For discussion
on 5 February 2018

Legislative Council Panel on Housing

Quality management of products used in public housing developments

PURPOSE

This paper briefs Members on the quality management of products used in the construction of new public housing developments undertaken by the Hong Kong Housing Authority (HA).

BACKGROUND

2. HA all along attaches great importance to the quality management of building materials used in public housing developments. Under the established practice, HA will assess the risk factors associated with the selected building materials when formulating the specifications and contract conditions for new public housing projects, in order to establish a prudent quality assurance system. The system covers various aspects including product certification, surveillance visits to factories, site verification checks, Performance Assessment Scoring System for contractors, and internal audits, to ensure the performance of the contractors and suppliers in material control.

3. In March 2017, we briefed the Panel on HA's risk assessment and management measures of building materials used in the construction of public housing developments, and a series of new initiatives to enhance quality for building works implemented since the "excess-lead-in-water" incident in July 2015[1].

RISK ASSESSMENT OF BUILDING MATERIALS

4. HA had started a systematic risk assessment exercise on building materials in June 2016 based on the principles under the international standard ISO 31000; and completed the assessment of over 2 300 types of building materials used in architectural, building services, structural, civil engineering, geotechnical engineering and landscaping works in December 2016. These materials have already covered all building materials generally used in public housing developments.

[1] LC Paper No. CB(1)617/16-17(07).

5. HA has identified the risk levels of building materials based on the principles under the international standard ISO 31000, and grouped the materials into categories according to the level of risk. Building materials, which may cause serious impact in the case of non-compliance with specifications or failure in function, are classified as materials having the highest risk, with which the following circumstances will generally be involved –

(a) affecting safety of users and/or having adverse effect on health;
(b) being regulated by relevant statutory requirements;
(c) newly introduced or seldom used, hence the Housing Department/contractors have limited knowledge or understanding; or
(d) requiring advanced or special skills to work on.

6. HA has invited contractors and other stakeholders including Government departments, relevant organisations, trade associations, professional institutions, academia, professional service providers and suppliers etc. to participate in the risk assessment exercise. Feedback from the stakeholders on the systematic risk assessment system proposed by HA was generally supportive.

RISK TREATMENT

7. After the completion of the risk assessment of the building materials, HA has developed corresponding risk treatment measures based on the assessment results and the present known risk levels. These risk treatment measures have been applied to the five building construction work stages, namely, "sample submission", "purchasing", "delivery", "storage control" and "use (installation)", to ensure effective control measures are in place for every stage. Such measures include increasing the number of materials examined in verification checks at the delivery stage, the frequency of sampling test, and the number of inspections during installation; as well as adding the requirement of random checking of materials at storage areas, and deploying Material Monitoring Officers for checking and verification of materials delivered to site. As at end-2017, major risk treatment measures for all materials have been rolled out and implemented in stages, and have been applied to the quality control systems for new HA's projects.

8. Meanwhile, with a view to developing a consistent mechanism for quality control of materials, HA has required all contractors to –

(a) develop a project specific material risk assessment system which covers their subcontractors and suppliers, with reference to HA's

system and the international standard ISO 31000, and incorporate the system into their Quality Control System and Subcontractor Management Plan; and

(b) conduct an annual third party audit on their Quality Control System for each HA project, and increase the frequency of compliance audits on materials conducted by their in-house audit team.

WAY FORWARD

9. Risk assessment and management of building materials are on-going processes, and may evolve and change over time and subject to availability of materials in the market. HA will continue to cooperate with relevant stakeholders and experts, and regularly improve the quality control systems in order to check and monitor whether the materials comply with the specifications, and with a view to maintaining and improving the effectiveness of the systems.

ADVICE SOUGHT

10. Members are invited to note the content of this paper.

Transport and Housing Bureau
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