London fire shows density can have a terrible price tag

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Randy Bright

As I write this article, firefighters are still sifting through the remains of the Grenfell Tower in London, searching for 58 people who are still missing from the 24-story apartment building that was completely engulfed in flames. Nineteen people were hospitalized – ten of whom were listed in critical condition. Due to the severity of the fire, the 58 that are missing are presumed dead, and one source stated that "police admitted that the death toll could reach 100 and senior officers conceded the true scale of the disaster may never be known."

According to a USA Today report, "The Grenfell Action Group, the tenants' organization, had expressed concerns for years about the testing and maintenance of firefighting equipment and blocked emergency access to the site." The article quoted the group to have said after the fire, "All our warnings fell on deaf ears and we predicted that a catastrophe like this was inevitable."

The building had just been refurbished last year, costing $13 million and including the addition of new cladding on the exterior of the building. One source indicated that the type of cladding used had been banned in the United States on buildings taller than 40 feet, and may have contributed to the acceleration of the spread of the fire.

The fire has prompted local officials to take a look at other high-rise apartment buildings in London. Prime Minister Theresa May has been involved with the investigation, having received severe criticism for the government's poor initial response to the fire.

High-rise fires are becoming more commonplace. On Christmas Eve of 2015, a major fire erupted at a luxury hotel in Dubai. Though the building did not collapse, there were reports of huge parts of the structure falling off of the building nine hours after the fire began.

This wasn't the first time Dubai experienced a major high-rise fire. In February of 2015, a fire broke out in one of the world's tallest apartment buildings, the 86-story, 1,100 foot tall skyscraper ironically named the Torch Tower. The fire began on the 51st floor.

There were no reports of deaths directly related to the fires, but there were a few minor injuries.

With dense, high-rise development come risks, not just to personal safety, but to the places where hundreds, or in some cases thousands of people live. A large number of people were made homeless by what started as a small fire because the chimney effect spread the fire from one apartment to the next so quickly.

Despite this risk, urban planners still see high density as their most desired living arrangements for most of the population, and with that the notion that most people should live in the urban cores where density is more prevalent.

Any time we concentrate people in any environment, we increase the risk that a single event could cause great loss of life. This is true not only in buildings, but also in mass transportation such as aircraft. As the concentration becomes more intense, the greater the need is to create regulations to insure that the construction of those environments are done in a way that maximizes the safety of the occupants and decreases the number of deaths and injuries should an event take place.

This effort cannot be arbitrary, based on assumptions of what is or what is not safe, but on proven technology and testing of materials and methods. Current building codes reflect the best available construction techniques, but they only work when properly applied. There is no room for politics in the world of building codes, and I do not believe that current building codes have been influenced by politics. (I mention this because some early media reports said that the owners of the Grenfell Tower had set aside more expensive safety issues in order to spend money on making the building "green." I don't think this has been confirmed.)

Populations who live in dense developments should, as the surviving residents of Grenfell Tower have done, demand that their buildings be done according to code; high rise buildings should be designed to extinguish fires quickly with sprinkler systems, and to compartmentalize a fire to prevent it from spreading. On the other hand, those residents should also understand the risk that they are taking by living in a high-rise building, and take more responsibility to insure accountability from building owners.

Where the risk becomes even greater is where residents do not have a choice where to live, as is the case in communist or socialist countries, and governments that are the owners are not compelled to make their buildings safe. Free societies are much less risky in that regard.

People should be free to live where they wish, even in a high-rise apartment building; but such accommodations necessarily bring about more regulations in order to protect them. Dense development comes with a cost.

Randy W. Bright, AIA, NCARB, is an architect who specializes in church and church-related projects. You may contact him at 918-582-3972, rwbrightchurcharch@sbcglobal.net or www.churcharchitect.net.