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OF BUILDING FIRE SAFETY

NEW-BUILD BECOMES INCREASINGLY INNOVATIVE AND RENOVATION TRANSFORMS THE EXISTING BUILDING LANDSCAPE - IT IS VITAL THAT WE DON'T MISS AN OPPORTUNITY TO MAKE OUR BUILDINGS FIRE SAFE.

PHOTO: PA IMAGES

New Year in Dubai came to a dramatic close in 2015. Just hours before half a million fireworks were due to illuminate the sky above the world's tallest tower to celebrate the start of 2016, fire broke out at the 63-storey hotel opposite and flames quickly engulfed the façade.

Fortunately nobody was injured, but the issue of building fire safety was again pushed up global news agendas as millions watched footage of the blaze online on TV.

And that issue must continue to be kept at the centre of public attention because this was yet another example of building fire history repeating itself. In the United Arab Emirates alone there have been four fires in high-rise towers over a height of 34-storey in less than 18 months to July 2016.

But building fire safety is of course a global issue. In 2010 a fire in Shanghai killed 58 after sweeping up the exterior of a 28-storey high-rise apartment. The same year, seven were killed by a blaze in a nine-storey housing block in France.

"We must learn from the lessons of history to take legislative action before future disasters occur," says Juliette Albiac, Managing Director of Fire Safe Europe (FSEU). *"Right now - today - we have an opportunity to improve the fire safety of buildings. Failure is not an option."*

"There is an increasing sense of urgency because the construction sector is innovating at an unprecedented rate, but building fire safety regulations across the world have not kept up," says Albiac.

New buildings are bigger, higher and more complex than before. Often in line with increased requirements for sustainability these buildings use innovative new materials and systems such as ventilated metal-faced sandwich panels that often have combustible elements built in.

Furthermore, as the trend to renovate existing buildings continues to sweep Europe, it is important to see this as an opportunity to make them safer than ever.

"No-where in the world are the standards good enough yet. We need to develop more robust fire safety codes for buildings, implement more vigorous performance-based testing of construction materials and ensure these standards are enforced," says Albiac.

In the UAE, the government is in the process of updating building regulations with discussions focusing on the restriction of combustible material on facades on buildings above a certain height and with large populations of people.

In Europe, Fire Safe Europe and its partners, including Knauf Insulation, are calling for a holistic, coordinated approach to these issues through the implementation of a European Union Fire Safety Strategy.

This would include harmonised fire tests and classification schemes for façade systems across all EU countries based on test methods at the appropriate scale and representing all possible risk scenarios. We are also calling for the future-proofing of tests to allow for any future material innovations (see story below). At present, Europe is a patchwork of different fire testing requirements and this is not only bad news for safety but also goes against the principles of the internal market in which the free movement of goods, services, capitals and persons should be assured.

Barry Lynham, President of Fire Safe Europe, says: *"Many European countries have already taken measures to ensure that non-combustible insulation must be used on the facades of buildings above a certain height or designed to a certain use. It's common sense and we fully support this approach in other parts of the world."*

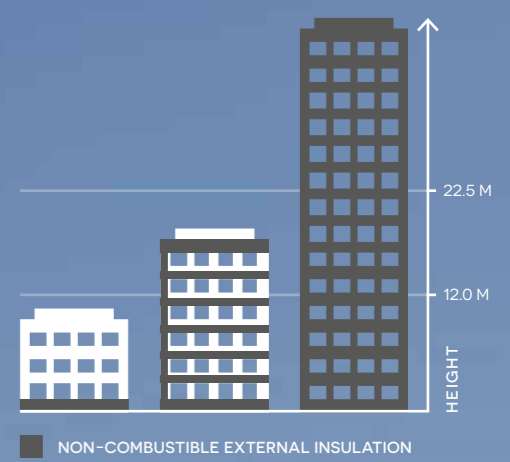
At country level we are working with regulators to develop and update fire safety standards that make sense for the buildings in that country. We have worked closely with government and fire protection organisations in Slovakia, Serbia and the Czech Republic to strengthen their building codes. In Slovakia, the Association of Preventative Fire Safety along with other interested parties has drawn up proposals to introduce more fire safe materials during the renovation of existing buildings.

In Croatia, following campaigns by groups such as the Croatian Association of Fire Protection, it is now mandatory to install non-combustible external insulation after a height of 11 metres in all new buildings and those being renovated.

In Germany, following a series of high profile facade fires, the Deutsches Institut für Bautechnik (DIBt), that provides technical advice to the German government, has recognised the risk to facades from fires started from the outside of a building, and has subsequently tightened the rules.

"These are striking first steps and offer vital contributions to better, safer buildings, but it is time more and more policy makers followed these examples and took the action required to make our built environment safer," says Lynham. *"It's time to work together to build a fire safe world."*

THE CASE OF MANDATORY INSTALLATION OF FIRE BARRIERS IN CZECH REPUBLIC



Height of safety

A Fire Safe Europe study of fire regulations for two types of high-rise building – hospitals and residential blocks – found major inconsistencies across 11 European countries in regulations covering insulation products used in facades. Although most countries insisted on non-combustible or the highest combustible class, Sweden and the UK allowed exceptions to this if the facade system passed a national large-scale facade fire test. However, in Belgium, Greece and The Netherlands there were no fire performance requirements for insulation products in facades.

