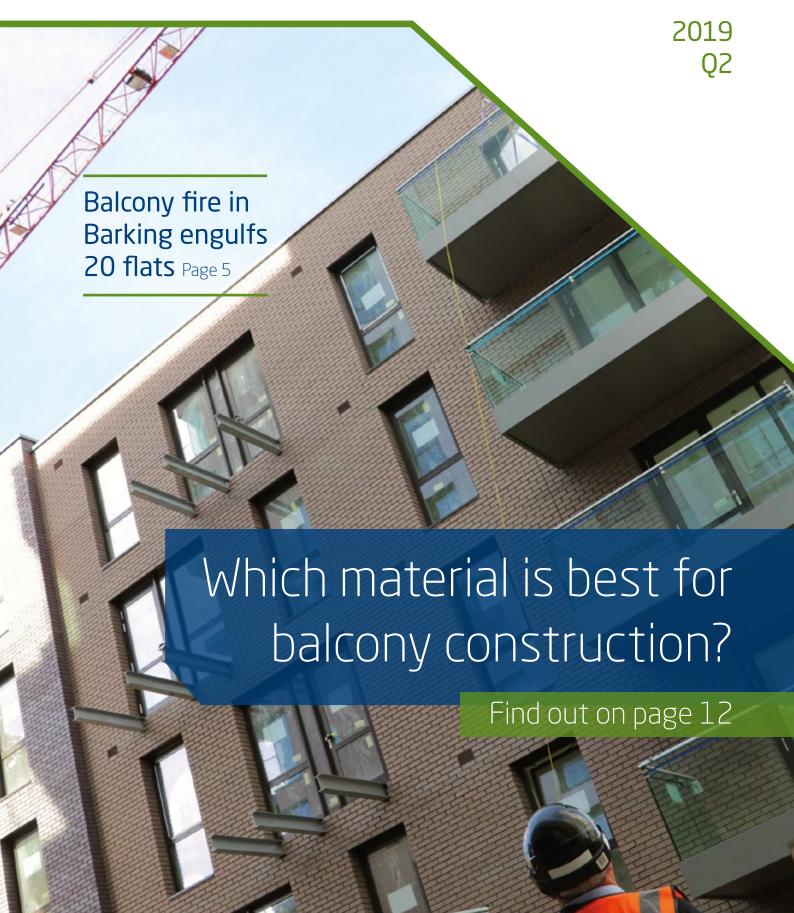
# INSIGHT



The News Magazine From Sapphire





#### Editor

Hello I'm Mary, I'd love to hear your ideas for future content, or questions you would like our experts to answer in future issues. You can email me at mary.mccollum@sapphire.eu.com

In this issue of Insight, we explore the characteristics and benefits of metals used in balcony construction. In the context of the cladding ban and the recent balcony fire at Barking, the materials used in the construction of balconies has drawn the attention of

developers and the public alike. While balconies under 18 meters are excluded from the ban, they aren't excluded from public scrutiny. In this issue we will discuss the use of steel, stainless steel and aluminium and their best use for optimised cost and structural efficiency.

# Editor's Overview

75% of all aluminium produced since the 1880's is still in use!

With expert advice from Tim Hill, our R&D team leader, a guest feature from the Council for Aluminium in Building and an in depth look at anodising aluminium from our supply chain partner, Spa Aluminium.

Mary McCollum
Mary McCollum



#### **Event Coordinator**

Hello I'm Regan, we run regular industry roundtable events and CPD's. To join an event or to book a balcony design, balcony fires or drainage CPD, email me at regan.cook@sapphire.eu.com

Regan Cook

Regan Cook

## Read more...

...about our Reading Roundtable event on page 9.

## Events



#### Hindsight

NHBC Building for Tomorrow **25th April** 

Sea Containers Roundtable **30th May** 

Reading Roundtable **26th June** 

Contact me to book a CPD, Fire CPD or Design Meeting today!



#### **Foresight**

## Gherkin Fire Roundtable & CPDs 4th September 2019

This roundtable discussion will be focused on the topic of reducing fire risks on high rise residential buildings with balconies. The afternoon session will include multiple CPD presentations from industry leaders. The event is free of charge.

## Manchester Fire Roundtable &CPDs **Sep-Oct**

This morning roundtable will also be focused on reducing fire risks on high-rise residential buildings, particularly focused on the Manchester area. The afternoon, likewise, will include a number of CPD presentations. The event will be free to attend.

## Industry Insight

3/20
iiii architects say they have a good





#### **Technical Advice**

Hello I'm Nick, I keep up to date with latest industry changes and regulations, to guide clients with technical design at early design stages of projects, email me at nick.haughton@sapphire.eu.com

63%

of respondents said CPDs or further training would help June this year was again a bad month for balconies with 3 significant fires.

