocks over 11 metres tall, as reported by [Design Buildings](#).

Changes are also coming to the [Fire Safety Bill](#). The updated bill aims to "put beyond doubt that the Fire Safety Order will require building owners and managers of multi-occupied residential premises of any height to fully consider and mitigate the risks of any external wall systems and fire doors."

Government funding

In February 2021, Housing Secretary Robert Jenrick announced a further £3.5 billion will be made available towards the remediation of unsafe cladding on high-rise buildings over 18 metres.

This will be paid for in due course through a new Developers Levy, where any developer who wishes to build a high-rise building in England will be faced with a new tax. This is expected to raise £2bn over the next 10 years.

The levy has been met by frustration from property developers, as reported by [The Construction Index](#). One developer said: “Why should a company that has never installed dangerous cladding, and perhaps never built high rise blocks in the past, be tarred with the same brush and penalised when they’re no more responsible for this scandal than those in other sectors?”

On 23 March, the Government announced they would ‘publish a consultation on a new tax on the largest residential property developers in the coming months’ with a view to introducing the tax in 2022. It’ll no doubt be hotly debated and fiercely resisted.

Housing Secretary Robert Jenrick has told the House of Commons that lower-rise buildings between 11 metres and 18 metres have “significantly lower” risk.

These buildings will also gain new protection from the costs of cladding removal in a long-term scheme designed on the basis of low interest, government-backed financing. Leaseholders have been promised they won’t pay any more than £50 a month towards the cladding removal. The proposal has been met with strong opposition.

HomeGround Management's Eyvind Andresen spoke about the difficulties accessing the remediation fund:

“We’ve seen the government’s delivery partners continually changing the procedures and putting in place new questions, hurdles, and barriers. It’s been a complex, expensive and time consuming process when the ultimate goal is to find a solution for costs that otherwise would fall to the leaseholders. We’re in continual dialogue with the government and its delivery partners.

“The £5bn [of government funding] is unlikely to touch the sides of the total problem. We and many other building owners are exploring a number of different avenues to cover the costs of remediation and fire safety issues that aren’t currently covered by the funds.”

Government funding timeline



16 May 2018

A £600m fund was made available for remediation of unsafe ACM cladding on buildings 18 metres or taller



11 March 2020

A further £1bn was announced to cover the removal and replacement of unsafe non-ACM cladding systems



31 January 2021

A £30m Waking Watch Relief Fund was announced to help relieve the costs on the leaseholders



10 February 2021

£3.5bn of the £5bn building safety fund was allocated to cladding remediation on buildings over 18 metres.

The Grenfell Tower Inquiry

On 15 June 2017, then-Prime Minister Theresa May ordered a public inquiry into the Grenfell Tower fire to review what happened and why.

The inquiry was split into two modules. Despite being suspended in March 2020 to help the UK navigate the COVID-19 pandemic, module one focused on the events on the night. It also tried to determine responsibility for the design and delivery of the 2012-16 refurbishments that clad the tower with flammable materials. It concluded in October later that year.

Module two began in November 2020, and focuses on product manufacturers 'including their testing, certification and the claims made in their marketing literature', according to [Building](#). The hearing is expected to go on into 2022.

A series of deeply concerning headlines have followed. Simon Allison of Landmark Chambers spoke on the proceedings:

"The Grenfell inquiry is absolutely essential; we need to learn lessons. A Judge led inquiry with proper investigation and formal evidence being presented is vital so that the public has confidence in the outcome and to give maximum weight to the recommendations."



Architect Brendan Geraghty acknowledged the mistakes across the industry:

"The failures of Grenfell are a collective failure of our industry and certainly architects need to take their responsibility in respect to how they contributed to that. Bringing a building together is an extremely complicated process. We need to be clearer on what we're specifying and why, so that it follows through the entire process. The people at the end of the process are residents and customers that we're here to serve. They should be able to trust and enjoy the product we're all creating."

Brendan Geraghty
Centred Architecture

For many years, the construction industry has grappled with the problems of asbestos as an insulation material. Housing Secretary Robert Jenrick, commenting upon the comparison, said that cladding 'needed to be seen in the context' of asbestos.

Both products are widely used for insulation and are now considered extremely dangerous. Even today, it's estimated that six million tonnes of asbestos remains in 1.5 million buildings across the UK, [according to ResPublica](#).

Whilst cladding can be extremely flammable, asbestos (once used as a fire-retardant material) can cause mesothelioma, an incurable form of cancer, and other very serious lung conditions. We've supported clients with asbestos-related conditions for almost 40 years.

Perspectives on the Cladding Crisis

A look at how the cladding crisis has impacted those across the industry.



Perspectives on the Cladding Crisis

The cladding crisis has affected people at each stage of the building lifecycle.

