

About the Big Fire in Hong Kong November 2026

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Most part of his papers came from LatePost interview, November 30, 2025, 10:02 a.m. Beijing

Abstract

A big fire occurred in 2025 with an in-depth interview carried out based on limited information available. This paper was compiled from the interview report. Key points discussed in fire engineering are summarized. The most significant point learned from this tragic fire is to implement better fire safety management among different stakeholders.

1. Introduction

A big fire occurred in 2025 as reported [1]. A more in-depth interview was carried out a few days later [2] based on limited information available. This paper was compiled from the interview report at early stage not yet starting the investigation.

The author has carried out research [3] in fire science and engineering for over 40 years. He had investigated several big fires including the Garley Building fire [4,5] in Hong Kong, 1996. He has not experienced such a big accidental fire with so much severe casualties in Hong Kong after joining the profession. There had been several big fires burning huge areas of wooden huts [6]. This is one of the largest local accidental building fires on record.

An interview was carried out by LatePost, primarily analyzing the Hong Kong Hung Fuk Court fire from a fire science perspective with report posted on November 30, 2025 [2]. There were also many interviews and talks afterwards [7-13].

The author believes that after growing up to such an intense fire, “whether it was a bamboo scaffold or a steel scaffold, or whether the netting contained flame retardants, their impact to the big fire would be similar.” A key issue is why the big fire was not detected at an earlier stage. Some eyewitnesses also claimed that the fire alarm system was not functioning.

This disaster has unique characteristics of Hong Kong, such as narrow streets and extreme high density of tall buildings. But it is also a global challenge to handle exterior combustible wall fires in tall buildings.

After having big fires such as the Garley Building [4,5] in Hong Kong 1996, the Jiaozhou Road Teacher Apartments fire [14] in Shanghai 2010, or the Grenfell Tower in London 2017 [15], new fire safety standards and practices are proposed. Human understanding of safety has always been shaped and driven by accidents and the loss of lives. This catastrophe is no exception.

These were also reported [16-19] and discussed in many talks. “Even if the ladder

reaches 100 m, 200 m, or 300 m, it is still extremely dangerous for people to climb up and take appropriate actions. That is why tall [5,6] building fires basically have to be handled inside the building.”

2. Key points

Key points in fire engineering discussed that interview [2] are summarized as follows in answering question rationally.

2.1 When did you learn about the Hung Fuk Court fire? What was your initial assessment at the time?

The fire appeared to start around 2 p.m. and saw it on TV at 4 p.m. It had been burning for at least an hour. Some apartments were no longer just emitting smoke out—flames were already coming out. This indicated “flashover” occurred inside that flat with extremely high temperatures inside. It also means extinguishing the fire has become much more difficult.

2.2 The fire has claimed 128 lives, with approximately 200 people still unaccounted for (as of November 28). What caused this tragedy?

The fire investigation has only just started. At this stage, we can only say that there are suspicions regarding material defects, as well as potential human factors, personnel issues, and regulatory oversight implications. A researcher in fire science and engineering can only analyze the possible causes from several perspectives.

- The first one involves how the fire started, which remains unclear at this time. However, we can observe that the building is undergoing refurbishment, with scaffolding and safety nets on the exterior walls. It was suspected that styrofoam has been used to cover windows in some areas to protect glass panes, all there are combustible materials. A large amount of other materials are also piled up at the scene as reported in the news.
- The second one involves the fire protection system and building management. Fires on the exterior facades of tall buildings are difficult to control from outside, making reliance on internal firefighting equipment essential. Some of the firefighting equipment was activated, while others were not. Could it be that internal firefighting equipment was temporarily deactivated during maintenance? If temporarily deactivated, the building should have notified the fire department. This may indicate a building management issue to explore.
- The third one involves firefighting and rescue operations. With such an intense blaze, the focus shifts to confining the physical fire size, rescue efforts, and post-disaster management. A Level 5 fire alert resulted to allocate more firefighters. Additional personnel were sent with water suppression system deployed.
- Additionally, the “wind-fire effect” must be explored scientifically. Buildings store considerable amounts of combustible materials—just look around your own home: furniture, shoes, clothes, books, and so on. When north or

northeast winds blow at the scene, air driven into the flats would burn combustibles stored.

- The fire intensified, and as temperatures rose inside the building, pressure differentials formed. This “drew” in more air to burn more unburnt fuels to spread the flames. The increased pressure differential then sucked in even more air—fire feeding wind, wind feeding fire—spreading from one floor to the next through the window plume. The fire plume from a flat moved upward, reaching the styrofoam on the windows and spread up rapidly. With wind and fire brands generated, the flames spread horizontally, igniting more items within the rooms. The result: the fire burns upward floor by floor, burning more unburnt combustibles by wind, then spreads sideways from room to room, then block to block.