Coupled with this, the ban continues to present a challenge with laminate glass. Glass has long been a favoured balustrade material. However, balustrade integrity post breakage, and the dangers of falling particles have driven the use of laminate.

Sapphire has been at the forefront of the change to laminated from monolithic. However the recent AD B changes have effectively banned the use of laminated glass in balustrades, while still permitting its use in windows.

Regards

Nick Haughton

Nick Haughton

83%



of Quantity Surveyors said metal was their preferred

material for balconies

Laminate: To be, or not to be...

Along with many other industry leaders, we feel this ban was inadvertent and the risk of fire spread from the interlayer is minimal compared with the risks of monolithic glass in the event of breakage.

After much lobbying, the MHCLG has now commissioned a working group to review the wording of the new regulation and its overall impact on building safety, including propose alternatives by end July.

Our Technical Director Andrew Parsons has been selected to contribute to this group, so hopefully the issue will shortly be resolved.

63%



concrete balconies

## April Fools: The Gardony

We started the quarter with a bit of fun – our annual April Fools video! This year, The Gardony captured the imaginations of our followers reaching well over 200K views on social media alone! This self-sustaining balcony garden concept was so believable because of our well-known innovative thinking and dynamic R&D department.



The original video as well as the behind the scenes reveal video can be found on our YouTube channel.



# Sapphire Attends the Historic 'Topping Out' Ceremony with Wates

The roots of the 'topping out' ceremony date back to pagan times and continues its rich history at Wates today.

During the ceremony Wates executives, including James Wates himself, lay a brick each on the rooftop to commemorate the building structure reaching it's full height.

Historically, pagans would top new buildings with the topmost leafy branch in a show of gratitude to the tree and to ensure the tree spirit would not be left homeless. The topping out ceremony is now common in high rise buildings marking the successful addition of a building to the skyline.



# Sapphire proudly supports Berkeley in charity boxing event

On Friday 31st May Andy Carson, Operations Director at Berkeley Group took part in a sponsored white-collar boxing event to raise funds for Mind – The Mental Health Charity.

The event took place at the O2 arena in London as Mr Carson,

quite literally, fought to end the stigma around mental health and to aid Mind in their efforts supporting those struggling. Coming just 2 weeks after Mental Health Awareness Week the event raised in excess of £15K which is sure to help those in need.

"This is close to my heart and we need to do more."

Andrew Carson

## Balcony Fire Engulfs London Flats

Yet another balcony fire has destroyed 20 flats and damaged 10 more in Barking, **East London.** 

The fire quickly spread over 6 floors forcing residents to flee leaving their possessions behind.

The fire took about 100 firefighters more than 2 hours to extinguish and residents took shelter in the Thames View Community Centre.

One resident, Mihaela Gheorghe, said she had previously raised

"several issues" concerning the safety of the wooden balconies with various parties including the council.

This fire follows just weeks after a blaze broke out at flats in the north of London which, according to a witness forced hundreds to be evacuated.

As a result, Mayor Sadiq Khan has demanded a review of the Barking Riverside development calling the fire "shocking" and stating it could easily have

resulted in deaths. He also revealed that City Hall had already had concerns over the safety of the building.

While the Combustible Cladding ban prohibits the use of combustible materials on the exterior of buildings over 18 metres, it does not regulate smaller or pre-existing buildings.

While not necessarily illegal, should the industry continue to use combustible materials on building exteriors?

"This incident highlights both City Hall's total lack of powers over private building owners and the woefully slow response from the government and developers to the tragic fire at Grenfell Tower - two years on, residents in blocks of flats are still living in fear that their buildings are unsafe."

Sadig Khan - Mayor of London



Barking, East London Fire



### **INSIGHT SPOTLIGHT**



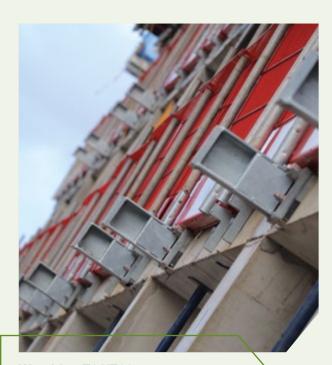
#### **Tottenham Hale**

Cranes at Tottenham Hale illuminated by the early morning sun. Image credit: E. Ellis, Wates



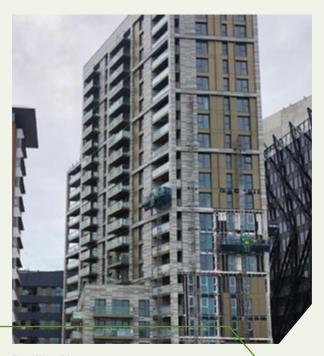
#### **White City**

Work is well underway at White City adjacent to London's vibrant Westfield shopping centre.