This part of the report looks at the different perspectives of people caught up in the crisis, including:

- [Leaseholders](#)
- [Freeholders and building owners](#)
- [Builders, developers and construction workers](#)
- [Chartered Surveyors and fire safety engineers](#)
- [Mortgage lenders and insurers.](#)



Leaseholders

Hundreds of thousands of people have been impacted by the cladding crisis.

Many are concerned for their safety because they live in a building with ACM cladding or another high-risk material, and almost all have faced the financial pressure of remediation costs.

Irwin Mitchell solicitor, Alison Hills is caught up in the crisis. She shared with us her situation, and one of another leaseholder who's a doctor on the front line dealing with COVID-19 patients. She stressed that he works most of the day fighting the pandemic and saving people's lives, before returning to an unsafe home where he faces a £50,000+ remediation bill

Others are unable to sell their property due to mortgage lenders and

insurers requesting a fire safety certificate, otherwise known as an EWS1 (External Wall System).

The Royal Institution of Chartered Surveyors (RICS) has responded to this with [simplified guidance designed to help leaseholders](#) (pictured).

Simon Allison of Landmark Chambers has sent his support to leaseholders:

“We all appreciate the difficult position leaseholders are in, not just leaseholders who just have their flat, but also where they've also got a share of their building. I think at this point the message is sit tight. We're all hoping that the government funding and support is going to get there. It might not get there for everything, but we hope it will make things at least affordable for the majority of leaseholders, with most major defects covered one way or the other.”

EWS1 guidance



Freeholders and building owners

Since the Grenfell Tower fire, freeholders and building owners have come under scrutiny.

They've been accused of passing the cost of remediation work onto leaseholders unfairly, with many suggesting they should absorb the financial burden themselves. MPs of the All-Party Parliamentary Group for Leasehold and Commonhold Reform shared their views with Lord Greenhalgh, the housing minister. The Group said: "freeholders should pay for cladding remediation or pass the freeholds on to the leaseholders living in the blocks," [as reported by Leasehold Knowledge](#).

But others disagree, including residential property manager [Bernie Wales](#): "The removal [of cladding] should not be a cost for freeholders, where those freeholders were not the developer who installed the (now) unsafe cladding."

In some cases where leaseholders are looking to sell, they're asking the freeholders and building owners to take all necessary steps to confirm the safety of the building by getting an EWS1 report. Whilst some are open to helping, others are not.

Eyvind Andreson drew on his experience of working with freeholders and developers so far:



We've worked with a number of responsible developers who came forward early in the process to offer voluntarily to remediate buildings where they had constructed them, and our clients had subsequently acquired them. But the response from developers has been inconsistent and their position has hardened as the extent of the problem across the industry has become more apparent.

In the role of the building owner, we're one of the number of entities who were sitting downstream of the construction and the regulatory framework left holding the baby of cladding. We must not forget that the building owner encompasses a number of different responsible entities that can include resident management companies who have the obligations to look after their buildings right to enfranchise companies and landlords of all shapes and sizes.

Eyvind Andreson

HomeGround Management



Builders, developers and construction workers

The building and construction industry has also come under criticism. Most can say they were abiding by the guidance set for them, and that they relied on regulators and others to follow the rules that were in place at the time. But some have undoubtedly made mistakes and taken shortcuts like those that led to the Grenfell Tower disaster.

Some construction firms are leading the way in remediating the dangerous materials from their buildings and are putting money aside for remediation work, as reported by [The Construction Industry](#) and [Construction Enquirer](#).

Mark Clinton, partner and head of construction at Irwin Mitchell, believes the problems lie within the lack of overall responsibility:

“It’s a very complex issue involving regulators, professionals and contractors, and suppliers. The tendency of the industry to go for lowest price tendering rather than focussing on best value and long-term collaborative relationships creates the environment for quality and safety issues to develop.

“The construction industry is fragmented with risk passed along a contractual chain. For some time now the majority of work on construction projects has been done by subcontractors. Main contractors are basically just organisers of the project. They don’t do much, if any, work themselves. Where product and collateral warranties exist, building owners and the funders may be able to go directly against sub-contractors and suppliers, if their claims are in time.”

Chartered Surveyors and fire safety engineers

Chartered Surveyors and fire safety engineers have been in high demand since the Grenfell Tower fire.

They're the only people who can sign off on highly sought-after EWS1 certificates, which are designed to provide assurance that a building is safe, or to outline what remedial work is needed. It's estimated there are only 300 people in the country who have the authority to sign off on these forms, [according to Move](#).

Recent guidance on flat dwellings has relieved some of the pressure on EWS1 certificates and surveyors, [as published by RICS](#). But there are still thousands of people across hundreds of buildings still uncertain of their safety and financial position.

Receiving an EWS1 certificate for a building can take 12-18 months once

the process is started, and if everything goes to plan, [a BBC case study reports](#). Barrister at Landmark Chambers, Simon Allison noted "it's been reported it could take up to 10 years for all the remediation to take place because there's only so many contractors able to do the work."