3. Bamboo scaffold

Fire science and engineering were discussed earlier. As for the numerous human factors—including the management issues mentioned involving construction companies, as well as corruption problems highlighted in news reports—these constitute a separate realm of discussion and fall outside the scope of fire science.

3.1 What is the key factor in determining whether it is bamboo or styrofoam that burns intensely?

There is not much difference whether it is a bamboo scaffold or a steel scaffold, or whether the netting has flame retardants or not, when the fire grows so big.

Bamboo scaffold is indeed combustible, but its flammability depends on the moisture content of the bamboo. If it is wet, it would not burn easily; even dry bamboo is not particularly easy to be ignited under a small starting fire. Steel scaffold can also expand and deform under high temperatures. It is hazardous if such heavy structures fall down when the fire grows big.

Whether the protective net contains flame retardants or not makes much difference in such intense fire conditions. This is because flame retardants merely delay ignition—perhaps delaying it by 10 s or 20 s—but ultimately, the material will still burn.

3.2 Why was the fire so intense?

Preliminary investigations suggest it may have started with an accidental blaze in one room, which ignited the styrofoam on the windows, causing the fire to spread rapidly.

This time the problem was clearly related to fire safety management [20-24]. It takes time for a fire to spread—it might take 15 mins, 30 mins, or even an hour before it threatens the entire building. If the fire had been detected and extinguished earlier, situation as observed today might not have occurred.

4. Tall exterior wall fire extinguishment

4.1 Is it true that some say tall fires cannot be extinguished because fire engine ladders are too short?

Even if the ladder reaches 100 m, 200 m, or 300 m, it remains extremely dangerous for personnel to ascend it. Therefore, during tall building fires, firefighters primarily operate from within the structure itself.

4.2 Compared to past fires in Hong Kong, as well as other incidents such as the 2010 Jiaozhou Road Teachers' Apartment fire in Shanghai's Jing'an District [14] and the 2017 Grenfell Tower fire [15] in London, what lessons have these historical events taught us?

For Garley Building fire [3,4] in Hong Kong, 1996, that fire also occurred during maintenance work. There were many construction tasks underway that affected the fire protection system and escape routes. In removing and installing new electrical wiring, the fire protection system has to be disabled.

At the time, firefighting efforts were also difficult because the streets have many neon signs secured by steel cables. That was difficult for deploying ladders and water cannons from fire engines. That fire incident revealed significant room for research and improvement in both emergency maintenance protocols and fire rescue strategies.

5. Lessons learnt after major accidents

5.1 What can all parties do after having this big fire?

Generally, further measures are only implemented after a fire investigation is completed. For instance, following the investigation into the Garley Building fire [3,4], the government mandated that all older buildings upgrade their fire safety systems to meet the new standards at that time. This investigation may take two to three years to comply a scientific investigation report, so it would be more appropriate to discuss legislation at that point. We cannot draw many conclusions with scientific evidence today.

5.2 Some people are discussing accountability, disaster relief, and resettlement, and it feels like every issue is incredibly complex.

Post-disaster resettlement is a far more complex issue that cannot be determined solely by fire safety regulations. It hinges on how many units exist in society and how much funding is required. It is fundamentally a political, economic, and societal challenge.

Whether residents can return to live in the building will also depend on the outcome of the fire investigation. Structural engineers must first assess the integrity of the building's structure, columns, and load-bearing walls before making a decision. Generally speaking, however, the building can withstand a 4-hour post-flashover standard fire. This time, not the entire building underwent flashover, and it did not collapse. Currently, it appears structurally sound. However, some columns in units

might be affected by flashover sustained damage and require repairs.

6. Conclusion

The most significant points learned from this tragic fire are:

- Owners, tenants, management companies, and contractors must all work together to effectively implement fire safety management.
- Many fire safety management plans are rigorous and well-defined, yet they often fail to be fully implemented. To illustrate, the weapon “Peacock Feather” in Gu Long's novels is formidable, but it has never been used—it remains locked in a safe forever. Even if a fire safety management plan is comprehensive, if it is not put into practice, it becomes like the Peacock Feather: useless even when stored.
- If increasing security personnel proves too costly, installing smart detection systems is a viable alternative. While these systems do require investment, they represent a necessary expense compared to the millions or tens of millions spent on a single room. Effective fire safety management can significantly reduce the risk of accidents.

7. About the Author

He is a Fellow of the Hong Kong Academy of Engineering and a Non-Official Justice of the Peace appointed by the Hong Kong Special Administrative Region. The Hong Kong Polytechnic University is one of academic institutions in Asia conducting fire research under his leadership since 1988 with the first cohort of doctoral degree students at Polytechnic graduated in 1991. After retiring from that university, he takes up a much more challenging academic position to further explore fire and explosion in mainland. He is now the Advisor to President and Distinguished Chair Professor at Civil Aviation Flight University of China on developing aviation safety for the country with much stronger support on exploring safety along land, air, space and new energy themes.

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