#### Wembley E01/E02

Recently cast anchors and stubs await arms at Wembley E01/E02 for balcony install.



#### **Dudley House**

The bronze balcony fascias link seamlessly with the bronze façade at Dudley House.

Image credit: G. Wales, McKean Developments

# Sapphire Reveals a New Photorealistic Balcony Configurator

We are excited to announce a new photo realistic balcony configurator!

This exciting addition to our website will allow users to simply create photorealistic images of a

balcony changing the design of the components from decking to soffits to balustrades.

Visit www.sapphire.eu.com/ photorealistic-configurator



# 25 Balconies Installed in 1 Day!



Image credit: B. Hooper, Dantaag

An impressive day's work at Berkeley Group's Southall Waterside as our accredited install partners Dantaag install 25 balconies in just one day.

### The Glide-On™ system living up to its name.

The feat marks the 4th highest number installed in a day in our history and shows the Glide-On™ system living up to its name. The simple yet revolutionary Glide-On™ technology allows balconies to be lifted from lorry beds to steel arms quickly and safely.

The current record stands at 34 balconies installed in a day but with our continued innovations it won't be long until we reach even higher.

# Sapphire staff pitch in at the Thames Hospice charity walk

On Saturday 18th May 4 of the Sapphire team attended the **Thames Hospice sponsored** charity walk as RRT volunteers.

The Sunflower Walk took place at the beautiful Virginia Waters, part of the Royal Windsor Great Park in Berkshire. Participants could take in the sights along either a 4k, 6.5k or 13k route!

The Rapid Relief Team distributed free water to participants



throughout the walk and at the finish line and our willing colleagues John, Ruth, Nick and Cassia supported as volunteers.

## All About Anodised Aluminium

Aluminium is a wonderfully versatile material, popular in a diverse variety of applications. When considering finishing options many product designers and specifiers choose anodising for its unique aesthetic appearance and protection qualities.

Often unlike powder coating, which is applied to the surface of a product, the anodic film created during anodising becomes an inherent part of the aluminium offering potentially superior durability qualities without compromising the metallic appearance.

By submerging a profile, panel or component in a sulphuric acid-based solution and stimulating with an electric current it is possible to accelerate aluminium's natural corrosive property in a controlled manner, forming a protective layer. The thickness of film built within the pore structure of the surface is measured in microns; as a general rule 5 microns is suitable for indoor applications, 15 for light external and up to 25 for external marine environments.

In addition to the "natural" or "silver" finish produced in this method it is possible to introduce a secondary stage to colour the surface. This can be done in two ways; either by using a pigment to dye the material or by using an electrolyte. The major benefit of the electrolytic process is that the result is colourfast meaning that it can be used on external applications without suffering from fading when exposed to UV light.

A variety of polished techniques can also be applied to the aluminium prior to the anodising process to give an array of stunning bright and linished combination finishes. An example of this is Spa Aluminium's "Stainless Steel Effect" which has proven very popular in a range of glazing, partitioning and balustrade applications, many contractors prefer using aluminium as it is more versatile to work with and lighter, the "stainless steel effect" finish enables them to compliment steel hinges, patch fittings etc with profiles.

Most architectural anodisers will offer a minimum 25-year guarantee on architectural standard work providing specified maintenance procedures are followed, affording architects and specifiers a comparable warranty to powder coated products.



# Sadiq Khan Takes Aim at London's Housing Crisis

London's mayor is making efforts to tackle the capital's housing shortage by setting ambitious goals and applying pressure for additional funding.

In May figures released showed a record-breaking number of affordable homes were initiated with City Hall's support. The figures also included the highest number of council homes in London in 34 years, since 1985.

Khan has more than doubled the number of homes started in Boris Johnson's final year, totalling 14,544 affordable homes.

The mayor's Affordable Homes Programme, launched in 2016 is set to complete in March 2022,

has secured a total of £4.8bn in funding from the government.

However, a new study by City Hall has found that £4.9bn is needed per year to deliver the amount of affordable housing the city needs, 7 times more than current funding levels.



"We currently receive only a fraction of the affordable housing investment needed in London."

Sadiq Khan - Mayor of London



We are your experts in container planting. We know what brings life to your balcony & appeal to your buyers

- Creates buyer appeal.
- Preplanted solutions designed for life on your high rise balconies.
- Watertanks built into planters.
- Lightweight planting medium
- Anti-leach planting bags.
- Planter styles can reflect your buildings theme aspiration.



