

The Grenfell Tower Fire demonstrated what can go wrong

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Around 250 investigators are still combing through the debris of the Grenfell Tower after a devastating fire that took place on June 14th, claiming the lives of 79 people.

It is now known that the fire started on the 4th floor of the 24-story building, and it is believed to have started when a Hotpoint refrigerator-freezer malfunctioned. When the fire reached the exterior of the building, it quickly ignited the recently installed cladding that had been added to the building's exterior. From there, the fire rapidly spread upwards and completely around the building.

One report indicated that the cladding between windows that was continuous from top to bottom of the building, acted as a chimney, contributing to the rapid spread of the fire upward. Despite firefighting efforts, the fire burned for about 60 hours. There was concern that the building could collapse, but it has since been determined that the building's structural integrity had not been compromised by the fire.

The tower was designed in 1967, and its construction began in 1972 at a time when sprinklers were not required. It contained 127 apartments.

It underwent an extensive renovation that was completed in 2016, which included the application of the new cladding and insulation. Although the smoke detection system was upgraded, the inclusion of a sprinkler system was declined due to the additional cost and disruption to tenant spaces it would require.

The building also had another fatal flaw: it had only one stairway with which to escape a fire. To make things worse, the property manager's published policy to the residents was that they should remain in their apartments and await rescue in the event of a fire.

The U.K. government is being heavily criticized among accusations that officials had ignored repeated warnings about the safety of some 4,000 older "tower blocks" that were not equipped with sprinkler systems.

The mayor of London, Sadiz Khan, who was also heavily criticized at the beginning of the investigation, is now exhibiting a different tone. One source quotes him saying that "Those who mock health and safety, regulations and red tape need to take a hard look at the consequences of cutting these and ask themselves whether Grenfell Tower is a price worth paying. Nowadays, we would not dream of building towers to the standards of the 1970s, but their inhabitants still have to live with that legacy. It may well be the defining outcome of this tragedy that the worst mistakes of the 1960s and 1970s are systemically torn down."

The same source reported that an organization of the residents of Grenfell Tower (Grenfell Action Group, or GAG) holds the property manager, KCTMO, responsible for the disaster. That source reported that GAG had published warnings in January of the potential danger should a fire break out, and in November of 2016 they published an online article “attacking KCTMO as an ‘evil, unprincipled, mini-mafia’ and accusing the council of ignoring health and safety laws. GAG suggested that ‘only a catastrophic event will expose the ineptitude and incompetence of the (KCTMO)...(We) predict that it won’t be long before the words of this blog come back to haunt the KCTMO management and we will do everything in our power to ensure that those in authority know how long and how appallingly our landlord has ignored their responsibility to ensure the health(sic) and safety of their tenants and leaseholders. They can’t say that they haven’t been warned.”

Another source has indicated that a number of criminal charges are being considered, including issues regarding health, safety and even manslaughter, and city governments are already in the process of identifying other buildings with cladding of the same type as was found on the Grenfell Tower and requiring its removal.

Ironically, before the fire occurred, easing of fire safety standards in new schools were under consideration, which would have dropped the requirement for sprinkler systems. That is no longer the case.

As I have said many times before in this column, building codes are politically benign and are designed to save lives. They are needed to protect the public, especially in multi-family dwellings, and even more so as urbanization leads to the construction of high-rise multi-family buildings. As buildings grow in height, the risks and number of things that can go wrong grow exponentially, as does the potential loss of life. Developers, builders, architects, and engineers need reliable standards to adhere to, but the public also needs to know that the building they choose to live in is safe. Unfortunately for the tenants of Grenfell Tower, their building was made even more unsafe after they made that choice. Safety can never be taken for granted.



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