

## LCQ4: Building designs adding difficulties to repair and maintenance works

Following is a question by the Hon Lam Cheuk-ting and a reply by the Secretary for Labour and Welfare, Dr Law Chi-kwong, in the Legislative Council today (June 20):

Question:

It has been reported that quite a number of residential buildings newly completed in recent years were constructed with bay windows, fitted with glass curtain walls, installed with decorative components on external walls, and had air-conditioners and drainage pipes installed in concealed locations on the external walls. Such design features have added difficulties to the repair and maintenance works, e.g. the work locations being inaccessible from the inside of the buildings. Since scaffolds cannot be erected on the external walls of some buildings, the more expensive gondolas are needed to be used when works are carried out on the external walls, thus increasing the financial burdens on property owners. Furthermore, due to the design constraints of some external walls, gondolas cannot get close to the work locations. As a result, workers have to stretch their bodies out of the gondolas when carrying out works. This, coupled with the gondolas swinging with the wind, has increased the risk of workers falling from height. In this connection, will the Government inform this Council:

(1) of the number of industrial accidents in the past five years in which workers fell from height while carrying out works on external walls of buildings and the resultant casualties (with a breakdown by whether the relevant works were carried out by using scaffolds or gondolas);

(2) whether it will formulate policies and guidelines to stipulate that the needs of future repair and maintenance works have to be taken into account in the building designs, so as to minimise the need to carry out works at height and to ensure that scaffolds can be erected on the external walls for carrying out the relevant works; and

(3) of the measures put in place to step up the regulation of works on the external walls of buildings which are already completed so as to protect the safety of workers working at height?

Reply:

President,

The Government is highly concerned about the safety of works carried out at external walls of buildings. According to the occupational safety and health legislation administered by the Labour Department (LD), duty-holders

(including contractors/employers) have the duty to conduct task-specific risk assessment before commencing repair and maintenance works at external walls, including taking the actual working environment and condition (such as the uniqueness of building design) into consideration, and based on the results of the risk assessment, to formulate appropriate safe working methods, procedures and necessary safety measures. LD, through promulgation of Codes of Practice (CoP)/Guidelines, publicity and promotion, as well as carrying out routine inspections, ensures the safety of workers working at external walls of buildings. The Government also understands the importance of building design to the safety of works carried out at external walls, and relevant government departments are actively following up on this issue.

In consultation with the Development Bureau and the Buildings Department (BD), the Labour and Welfare Bureau provides a consolidated reply to the three parts of the question as follows:

(1) From 2013 to 2017, there were 13 fatal industrial accidents relating to workers falling from height during renovation and repair works carried out at the external walls of existing buildings, resulting in the death of 14 workers. Among these cases, 11 involved the erection, dismantling or use of scaffolds. None of the cases involved the use of suspended working platforms (SWPs). According to the results of the accident investigations conducted by LD, there was no evidence showing that the design of the external walls of these buildings was not suitable for erection of scaffolds to carry out the works. LD does not keep the figures of non-fatal accidents relating to repair and maintenance works at external walls.

(2) With regards to the design of new buildings, in order to encourage the industry, when designing buildings, to consider the incorporation of facilities to facilitate external inspection and maintenance of buildings, BD implemented new initiatives in early 2016. In considering applications for exemption of components of the exterior of buildings, such as air conditioners (ACs) platforms and curtain walls, from gross floor area (GFA) calculation, the provision of ancillary facilities for repair and maintenance of such exterior components is one of the prerequisites. BD has issued a circular letter to the industry in December 2016 promulgating Guidelines for Designing Access and Safety Provisions for the Maintenance and Repair of External Air Conditioners (ACs) at Height. The guidelines set out the requirements regarding adequate working spaces around ACs, appropriate access, etc. Upon issue of these guidelines, development projects with general building plans first approved by BD involving exclusion of ACs platforms from the GFA calculation should comply with the guidelines and provide relevant ancillary facilities. A working group was set up by BD, LD and the building industry in 2017 to review the guidelines for designing ACs platform to facilitate workers carrying out repair works safely. The working group also reviews the requirements for installing cast-in anchor devices on external walls to complement the use of safety belt. BD will consult the building industry later on the proposed revisions to the guidelines of ACs platform per the established procedures.

BD is now looking into the legislative amendment of the Building (Construction) Regulations (Cap 123B) including introduction of requirements

to mandate provision of adequate safety facilities in building design to facilitate future repair and maintenance works on external walls. When the amended regulations commence operation, BD will require Authorized Persons to provide information on the facilities for external repair of buildings, such as working platforms that conform with legislations relating to occupational safety and health, etc. Such facilities must be specified on the building plans for consideration and approval by BD for compliance with the proposed revised provisions. To complement the proposed amended regulations, BD is formulating guidelines on the design of access for repair and will consult the building industry per the established procedures later.

(3) LD administers the Occupational Safety and Health Ordinance (Cap. 509), the Factories and Industrial Undertakings Ordinance (Cap 59) and their subsidiary regulations. LD, through inspection and enforcement including area patrols outside office hours and special enforcement operations targeting high risk works such as working at height, sends officers to carry out surprise inspection on works carried out at external walls of buildings, with a view to deterring operation contravening safety regulations and to enhancing safety of such works. The legislation stipulates the safety requirements for work at height (including works carried out at external walls) that duty-holders should comply with, including erection of safe working platforms, as well as provision of secure fences, safe access and egress and suitable fall-arrestors for working platforms to protect the occupational safety of workers working at height.

On working-at-height, LD published CoP/Guidelines, including the CoP for Bamboo Scaffolding Safety, CoP for Safe Use and Operation of SWPs, Guidance Notes on Classification and Use of Safety Belts and their Anchorage Systems, etc. They set out practical operation requirements and measures for general working environment/condition in respect of external wall works safety to help contractors/employers understand and comply with the legislative requirements and their responsibilities under other legislations. Under this principle, LD will review and update the relevant CoP/Guidelines from time to time to reflect the changes in general working environment.

However, as the design of the external walls of buildings varies, contractors/employers have the duty to conduct task-specific risk assessment before commencing repair and maintenance works at external walls, including taking the actual working environment and condition (such as the uniqueness of building design) into consideration, and based on the results of the risk assessment, to formulate appropriate safe working methods, procedures and necessary safety measures including the provision of suitable working platforms and fall arrestors for the workers and ensuring their proper use, in order to comply with statutory work-safety requirements. When necessary, contractors/ employers should also seek professional advice.