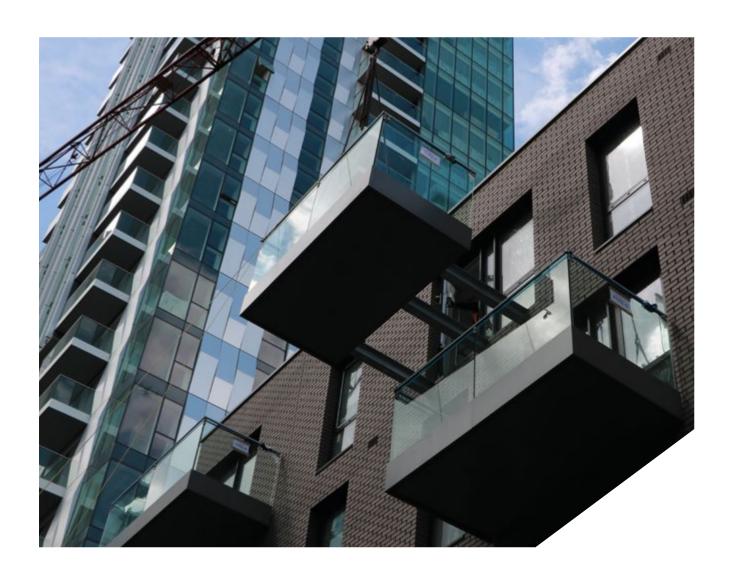
Follow us on Instagram.com/balcon.me or visit www.balcon.me

# Speedy Installation Stuns at Woodberry 1B

Sapphire's innovative offsite prefinished balcony system enabled the 20 balconies installed to be delivered and installed rapidly at North London's Woodberry Down. All balconies were delivered and installed in a single day, leaving onlookers stunned. Berkeley Group themselves were doubtful this could be achieved, until it unfolded in front of them.

"I even lost a bet thinking that it wasn't possible!"

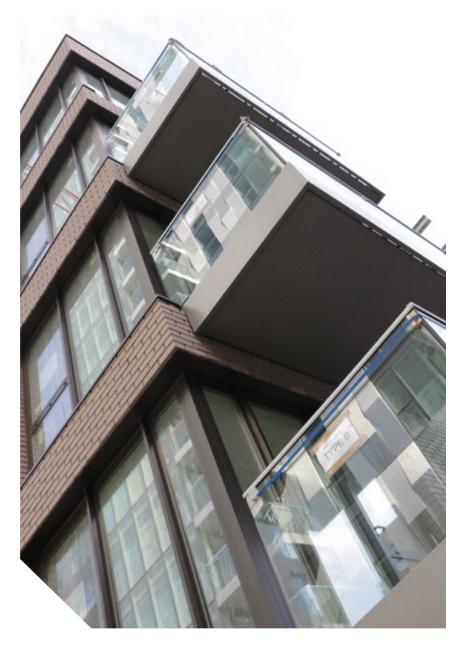
Site Manager -Berkeley Group



alconies were manufactured offsite in one of Sapphire's production facilities while connections were being completed. With the building prepared the prefinished balcony units, complete with glass balustrades and soffits, were transported to site ready for fixing to the façade using the system's innovative connectors. Sapphire's fast-track solution saved the housebuilder time. labour and crane hire charges. Once again, Sapphire's Glide-On™ system has allowed record-breaking balcony installation speeds. As soon as the installation team got up and running, they were able to unload and install a lorry-load of six balcony units in just under an hour. In addition, Sapphire designed special first-fix bracketry to suit the apartment building's timber frame construction.

Aimed specifically at the high-rise housebuilding sector, Sapphire's Glide-On™ balcony system makes balcony installation simpler, faster and more cost-effective. Allowing high quality residential projects like Woodberry Down to have balconies installed rapidly and to excellent factory quality standards. Manufacturing and finishing balconies in its factories allow Sapphire to maintain a high degree of quality control and efficiency. In addition, Sapphire's offsite solution helps minimise site time and associated costs, such as scaffolding and crane hire, and product quality is kept consistently high compared with completing more of the work on site.

Balconies installed on the apartments at Woodberry Down incorporate Crystal® glazed balustrades. The structural



glass panels are combined with a stainless-steel top rail which enhances the minimalist appearance whilst offering high corrosion resistance. Being a frameless balustrade system, Crystal® requires no vertical support posts so residents can enjoy clear views over the capital.

In addition to this phase of Woodberry Down, Sapphire has also manufactured and installed over 150 glide-on balconies for Skyline, the development's 30-storey residential tower. Once all phases are completed Woodberry Down will deliver around 5,500 new homes,

situated alongside reservoirs and open spaces and yet just a short distance from Central London and the City.

