

The key to combatting Hong Kong's ageing building problem

Hong Kong faces an imminent ageing building crisis, which has been compounded by a lack of proper maintenance and management. Surveyors have a key role to play in a major government drive to tackle the problem.

Prudence Lui



Photo: SCMP/Sam Tsang



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Yau Ma Tei, with Temple Street market in the foreground. Ageing buildings have become an increasingly important issue for the city, with the problem usually compounded by a lack of proper management and maintenance.

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The bulk of Hong Kong's existing building stock was erected from the 1970s to 1980s when, driven by the surge in industrial expansion, the city's economy started to take off. The Government's Development Bureau has cited about 4,000 buildings that are more than 50 years old, and this figure is set to increase by 500 every year. Ageing buildings have become an increasingly important issue for the city, with the problem usually compounded by a lack of proper management and maintenance. As a result, many buildings in Hong Kong, which are constructed using reinforced concrete, could only achieve a general lifespan of 50 years. Professionals are urging owners to act now; otherwise the condition of these buildings will rapidly deteriorate and endanger public safety.

This dire forecast is also supported by Hong Kong 2030+, which stated that, with each passing year, it is inevitable that the city will face a serious problem over the ever-increasing number of old buildings; it is predicted that in 2046 there will be 326,000 private housing units that are more than 70 years old (i.e. completed in 1976 or before), which is about 300 times the stock of the same age in 2015. Such old private building units will be concentrated in urban areas, with the Yau-Tsim-Mong district estimated to have over 60,000 of them by 2046. The state of such older buildings will depend upon the quality of each block's building management and repair maintenance. Those lacking ongoing repairs will by then be showing obvious signs of dilapidation and defects.

The Urban Renewal Authority's Managing Director, Ir Wai Chi-sing, says the need for work is urgent. "In 2010 we carried out a survey on building conditions using structured visual inspection method to focus on criteria like concrete spalling, rusty reinforced concrete, water leakage and broken drainage pipes," he says. "From there, we combined an indicator showcasing serviceability

of the building. About 60 percent of existing ageing stocks are concentrated in Sham Shui Po, Kowloon City, Yau Ma Tei, Mong Kok and Central & Western districts."

"When a block is over 30 years old it starts deteriorating and, if neglected, at 50 years it's nearly unserviceable. The solution is either a big revamp or reconstruction. Our current projection is that 5,500 out of 9,700 blocks of 50 years or older are in a non-serviceable state. By 2046, 28,000 blocks will be 50 years old or more. If we don't start repairing them, the proportion of unserviceable blocks will be immense. Structurally speaking, however, a block constructed of reinforced concrete can usually last for a century if it has been well maintained."

Buildings that are 30 years old or more face ageing issues, such as defective lifts, spalling and rusting steel reinforcement. It's common to define an ageing building by the year it was completed, according to Sr Professor Eddie Hui of the Department of Building and Real Estate at the Hong Kong Polytechnic University and HKIS Property and Facility Management Division Chairman. "However," he says, "it really depends on the condition and quality when it was constructed. In fact, external ageing symptoms might not affect structural safety. In the next decade, ageing buildings will burgeon, given that, as new buildings become old, potential health hazards appear if there's no proper management. Prompt repairs are paramount in order to stretch the life span of older buildings; otherwise, this issue poses threats to public like a time bomb."

Building surveyors play a pivotal role in treating the problems of ageing blocks. Sr Daniel Chang, HKIS Building Surveying Division Chairman, says, "Ageing is not an issue if we maintain the building in the proper manner, especially regarding building safety and health. Take a

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traditional residential estate like Taikoo Shing as an example. Its property price remains high and stable thanks to good property management. Serviceability counts as much as the building fabric itself. It's especially true for estates with an ageing population who require changes to fixtures like replacing a step or two with a slight ramp for safer access.”

Prevention is better than cure. Various forms of assistance under the Integrated Building Maintenance Assistance Scheme are provided by Urban Renewal Authority (URA) to alleviate the problem which help eligible applicants and subsidises 10-20 per cent of repair costs. But Ir Wai warns that, by 2046, HK\$70 billion may be needed to tackle buildings of 30 years or older, although such repairs are limited to general works and not in-depth makeovers to improve serviceability.