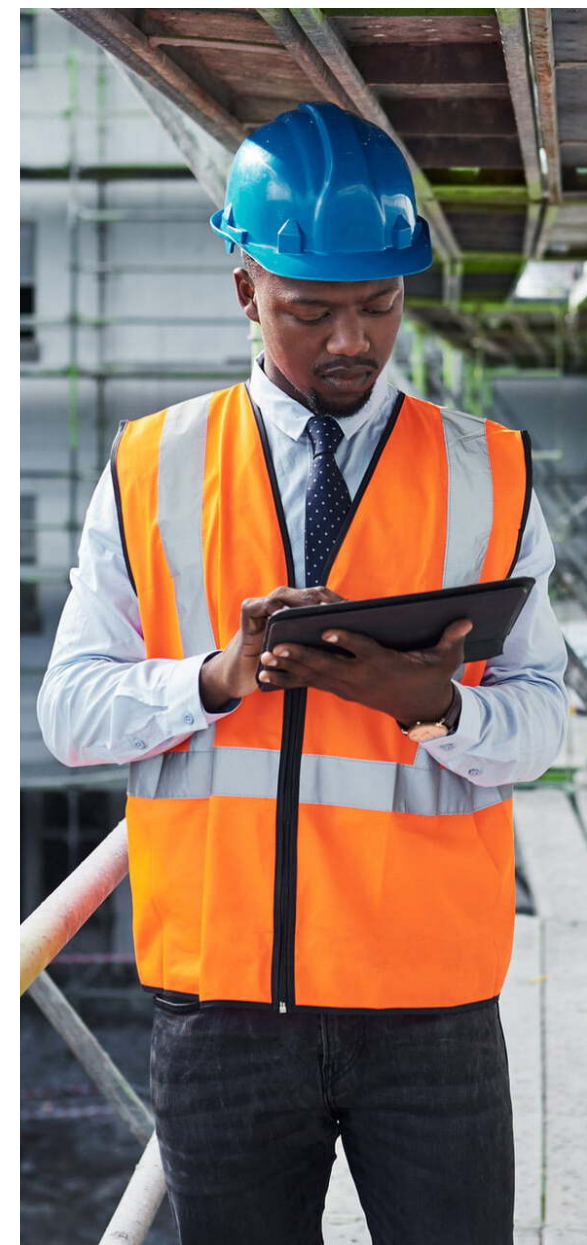
One qualified engineer has reported that even he's had issues signing off on EWS1 forms. He explained that insurance companies won't cover them if the form is wrong, [in an interview with the BBC](#). Getting professional indemnity insurance for issuing the certificates has also become expensive and difficult.

Up to 200 additional engineers are being trained by RICS to help cope with the demand, [according to the Fire Protection Association \(FPA\)](#).

The government's pledged £700,000 to help fund further training for these assessors. It's likely to take a significant amount of time before they're operational.

The EWS1 certificate is required for buildings of 18 metres and above. Brendan Geraghty of Centred Architecture explains the simple reason for this cut-off, which divides high-rise buildings:

"The 18 metre rule originates from the length of ladders that the fire department was able to bring to a scene. In a sense, six storeys is 18 metres and they could get access to the building to get people out. It hasn't evolved since then, and so above 18 metres there was a need for greater protection and clarity, and understanding about how the building will perform in fire conditions."



Mortgage lenders and insurers

A lot has been said about ‘mortgage prisoners’ as a result of the cladding crisis and the need for EWS1 certificates. People are unable to sell their homes because mortgage companies won’t finance the deal for the potential buyer.

Major banks have welcomed the latest guidance from RICS on EWS1 forms. But when asked if they would mortgage a property with a failed EWS1 form that now no longer needed one, none of the eight in question said yes, [the Telegraph reports](#). Most lenders say they’d assess each case on a building-by-building basis.