## **Key Stats**

Architect: **Waugh Thisleton** Developer: **Berkeley Group** Contractor: **Berkeley Group** 

Installers: **Thomas Anderson** 

Steels

Balconies: 20 Storeys:

Location: London

# Ask The Expert

Which metal is best for balcony construction? A good question and not easy to define without some explanation. Between 1992 and 2009 we specialised in stainless steel and aluminium balustrades. Then from 2009 to 2014 we were using mainly galvanised steel balconies along with our balustrade systems.

Since, we've developed our unique hybrid Glide-On™ system which uses all three metals! So, with all this experience we have a good knowledge of their characteristics.



#### Tim Hill

Tim leads our R&D team developing innovative new solutions to challenges. From StubGuard™ to unannounced innovations Tim's expertise are regularly put to the test in developments at Sapphire.

# Q: What standards must balcony materials meet?

A: Must be class A non-combustible, which all three metals are.

Most warranty providers are looking for a 60-year design life.

Aluminium and stainless meet this condition, steel can if properly coated.

# Q: What material should soffits be made from?

A: They will often perform a drainage function and are subject to prolonged water contact, so a non-corroding material is necessary, of which aluminium is lighter and lower cost than stainless steel.



### Q: Is aluminium or steel better in a fire?

Neither burn – both are class A1.

Following our tests at Exova, we found that an aluminium soffit will keep the area above cooler due to its capacity to 'heat-sink' and reflect heat. While steel has a higher melting point, the amount of energy needed to melt it is nearly identical to aluminium.

Finally, an external fire will not reach such high temperatures as it would in an enclosed space. Either is suitable but aluminium is preferred in an escape scenario, because of heat sinking.

## Q: Should I choose the metal based on strength or lightweight properties? What about the number of connections?

Choosing a lightweight balcony structure (e.g. aluminium) with stronger anchors minimises the number of penetrations required for connections. This leads to thermal improvements with direct cost savings requiring fewer fire stops, waterproofing interruptions and façade trims.

The lighter the balcony the fewer connections required. Aluminium balcony frames weigh less than half of steel. Using aluminium frame, decking, soffits and vertical bars would mean a total weight of around 500-700kg whereas a steel version with WPC decking would be at least 1500kg.

Anchors, stubs and arms are made using a combination of stainless steel and galvanised steel.

## Q: Which material has most design flexibility?

Steel, aluminium and stainless are all easy to profile and fold. All can be welded too. Unlike stainless and steel, aluminium is easy and cheap to extrude meaning bespoke designs can be easily created.

All can be powder coated, but steel must be corrosion treated first. Aluminium can also be anodised or brushed anodised.

## Q: Does my material choice affect my balcony deflection?

Strength comes primarily from the anchors, the lighter the balcony and stronger the anchors, the fewer vou need.

Bolt on balconies often rely on the strength of steel to stop flex in the balcony back member. Glide-On™ means moment forces are transferred to the slab edge, the best place to resist it.

### Q: Which material minimises corrosion risk?

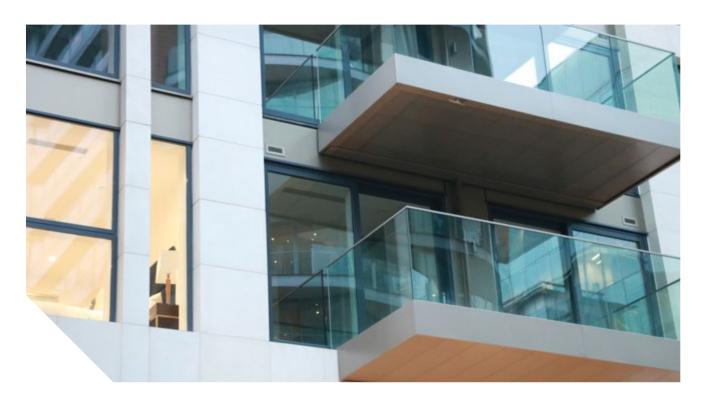
Steel can rust so all parts need to be galvanised or coated with a corrosion resistant finish, any defect, imperfection or damage to the coating may cause rust spots or weeping. Stainless does not corrode as steel does but using 316 grade is important where visible. Aluminium does not rust and works well with stainless steel fixings.

## Q: Recommend me an approach....

We recommend you use a Hybrid of three materials,

- Stainless steel anchors, (best thermally and corrosion resistance and great strength).
- Galvanised steel stubs and arms (with stronger anchor designs these are best suited to transfer moment forces to slab edge and resist deflection).
- Aluminium Cassette frames, soffits and decking (lighter weight, ultimate corrosion resistance, cost effective, more sustainable, better suited for custom shapes, requires fewer anchors).