“One of the URA's objectives is to promote the maintenance of residential buildings,” says Ir Wai. “This explains why we categorise buildings into three types – young, middle-aged and old – in order to deploy different strategies and policies. For instance, with younger buildings – those aged 30 years or less – we focus on preventive maintenance. For those “middle-aged ones” (30 years or older) the stress is on an educational approach, like how to implement repairs and maintenance step by step via our promotional activities.”

“The city faces a big problem over buildings built before the 1970s. Owners either lack money for redevelopment or the blocks were built by volume back in the old days so they can't meet the prevailing planning parameters such as a lower plot ratio. Frankly, most ageing buildings with redeveloping potential have been taken up by developers and we don't have the resources to handle all the rest. Were an increase of around 100 per cent to be permitted

in plot ratio it would only yield a break-even point of investment. There is no way out and therefore we can only adopt planning tools like up-zoning, rezoning and plot ratio transfer. Additionally, we are also exploring new tools like plot ratio trading and plot ratio reserve.”

Looking ahead, stakeholders strongly believe the situation will cause a significant problem and urge collaboration among Government, businesses and owners/professional bodies. While the Government supervises on a regular basis, owners must stay proactive in applying for various assistance schemes and ensure OCs are established and that there is sufficient funding to pay future repair bills. Ir Wai also suggests professional associations like the HKIS and the Hong Kong Institution of Engineers help formulate guidelines to post on the URA's one-stop information platform. “Since these professionals are familiar with property repair, they could draft easy-to-understand guidelines for direct owners and management companies on how to undertake repairs or inspections. Moreover, guidelines on a maintenance manual can also be drafted by developers because inaccurate technical specifications affect costings. Even accountants can help as they can look after the balance sheet.”

Sr Daniel Chang believes more surveyors will be needed to cope with the task. “As the number of ageing buildings will grow in the future and market demand for professionals continues to grow, we expect a shortage of manpower,” he says. “Hopefully, the building surveyor profession will be promoted in various universities as well as secondary schools. In return, it would be great to see more students choose this profession. The HKIS has around 1,260 Building Surveyor members and about 50 qualified professionals join the HKIS every year.”

The article is published courtesy of Classified Post.

香港樓宇老化的應對方案

樓宇缺乏適當維修和管理，加劇了香港樓宇老化情況。測量師可發揮專業，協助政府落實政策改善有關問題。

Prudence Lui

香港大部分現有建築物均落成於 1970 年代至 1980 年代，即本港經濟起飛、工業急速發展的時代。根據政府發展局的資料，香港現時約有 4,000 幢樓齡超過 50 年的樓宇，而按估算此類樓宇每年將增加 500 幢。社會關注樓宇老化的問題，不少樓宇欠缺管理及疏於保養而令問題更嚴重。不少以鋼筋混凝土建成的樓宇一般只能維持約 50 年。多個相關界別的專業人士促請業主們盡快採取行動，否則樓宇老化問題加劇將威脅公眾安全。

《香港 2030+》規劃報告部分內容揭示了問題的迫切性。報告指出，香港舊樓數目按年遞增，情況嚴峻，估計到了 2046 年，全港有 326,000 個樓齡超過 70 年的私樓單位（於 1976 年或以前落成），與 2015 年比較，數目多近 300 倍。此類老舊的私人樓宇單位主要集中在市區，其中油尖旺區在 2046 年的舊樓單位估計將超過 60,000 個。具體樓宇狀態需視乎每一幢樓宇的管理及維修保養情況，長期缺乏維修的樓宇將出現明顯的破損和失修跡象。

市區重建局行政總監韋志成工程師表示，樓宇維修刻不容緩。他說：「我們在 2010 年進行調查，有系統地目測檢查樓宇狀況，集中審視石屎剝落、漏水和污水管破爛等情況。我們整合出顯示樓宇持續可用性的指標。現時約有六成老化樓宇集中於深水埗、九龍城、油麻地、旺角和中西區。」

「樓宇落成超過 30 年便會開始老化。若樓宇持續失修，當樓齡達到 50 年，樓宇便無法繼續使用。解決方法只有兩個：大規模翻新或重建。我們估計現時樓齡在 50 年或以上的 9,700 幢樓宇中，有 5,500 幢已無法維修。到了 2046 年，全港將有 28,000 幢樓齡超過 50 年的樓宇。如果我們不開始維修，將會有更多無法持續使用的樓宇。從結構上來說，鋼筋水泥建造的樓宇只要保養良好，通常都可用上一個世紀。」

