

LCQ12: Safety of workers carrying out maintenance and repair of building facilities on external walls of buildings

Following is a question by the Hon Shiu Ka-fai and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 13):

Question:

Some suppliers of air-conditioning (AC) facilities and practitioners of the AC works trade have relayed to me that the designs of some private buildings newly completed in recent years have not fully taken into account the needs of workers when they carry out replacement works and repair works for AC facilities on the external walls of such buildings in future. In this connection, will the Government inform this Council:

(1) whether it is aware of the situation that although some private buildings have been installed with gondola working platform systems (gondolas), (i) the designs of the buildings concerned have failed to dovetail with the use of the gondolas in practice, resulting in a gondola being unable to reach the location for installation of the facility concerned, and (ii) there is still certain distance between a gondola and the facility on an external wall even if such location is reachable, resulting in the workers having to stretch their bodies out of the gondola in order to carry out the works which poses the risk of workers falling from heights; if it is, of the measures put in place by the Government to improve such a situation; if it does not, the reasons for that;

(2) whether the Buildings Department has reviewed how far developers have complied with its Guidelines for Designing Access and Safety Provisions for the Maintenance and Repair of External Air Conditioners at Height issued in December 2016 and the effectiveness of the Guidelines; if so, of the outcome of the review; if not, whether it will conduct such a review expeditiously;

(3) whether it will consider the suggestions put forward by the practitioners in the AC works trade of introducing legislation to stipulate that the designs of AC platforms on the external walls of a building to be built must:

- (i) provide reasonable and adequate space for an AC facility to be placed flat on the platform,
- (ii) provide safe access for workers to enter and exit,
- (iii) fit in with various tubes on the external walls, and
- (iv) install with anchor devices (e.g. "eye bolt") at appropriate locations for workers to attach their safety belts; and

(4) as the relevant legislation in Singapore stipulates that developers must

take into primary and necessary consideration the needs of future maintenance and repair of building facilities when they draw up designs of buildings, whether the Government will (i) enact legislation to enforce similar requirements, and (ii) introduce common working platforms on external walls to provide workers with reasonable and adequate working space, thereby minimising their risks of falling from heights?

Reply:

President,

The Government attaches great importance to occupational safety for carrying out repair and maintenance works at external walls. Labour Department (LD), Buildings Department (BD) and Construction Industry Council (CIC) have issued guidelines on different aspects of external repair and maintenance of buildings.

In consultation with LD and BD, the Development Bureau provides a consolidated reply to the four parts of the question as follows:

(1) External repair and maintenance works at buildings fall under the portfolio of occupational safety, such works should fulfill the requirements of the Occupational Safety and Health Ordinance (Chapter 509), Factories and Industrial Undertakings Ordinance (Chapter 59) and relevant subsidiary legislations so as to ensure workers' safety. For work safety related to external walls of buildings, LD has issued code of practices and guidance notes for the industry, setting out detailed requirements and measures for general work setting and circumstances. Duty holders should follow such codes of practice properly. As building design varies, contractors or employers are responsible for conducting target risk assessment before commencing external repair and maintenance works of buildings, including duly consider the actual work setting and circumstances (such as the uniqueness of building design), so as to formulate appropriate safe methodologies, procedures and necessary safety measures to comply with statutory requirements. For the circumstances raised in the question, relevant departments have also through the industry gathered such views. Subject to the concerned circumstances, relevant departments will review the legislations, codes of practice and guidance notes from time to time to protect the occupational safety of workers.

(2) With regards to the design of new buildings, BD has issued a circular letter to the industry in December 2016 promulgating guidelines for design 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 and appropriate access, etc. Upon issue of the guidelines, development projects with general building plans first approved by BD involving exemption of ACs platforms from the calculation of GFA 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.

(3) & (4) Per the established policy, LD is responsible for the enforcement of the Occupational Safety and Health Ordinance (Chapter 509), Factories and Industrial Undertakings Ordinance (Chapter 59) and relevant subsidiary legislations. LD has all along been promoting the safety of repair and maintenance on external walls through inspections and enforcement actions, etc. These legislations have stipulated the requirements for duty holders undertaking works-at-height (including works on external walls), including provision of safe working platforms for workers working at height with a view to safeguarding the occupational safety of them. For carrying out of external repair and maintenance of buildings, LD has also promulgated codes of practice and guidance notes for the industry, including Code of Practice for Bamboo Scaffolding Safety, Code of Practice for Safe Use and Operation of Suspended Working Platforms and Guidance Notes on Classification and Use of Safety Belts and their Anchorage Systems, etc. These codes of practice and guidelines help contractors and employers understand and comply with the relevant legislative requirements. LD will review relevant codes of practices/guidance notes from time to time in order to meet changes in general working environment. On the other hand, to curb systemic safety risks at source more effectively through building design and management, LD will strength the engagement with project proponents of building works projects and urge relevant contractors to timely incorporate elements regarding work safety when considering construction methodologies and design during project design, preparatory stages and construction stages with a view to enhancing occupational safety and preventing accidents.

BD also reviews the subsidiary legislations under the Buildings Ordinance (Chapter 123) from time to time and proposes suitable amendments as necessary with a view to keeping abreast of latest building technology advancement and responding the industry's reasonable requests thus facilitating the industry to carry out building works per the law. BD is now looking into the legislative amendment of the Building (Construction) Regulations (Chapter 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. The direction of the legislative amendments will be on performance-based of each building to allow greater flexibility in building design and cater for the rapid building technology advancements instead of prescribing a set of safety facilities to be applied to all buildings. According to this direction, when the amended regulations commence operation, BD will require Authorised 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.

Besides, CIC issued a newly amended guidelines on the Design, Installation and Maintenance of Cast-in Anchors at External walls of New Buildings (Version 2) in November last year to enhance the safety of work-at-height on the external walls of buildings. The Task Force on Work Safety of Repair, Maintenance, Alterations and Additions Sites under the Committee on Construction Site Safety of CIC is exploring how best to enhance workers' safety when conducting external repair and maintenance works through building design and strengthening preventive and protective measures for existing buildings. Members of the task force encompass various stakeholders of the construction industry, as well as representatives of occupational safety and health associations, property management and the relevant government departments, including LD and BD.