# Sapphire's Speed and Innovation Win the Day at North Wharf Gardens



Sapphire is showcasing speed and innovation with Glide-On<sup>™</sup> balconies for North Wharf Gardens in Paddington, a residential development at the very heart of London. Sapphire's pioneering concept, which combines offsite manufactured Cassette<sup>®</sup> balconies with a unique glide-on connection system, enabled rapid installation, saving both time and money on site.

he fast-track install method minimised crane hire and associated site costs; while delivering fully assembled balcony units reduced the need for secure storage on site. This is a particular benefit for projects in city centres like London where site space can often be very limited.

"Sapphire's glide-on balcony concept is so simple and yet very clever. It provides a really fast and flexible solution for this type of high-rise residential development."

Design Coordinator - Bouygues UK



Comprising of four residential towers ranging in height from eight to 14 storeys, North Wharf Gardens is a stunning addition to London's landscape. Sapphire designed, manufactured and installed projecting balconies to apartments on the development's east and west elevations. Balconies were produced and assembled in Sapphire's factory and stored ready for delivery call-off as required to meet the build programme. This supply route not only helped keep the project on schedule but also ensured a high level of quality control that would be almost impossible to achieve on site.

Balconies feature Crystal® frameless structural glass balustrades and durable WPC composite decking. The glass panels are combined with a smart stainless-steel top

rail, which complements the development's contemporary façade of brick, concrete cladding and spandrel glazing.

Working from the top down, balcony Cassettes® were lifted into position and installed by simply sliding them on to pre-erected brackets. Balcony brackets were cast-in to the slab with arms projecting from within the cavity to outside of the finished façade. This provides an important thermal break, preventing balcony connection points causing a cold bridge from the cold balcony to the warm inside, which can lead to condensation problems.

North Wharf Gardens one of a growing number of prestigious residential developments to specify Sapphire's patent-protected Glide-On™ Cassette® balcony system. The innovative solution makes it simpler,

faster and more cost-effective for housebuilders to provide high quality balconies for their developments. As well as the time and cost savings, offsite manufacturing reduces the on-site health and safety issues associated, for example, finishing works like soffits when installing traditional balconies and potentially costly project delays due to bad weather.

## **Key Stats**

Architect: Powell Dobson

Architects

Developer: Taylor Wimpey

Contractor: Bouygues UK

Balconies: 39

Storeys: 9

Location: Paddington,

London

# Council for Aluminium in Building: Making the Case for Aluminium

Since the tragic events at Grenfell in 2017 and the Cladding Ban which came into effect in December 2018, the materials used in construction have been under the spotlight.

The Council for Aluminium in Building have been advocating for the use of aluminium in construction since 1994 and have amassed over 120 members across the supply chain.

It takes just 5% of the original energy to recycle aluminium.

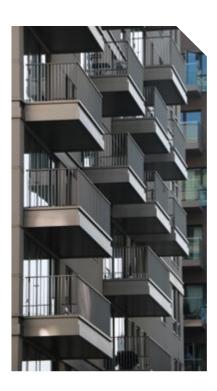
The specific characteristics of aluminium bring significant benefits to the world of construction. It is resistant to corrosion, lightweight, infinitely recyclable and very ductile.

Aluminium is not in short supply either as it is the third most abundant element and most plentiful in the earth's crust.

CAB hope that by educating and informing people about the benefits and properties of aluminium in regard to building that this incredibly useful metal will help solve industry woes.

Credit to: Jason Ratcliffe -CEO at The Council for Aluminium in Building

Aluminium is abundantly available and infinitely recycled using up to 95% less energy than the primary production process.





# Sapphire Undertake Insightful Industry Research

We recently commissioned extensive research to better understand the needs of different professions across the construction industry, to better serve our clients. This report gives valuable insight into the most important areas to get



right with balcony design and sheds light on the best practice methods and materials.

To obtain the report email Regan at regan.cook@sapphire.eu.com

## Brexit Bites as Tender Prices are Set to Rise

According to Arcadis tender prices are expected to increase by 4% in 2022 due to a crippling skills shortage post-Brexit. The consultancy reports predict a tighter labour market from 2022-2023 causing costs rising by 1% per annum.

Earnings grown an average of 4.2% for construction workers in the past year, a boost from 2.1% in 2017. Skilled EU labour makes

up 8-10% of the workforce which could be unavailable post-Brexit, adding strain to an existing UK skills shortage.

The industry as a whole will need to find better efficiencies to increase productivity in the face of potential down turns. Offsite manufacturing could be a key way of meeting these needs while reducing waste and improving quality standards.