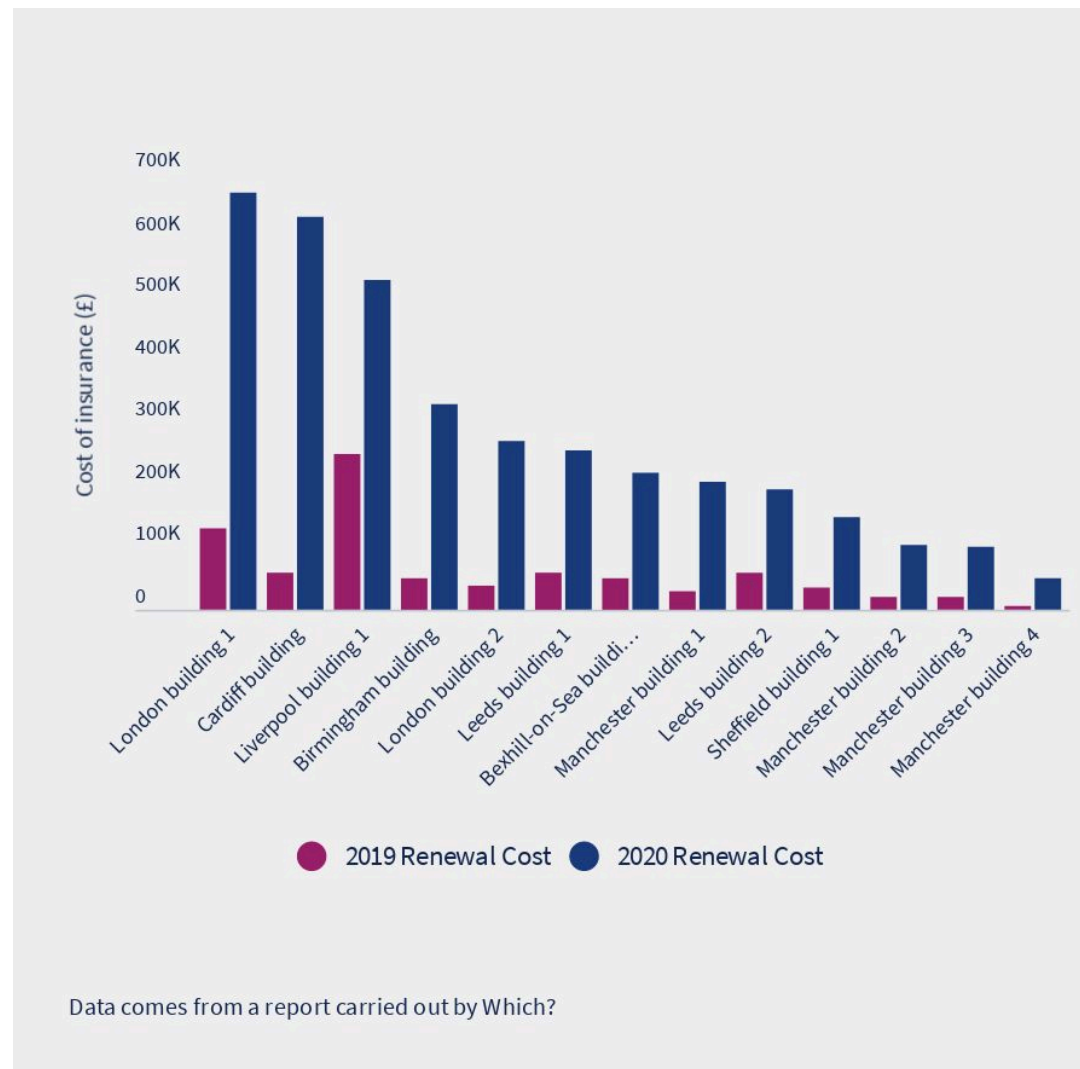
The cause of this ‘hard route’ is “education across the sector, not only for brokers but also lenders, with many simply not fully understanding the implications and requirements of the cladding situation,” Carl Shave,

director at Just Mortgage Brokers told [FT Adviser](#).

Jeremy Raj of Irwin Mitchell outlined: “The position with regard to mortgage lender requirements is evolving and what is desperately needed for the conveyancing industry is clarity.”

