

RISK MANAGEMENT

CONSTRUCTION AND ENGINEERING



Tower Block Cladding – What You Need to Know

A spate of recent blazes in high-rise buildings as far apart as London, Dubai and Australia has focused attention on fire safety. As urbanisation accelerates, constructors are increasingly being forced to build upwards. So with more and more people living and working in tower blocks, should office workers and homeowners be worried?

How dangerous is cladding?

The tragedy at Grenfell Tower in London has propelled the issue of cladding into the public consciousness. But what exactly is it? Essentially cladding is a block of insulating material sandwiched between two metal sheets (normally aluminium), designed to keep a building warm or cool as well as helping with aesthetics.

However, the most common forms of insulation used in cladding are made from oil derived 'foam plastics' such as polystyrene or polyurethane, which, although cheap, easy to make, and with superior insulating characteristics, are highly flammable. Some will delay ignition and fire spread, but simply put, when it comes to cladding – if it is cheap, it will burn.

There are other types of insulating material available, made from molten rock or glass strands (rockwool / glasswool), which are effectively non-combustible, but these alternatives are more expensive and therefore much less common in the construction industry.

Many industries use combustible cladding and although acceptable in some cases – where appropriate protection and maintenance are in place – the problem arises where it is used in high rise buildings; above the reach of the fire brigade. Above this height, the only truly effective way of controlling the fire is attacking it at its early stage via an automatic sprinkler system.

Getting the right protection

If all else fails and fire does break out, being able to respond quickly and adequately is vital. The minimal loss of life in the recent fires in Dubai – at the Address Downtown hotel and Torch Tower – were due to those buildings being designed to save lives, with effective fire doors and compartments allowing residents to escape.

Fire protection comes in many forms, such as fire extinguishers and hose reels, but the best and most effective defence against a fire is to have a sprinkler system installed. Sprinkler systems are specifically designed for a particular property and having the likes of 'window sprinklers' (which spray water on non-fire rated glazing) in modern designed buildings which use a lot of glass, can prevent fires from 'jumping floors'. In the aftermath of Grenfell, many commentators have pointed out such a system would likely have contained the fire to one apartment.



Prevention is better than cure

The number of buildings constructed with combustible cladding is vast and replacing the cladding on all these would be both prohibitively expensive and massively time-consuming. So, what's to be done? Rarely can the old adage that prevention is better than cure have held more true: at Allied World, our risk engineers know from experience that when it comes to fires, preventing them from starting is vastly more effective than trying to extinguish them.

This means a focus on risk management. At a basic level, this means adequate maintenance of anything in the building that could pose a potential fire risk. Cladding needs to be properly maintained and engineers will look out for the likes of punctures or disintegrating glue seals – as common in hot countries – which would expose the insulation directly to flame.

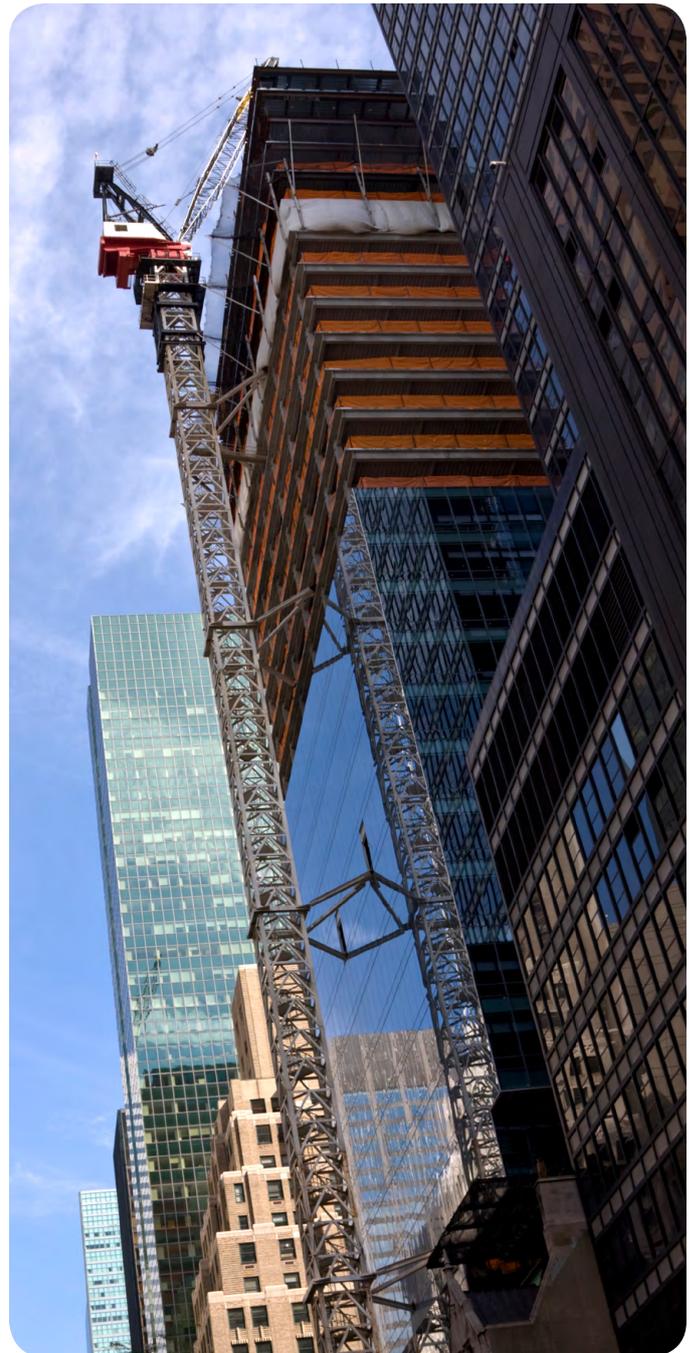
Common causes of fire include electrical shorts, cooking, smoking and even arson, so the human factor is probably the most significant in helping to prevent fire. People who live, work and visit these buildings need to be made aware of any steps they can take to help avoid fire breaking out, or what to do in the event that it does.

ABOUT THE AUTHOR

J. Anton Koch is a Senior Risk Engineer with Allied World and is currently based in Singapore. Previously, Anton worked with two large global insurance carriers where he established their Semiconductor Specialty Business Groups.



Anton has over 25 years of experience within the Insurance Industry, embedding Risk Management Systems for Fortune 500 Clientele. His silicon platform client list includes telecommunications manufacturers, LCD screen manufacturers and other leading electronics firms. Anton has lived and worked in Europe, Asia and the USA.



For more information about Allied World's Risk Management services or our insurance and reinsurance solutions, please visit www.alliedworldinsurance.com

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