## Ready and On Time for Pontoon Dock



The installation of Sapphire's Glide-On™ Cassette® balconies at Pontoon Dock is well underway and expected to complete in the coming weeks.

The project posed its own set of unique challenges with a tight delivery and install schedule due to the nature of the site.

Our Ready guarantee has been integral to ensuring the smooth progress of the project and preventing costly delays.

Situated minutes from the bank of the Thames and across the river from the Greenwich peninsula this development is part of a significant regeneration project.

## Looking Back on Baltimore Tower

altimore Tower, completed in 2016, remains to date the largest project in Sapphire's history. We supplied and installed over 10,000 panels for the balustrading and the glass floors for the balconies.

The tower dwarfs the other project we supplied balustrades for on the plot known as building 9, which stands at a considerable 20 storeys.

The monumental building is comprised of 45 storeys containing 366 residential units, a street front café by the water and triple-height penthouse restaurant.

The tower now represents an unmissable landmark in the London skyline. The balconies form an oblong shape rotating around the central axis creating a unique twisting effect.

The project presented a unique challenge and opportunity for us as the client wanted to avoid the use of scaffolding due to the unusual shape of the building. We found a solution to this issue by developing an innovative Sapphire shroud. The shroud wrapped around each storey allowing all trades to work from within the building without the need for fall arrest.

This covering allowed the balustrades and glass flooring to be installed safely without the need for scaffold, mast climbers or harnesses and climbed with the building as it stretched to a final height of 150m.

The tower has since won the 'Best Residential High-Rise Architecture' award from the International Property Awards 2017 and features proudly in our portfolio.







## Cladding Ban: A Proactive Approach

In 2018, Sapphire commissioned Exova Warringtonfire to rigorously test multiple classes of materials to ensure we were able to provide our clients with the highest safety standard of product available. Following the eventual ban on cladding materials Class B and below, we have been exploring the recent decision to use Class A and A2 non-combustible materials on all buildings over 18m. Committed as ever to our proactive ambition, we have been investigating whether further can be done to guarantee resident safety, as well as limit costly fire damage.

## **Balcony Fire Case** Study: A Comparison



**Building:** 

The Lighthouse (2008), 19 Floors

Location:

Northern Quarter,

Manchester

Cause of Fire: Unattended food

cooking internally

**Balconies:** Unknown

The fire damaged 4 properties on the 9th floor (where it broke out internally) and caused smoke damage on the 8th to 14th floors externally. The level of destruction can easily be viewed from the photos above. The balconies were constructed with no soffits and combustible materials.



**Building:** 

The Norton (2015), 11 Floors

Location:

Greenwich

Peninsula,

London

Cause of Fire: Cigarette **Balconies:** 

Sapphire Ltd



A discarded cigarette ignited a piece of furniture on a lower balcony, causing a fire to break out. The fire was contained on the balcony and caused only minor smoke damage to the balcony above. The balconies were constructed using combustible materials (Class C) and aluminium soffits. The soffit contained the fire and eradicated any falling debris, limiting damage to the surrounding balconies. Post fire: The balcony was quickly and easily replaced.



### Summary: Safety Benefits of **Aluminium Soffits**

- · Limit the supply of oxygen to the fire
- Prevent burning debris from falling below
- · Prevent embers from igniting surrounding balconies
- · Aluminium reflects and disperses heat

Over 30 balcony fires have been reported London alone over the past 2 years. We can't control whether fires start, but we can control our choice in construction materials. We are dedicated to consumer safety and understand the severity and damaging effects a fire can have on all those involved. We fully advocate the use of soffits when constructing balconies, primarily for their fire resistance strength, but also for their enhanced aesthetics and drainage capabilities.

## Reading Roundtable

Our recent roundtable discussion was held at The Blade, an iconic landmark in the skyline of Reading. At the event we discussed the topic "How can the industry reduce fire risk on high-rise residential buildings with balconies" which sparked some fascinating discussion.

A key point raised was the lack of clarity provided by the cladding ban and the many questions left unanswered. As discussed on page 3, there remains some debate around materials such as laminated glass.