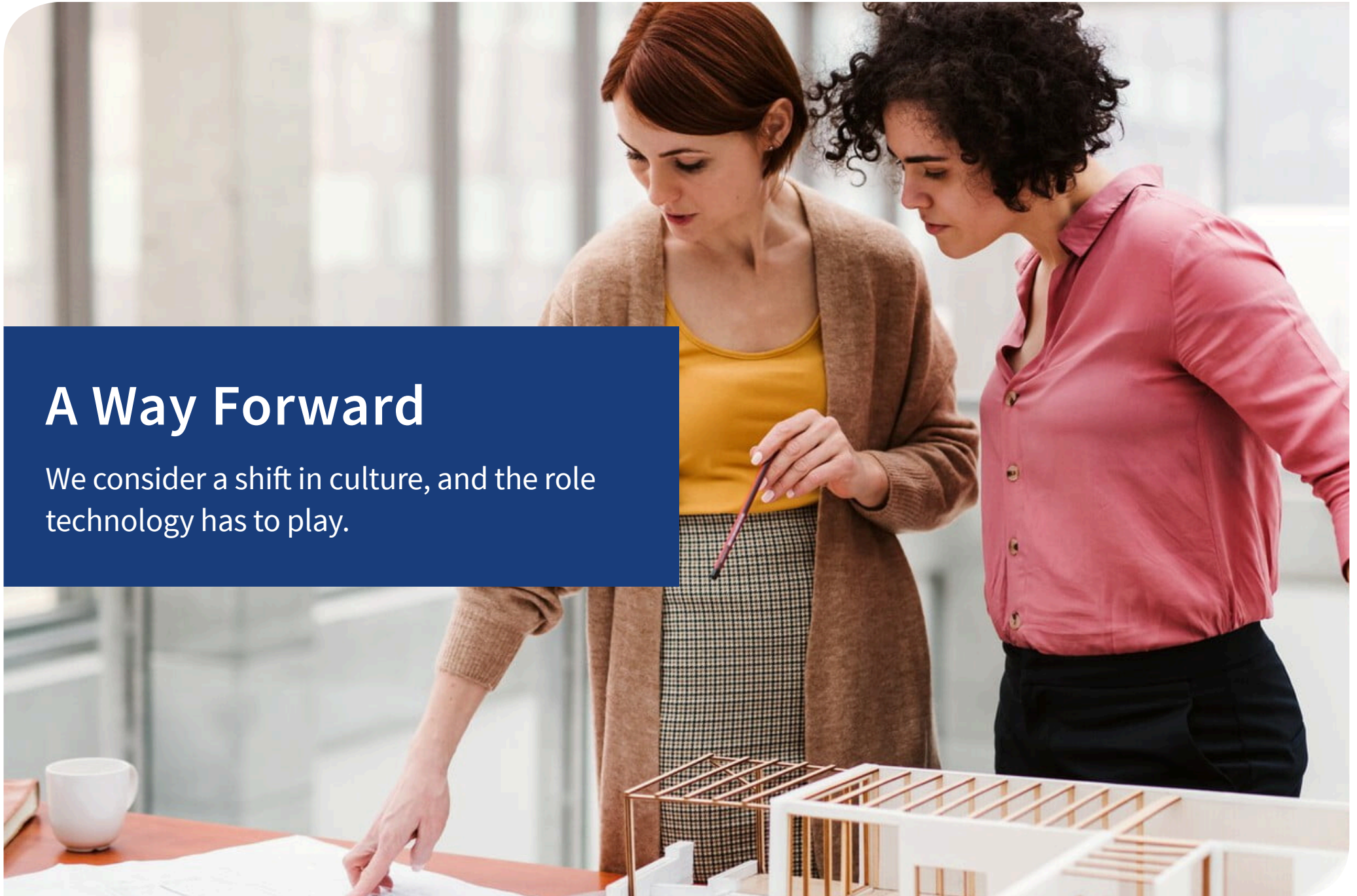
Residents of flats with cladding and other unsafe building materials are facing skyrocketing insurance bills, [research from Which? reveals](#).

A more extreme finding showed one building’s premium had risen 1,448% from £34,000 in 2019 to £525,000 in 2021. Others are paying upwards of £3,000 a year each for insurance. Which? also spoke with high-rise buildings from across the UK and compared their 2019 insurance costs with 2020. The findings are drastic as the graph shows.



A Way Forward

We consider a shift in culture, and the role technology has to play.



A Way Forward

BIM, safety standards and building control

Building information modelling (BIM) is intelligent 3D modelling that allows industry professionals to plan, design and manage buildings.

The adoption of BIM by industry professionals has grown substantially from 10% in 2010 to 70% in 2019. 60% of BIM-engaged respondents also reported a 60% increase in efficiency, [as reported by NBS](#).

Brendan Geraghty of Centred Architecture believes BIM is an important tool for the industry: “BIM standards allow the digitisation of construction from the initial design all the way through.”

BIM could and should help property managers and developers, who are expected to come under greater scrutiny from regulators.

As part of the remediation of cladding, businesses are applying to the Building Safety Fund to help pay for the works. But the funding applies only to the ‘relevant entity.’

Irwin Mitchell’s national head of construction Mark Clinton explains: “It’s the freeholder or the management company who’ll access the funding. They must first register the building before the government will do an assessment. Only then will they make a decision on funding.”

Mark predicts that these inspections will uncover more than just cladding issues in some cases, and they won’t be covered by the fund: “It’s the nature of a rectification project where you open up a building and find things you didn’t expect, and they won’t be necessarily funded.”

During our cladding event, partner at Irwin Mitchell Claire Petricca-Riding, spoke of her experience with clients getting it wrong with regulators: “We’ve acted for clients where they’ve said they didn’t realise they needed planning permission because they had building regulation approval and vice versa. This shows the need for education on these regimes.”

BIM is expected to play an important role in the safe management of buildings moving forward.



Modern Methods of Construction, digital twins and new builds

The UK construction industry contributes significantly to the UK economy. It represents 8% of Gross Domestic Product (GDP) and 9% of employment, and each year £150 billion is invested through the public and private sectors.

In a report titled ‘Modernise or Die’, Mark Farmer, CEO of Cast Consultancy, suggests that the failure to replace retiring workers and low productivity has left the construction industry facing “inexorable decline”. This is unless it embraces modern methods of construction (MMC), [as reported by RICS](#).

In recent years technology has come a long way, and many industries are using it to improve their product, service, and processes.

At our virtual event, architect Brendan Geraghty used the aeronautical industry as an example, explaining “they’ve been doing this for many years to stress-test the engines of their planes.”

One essential technological advance is the use of a digital twin. Brendan explained that “a digital twin is an advanced BIM model that captures physical components of a building. It can map, manage and analyse the dynamics within a building, and it allows us to look at a predicted model rather than a reactive one.”