樓齡逾 30 年的樓宇，老化問題叢生，包括升降機失靈、石屎剝落和鋼筋生鏽。香港理工大學建築及房地產學系教授兼香港測量師學會物業設施管理組主席許智文教授測量師表示，按照樓宇落成年份來計算樓齡是常見的做法，「但實際上要視乎樓宇興建時的情況和質素。事實上，樓宇外觀上出現老化並不會影響結構安全。未來十年，老化樓宇的數目將會急增；如果沒有適當管理，便會引發潛在風險。要延長老舊樓宇的生命週期，最重要是迅速維修；否則樓宇老化的問題就像計時炸彈一樣，威脅公眾安全。」

建築測量師在處理樓宇老化問題上擔當重要角色。香港測量師學會建築測量組主席鄭偉業測量師表示：「如果我們適當保養樓宇，注重樓宇安全和健康，老化本身並不是大問題。以太古城一類傳統屋苑為例，樓價持續高企穩定，全因物業管理做得好。持續可用性和樓宇本身物料同樣重要，尤其是人口老化的屋苑往往需要改動一些固定設施，例如把部分樓梯改裝成小斜道，以方便年老居民安全進出。」

「香港舊樓數目按年遞增，情況嚴峻。」

預防勝於治療。目前市建局推出樓宇維修綜合支援計劃，為合資格申請人提供一至兩成的維修費補貼。但韋志成提醒公眾，到了 2046 年，樓齡逾 30 年的樓宇維修費將達 700 億港元，而這些維修僅限於一般工程，不包括深入翻新和改善樓宇的持續可用性。

韋志成說：「市建局其中一個目標是推動住宅樓宇的維修保養。我們把樓宇分成老、中、青三大類別，方便調整策略和政策。舉例來說，較『年輕』的樓宇，即樓齡 30 年或以下的建築物，重點是預防性維修。而『中年』樓，即樓齡 30 年或以上的建築物，會側重於教育工作，例如推行宣傳活動，教育公眾維修及保養樓宇。」

「建於 1970 年代的樓宇目前已衍生不少棘手問題。業主可能缺乏重建資金，這些當年大量興建的建築物亦可能無法滿足現有的規劃標準，例如較低的地積比率。大部分有重建潛質的老化樓宇已被發展商收購，我們本身也沒有資源可以處理其他舊樓。如果地積比率提高約一倍，也只能在投資上達致收支平衡。在未有新方法的情況下，我們只能採用其他規劃工具去提升分區用途、改劃用途又或轉移地積比率。此外，我們也在研究新方法，例如地積比率交易和地積比率儲備。」

各界持份者均認為有關情況將帶來更多問題，促請政府、各大企業及業主/專業團體攜手合作。雖然政府定期監察樓宇，但業主亦需主動申請各種支援計劃，並成立業主立案法團，而且確保有足夠資金支付未來的維修費用。韋志成亦建議，由香港測量師學會和香港工程師學會等專業組織協助制訂指引，並張貼於市建局的一站式資訊平台。「由於相關專業人士熟識物業維修，他們可以為業主和管理公司草擬簡單易明的指引，協助他們開展維修或檢查工作。另一方面，發展商也可以草擬維修手冊指引，以免不適當的技術規格影響成本，會計師也可以幫忙處理資產負債表。」

鄭偉業認為，本港需要更多測量師去應付這項工作。他說：「老化樓宇數目日增，市場需要更多專業人士，我們預料市場將出現人手短缺。若各大專院校和中學加強推廣建築測量專業，便可吸引更多同學報讀相關科目及投身業界。香港測量師學會現時約有 1,260 名建築測量師會員，每年約有 50 位合資格專業人士加入學會。」

本文由《Classified Post》撰文。



樓齡逾 30 年的樓宇，老化問題叢生，包括升降機失靈、石屎剝落和鋼筋生鏽。若欠缺適當維修和管理，老化樓宇會威脅公眾安全。(相片提供：iStock)

「如果我們適當保養樓宇，注重樓宇安全和健康，老化本身並不是大問題。」