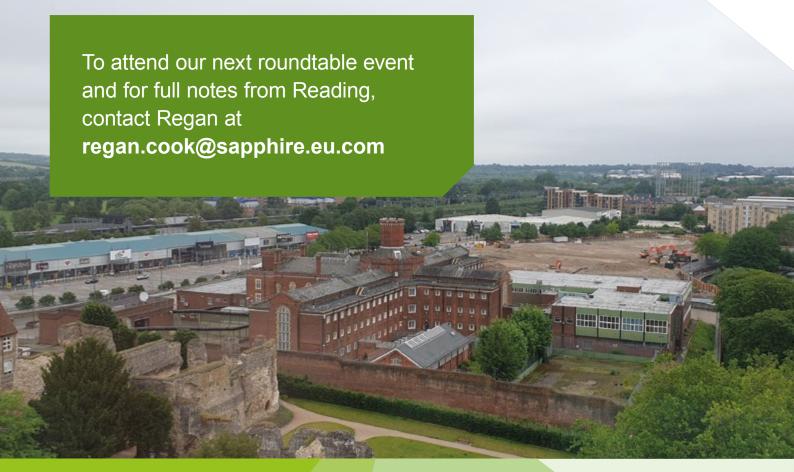
Another point made was the key difference between the risk of fire spread verses the fire risk to life, a distinction which is important to recognise. While reducing the risk of the spread of fire is essential and mandatory in ADB, reducing the risk to life is vital and can require different provisions.

It was generally agreed that the actions of the end user have significant impacts on the risk of fire which is outside of the industry's control. Therefore, it is important to mitigate this

by designing balconies to reduce the fire spread risk as much as possible.



While reducing the risk of the spread of fire is essential and mandatory in ADB, reducing the risk to life is vital.



## Sea Containers Roundtable

Attendees to the fire roundtable in London were spoilt for views of the London city scape on the 30th of May as we hosted our first roundtable of the year. The session was targeted at discussing the Spandrel Zone.

The discussion started in agreement that there's no one perfect spandrel zone solution and there are a multitude of methods involved when considering high rise residential projects. Thin post tensioned slabs can bring issues, particularly with the fire stop. The Sapphire StubGuard™ received high praise as a market leader and for providing an innovative solution for maintaining the continuity of the cavity barrier.



The group raised concern following the publication of EN 1992-4 and the changes required to anchors on the market. There was concern due to the lack of awareness of the changes and the number of products that don't currently comply. With regards to warranty, the consensus was that fire consultants are reluctant to get involved in details and that their PI cover has risen dramatically. EPDM is no longer compliant with part F,

although OBEX produce a waterproofing membrane that is part B compliant.

The Sapphire StubGuard<sup>™</sup> received high praise as a market leader and for providing an innovative solution for maintaining the continuity of the cavity barrier.









## "There is no Standard but the Steel Build Standard"

Design, fabrication and installation of:

## Structural steelwork Architectural metalwork Glazed balustrades Balconies

I found Steel Build one of the most helpful and knowledgeable contractors on site.

The supervisors were courteous and felt as part of the team. When the programme had to be hit they pulled out all the stops. I would not hesitate to use the company again.

> Job: ALTO John Connell Wates

All of the Steel Build team have been very professional.

Any issues have been dealt with, no problems and straight away.

I will look forward to working with Steel Build on future projects. One of the most professional contractors I have ever worked with.

> Job: Carnarvan Road Stuart Bennett Hollybrook

What you hope for with a specialist sub-contractor is that they take ownership of their element of your works and complete them without any negative effect on the rest of your package.

I experienced a willingness to be part of the larger site team, which enabled us to provide a seamless installation to our client.

> Job: Wates NW06 Steve Harris OCL Facades















www.steelbuildltd.com T: 01234 376990 E: info@steelbuildltd.com

Unit 1 Bryher Farm, Colesdon Road, Duck's Cross, Bedford MK44 2QW

# Government to Implement a New National Building Safety Regulator

The government has revealed plans to institute a new national regulator for building safety in response to the tragic fire at Grenfell Tower.

The reforms include making failure to comply with the proposed safety regime for designing and building high-rise homes a criminal offence.

The new regulator will also have the power to impose heavy fines when contractors and designers fail to comply.

The regulator will aim to drive high standards for those working on buildings and in doing so improve the public's confidence in the safety of high-rise homes. The consultation on these reforms closes on 31st July 2019.



# Sapphire Balcony Takes Pride of Place at EcoWorld



Our sample balcony adorning the sleek marketing suite at EcoWorld gave staff and visitors alike access to an outdoor recreational space.

The balcony will allow visitors to the site to experience the advantages of Sapphire balconies and take in the location. Prospective buyers will also be able to envisage their new home's outside space and the lifestyle benefits it provides.

# Sapphire Unveils New Website Offering Improved Customer Experience

Redesigned with the user in mind, our new website is packed with all the useful information, easy downloads and technical detail you would expect from Sapphire, with an easy to navigate menu system.

Easily find case studies, information hubs, client

testimonials and our Computer Aided Balcony Specifier (CABS) all with a fresh look and feel.

At the time of going to print the new site is just days away from going live and will showcase our new photorealistic configurator (read more on page 7).