Brendan summarised by saying this technology is available, but isn’t something that’s been implemented across the industry yet.

Moving forward, he believes technology will be key in developing high-rise buildings:



If we look at a wider spectrum including urbanisation, the efficient use of land, and the obligations under the Paris Agreement and net zero carbon, all of these things are relevant to how we design buildings in the future.

Technology will be a key factor in modern day construction, and this is some way from the errors made at Grenfell Tower.

Brendan Geraghty
Centred Architecture



Build to rent

To keep up with our growing population, we need between 225,000 and 275,000 new homes per year [according to the Department for Communities and Local Government](#).

One potential method to keep up with the growing demand is to embrace and adopt methods of pre-manufacturing. Constructing residential properties in purpose-built plants could be one way to accelerate construction, [Mark Farmer of Cast Consultancy explains](#).

And with 'generation rent' dominating the housing market, developers are expected to invest in purpose-built blocks of market rental homes, which is 'a relatively new phenomenon in Britain', [according to RICS](#).

Brendan Geraghty of Centred Architecture supports this theory: "Build to rent is an area where we'll see MMC played out quicker than perhaps in other areas of the residential sector."

Commercial to residential property

In our report 'The Changing Consumer', we reported that [46.7% of consumers now visit the high street less frequently](#).

177,000 high street jobs have already been lost, with another 200,000 expected to follow by the end of 2021. Wary consumers are shifting online, and now many people are working at home leaving our once bustling high streets virtually empty.

The newfound availability of commercial spaces, including newly redundant offices, is presenting opportunities to the residential property market.

In an interview with a Bdaily, property firm RFM Group said that converting office and retail space could [save the high street and boost the UK economy](#). They're focusing on the

creation of social housing in these spaces to create a shift to more community-focused city centres.

Irwin Mitchell's head of residential property Jeremy Raj said: "A lot of the high streets in a lot of our towns are looking at retail being converted into residential."

Claire Petricca-Riding of Irwin Mitchell believes companies will be in favour of this because "if you're doing internal works only, you won't need to apply for planning permission."

This could make the process of converting an empty office or high street store into residential property more straightforward. If companies need to make changes to the building's exterior however, they'll need to submit an application for planning permission. This could be

delayed due to the backlog caused by COVID-19.

Claire added: "We've also been discussing the conversion of class E retail space to residential property. Conversions allowed by permitted development will bring cladding into the heart of the planning and building safety regime where we're dealing with large scale residential conversions.

"The beauty of the permitted development conversions is that they don't need to go through the full planning application process to get consent. This makes conversions more cost and time effective to obtain. This means however keeping the external appearance the same as it was before and this might include inappropriate cladding materials for the new end use."



Creating a consumer culture

Without a customer, there's no need for a product.

But with the demand for housing so high and plenty of 'customers', does this mean that quality control can waiver because they'll sell anyway? Or is the demand just so high that standards slip because of the pressure on the industry?

Irwin Mitchell's national head of construction Mark Clinton suggests companies would rather distance themselves from the responsibility than be proud to have their name against the product. Mark said: "The culture of dealing with risk in the construction industry has seen a trend of passing it down the contractual chain."

The Consumer Rights Act 2015 helps consumers to understand their rights when purchasing goods or services and entering into a contract with a business. If they have grounds, customers can walk away from that contract with the backing of the act.

In the wake of the cladding crisis, some leaseholders have asked if they can just walk away. However, barrister Simon Allison confirms: "you can't just hand your flat back or forfeit your own lease."

Buyers of new build properties are therefore finding themselves trapped, with no easy remedy available.

Is it time for a culture change? Architect Brendan Geraghty supports the idea.



Moving forward is about taking control of the product you're producing and having a relationship with the customer who's purchasing from you.

Our customers are the people who buy and rent our apartments and houses, and they've got to be our primary focus.

Successful businesses are built around happy customers. Understanding the customer base and pitching towards that, and providing a project that they want and will value, is an increasing part of the agenda.

Brendan Geraghty

Centred Architecture



Wider factors affecting cladding

It's almost four years since the Grenfell Tower fire. The investigations, remediation works and proposals for how to remedy the situation remain a hot topic.

In this time the industry's also had to navigate Brexit and the coronavirus pandemic.

Britain left the European Union at midnight on 31 January 2020, with the new UK-EU relationship taking effect from 1 January 2021. The UK lost 25% of its EU-born construction workforce between 2020 and 2021. The UK was warned of a "major skills shortage" across the construction industry, as covered by [Home Building](#).

It's reported that more than a third of the buildings that were found to have ACM cladding still have it. This is despite the government originally pledging that all of this would be replaced by June 2020, [a BBC podcast understands](#).

At the time of the first national lockdown, remediation work on high-rise buildings with flammable cladding was paused on 81 of the 142 buildings undergoing work at the time, [according to the FPA](#). Construction workers and staff across the industry were told to stay at home, whilst others were furloughed.

Remediation work was allowed to continue with the government stating the cladding crisis is a matter of 'critical public safety,' [as reported by Lexis PSL](#). Work continued despite a further two national lockdowns.

Brighter Days Ahead

A 10 point plan with recommendations for our government and the industry.





Brighter Days Ahead

Learnings for the Government

For all the confusion and disagreement in the press, in politics and across the housing market, one thing remains clear. It's time for all involved to make changes and learn from previous mistakes.

Our panel of experts have combined their expertise and years of experience to present a series of recommendations. We believe they'll help the government and the industry to move forward.

The headline recommendations for our 10 point plan are:

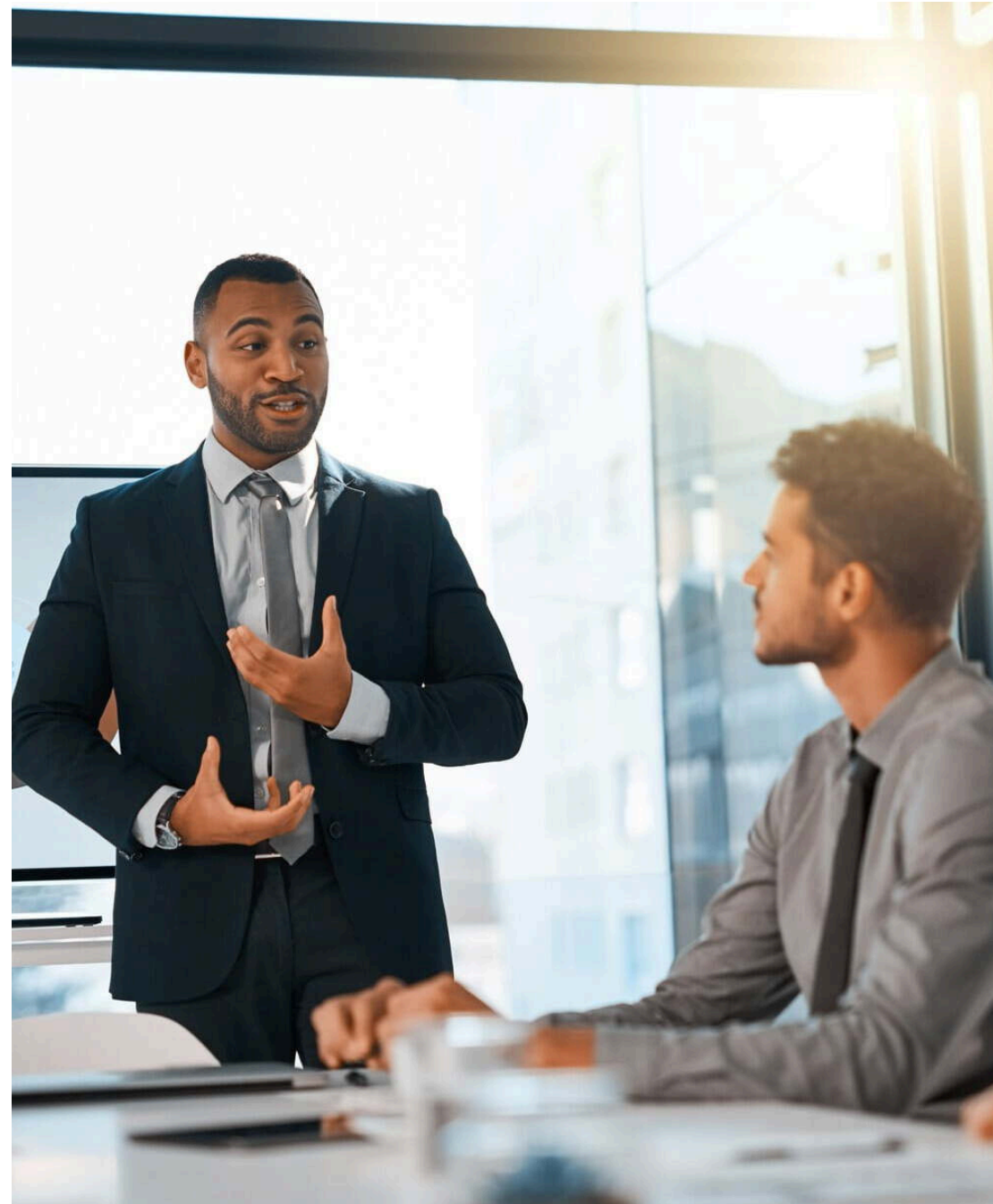
1. The figures some leaseholders are being asked to pay for remediation works are financially crippling, unrealistic and unjustified. They must be given up-front government funding, which they shouldn't have to repay. Wherever possible this should be offset by future clawback from the parties deemed to have been at fault. Such liability must be determined properly through due legal process.
2. Access to government funding for remediation works must then be made easier and faster. Often the wrong people have been left dealing with things. The fund must be significantly increased to cover all dangerous materials or defects including those discovered during remediation. We propose a minimum of £15bn. It should be available for all dangerous buildings, regardless of height.

3. The government should give freeholders a statutory right to install, maintain and charge for new systems that will help make properties safe. This includes whole-building sprinkler systems and fire alarms. We agree that these costs should be paid for by leaseholders. However, installation will reduce the need for Waking Watches and their associated costs, which typically fall on leaseholders.

4. Planning and building regulations must have greater cohesion and work in tandem with digital and regular on the ground oversight. These must be easily reviewed and checked. Regulations should cover safety and not just aesthetics. Online details of all at-risk buildings, relevant defects, safety features and evacuation procedures should be available to all, including potential homebuyers.

5. The privatisation of building control has proved dangerous. It needs a complete overhaul with clear, integrated lines of responsibility and best use of the technology that's currently available. Total independence and wide powers to review and intervene where necessary are required.

6. Certification of safe building materials and methods must be similarly and radically overhauled, so that the failings exposed by the Grenfell Tower inquiry can never be repeated. Sub-contractors must not be allowed to substitute materials. Risk should not be watered down through the contractual chain to the point of no responsibility.



7. Special provision must be made for disabled occupants of high-risk buildings as quickly as possible. This would include easily available relevant information for fire and rescue services and tailored escape plans.

8. We must learn from what others are doing. The Building Information Modelling (BIM) standards that were developed in the UK have been adopted across the world. But other countries, such as Ireland, have a much more rigorous approach to regulation and enforcement. Digitised record keeping and Modern Methods of Construction must continue to be standardised.

9. We need to accelerate the provision for surveyors able to issue EWS1 certificates. The Fire Safety industry needs similar support. Relative costs are minor and well worth investing in. Many are trapped awaiting administrative assistance that's keeping their lives on hold.

10. We must be able to look back in years to come at the Grenfell Tower disaster as a watershed moment for the industry and its regulators. It should mark the start of a new era for building standards and the safety of people in high-rise properties.

As a business, we're committed to helping make this happen.



Final Comments

A summary from our experts.





People's safety is the greatest driver for the construction industry to continue with remediation as quickly as possible. But the industry needs the government's support with funding agreements. The construction industry also needs to consider its role in the whole issue. Adversarial contracting, risk-dumping, lowest price tendering, trading on wafer-thin profit margins and training and skills should all come under the microscope. Whether the industry can change its ways is doubtful, but if Grenfell can't bring fundamental change, it's difficult to see what can.

Mark Clinton
Irwin Mitchell



The industry is in a transition period from traditional methods to a new digital age. It has certainly learnt the hard way with the Grenfell Tower fire, but it's extremely important this marks a time for change. New revolutionary technology will help bring more efficient and cohesive ways of working, and improved safety for residents.

Brendan Geraghty
Centred Architecture



Unfortunately the £5bn that's been put aside for remediation works isn't expected to rectify the situation, far from it. The government needs to put up the cost to resolve this crisis, and make funding accessible to those who need it. Freeholders and building owners shouldn't need to front the bill where they're not at fault, and this cost shouldn't be passed onto the leaseholders.

Eyvind Andreson
HomeGround Management



For the industry to move forward, safety and building regulations must be at the centre of the planning regime, not the afterthought of something which happens at a later time as it is now. The sector must come together and work as one in both high-rise properties in remediation and those of the future. It'll also be interesting to see the latest trends, with many professionals expecting a shift in high street commercial space to residential property.

Claire Petricca-Riding
Irwin Mitchell



Leaseholders must keep up the pressure on the government in the right way. Funding and remediation work are getting there, albeit slower than all would like. I'm confident the current crisis will eventually become largely resolved. We must learn lessons from this, particularly in my view within the construction industry, to ensure it can't happen again and, to the extent it does, ensure that appropriate parties are held to account.

Simon Allison
Landmark Chambers

Final comment

"No single group or entity can fairly be said to have caused the horrific events of Grenfell. Neither is there one responsible for the failings within the many thousands of our homes that have subsequently been revealed as unsafe.

"We mustn't let the desire to find a villain mask what a complicated and important issue this is. Clearly, massive regulatory failure has enabled many of the problems we've seen. So it's right that a rigorous legal process is followed to correctly apportion blame. Those investigations will take time. But it isn't appropriate to expect homeowners to endure further delays, and a better solution must be found for them.

"The response from Government so far has been slow, inadequate and hugely disappointing for many. We shouldn't allow the spotlight to turn away and better solutions are needed now. The industry and those that work within it must accept their share of the responsibility. We all need to work hard for better regulatory oversight, safer homes, accountability for past failings and a fairer outcome for those caught up in this scandal."

Jeremy Raj

Head of Residential Property, Irwin Mitchell



Thank you for reading

Cladding - A Way Forward