

**CONTROLLING OFFICER'S REPLY**

**DEVB(PL)273**

**(Question Serial No. 3466)**

Head: (82) Buildings Department  
Subhead (No. & title): (-) Not Specified  
Programme: (1) Buildings and Building Works  
Controlling Officer: Director of Buildings (CHEUNG Tin-cheung)  
Director of Bureau: Secretary for Development

Question:

It is mentioned in the Programme that the Department has completed the consultancy study on water seepage in buildings. What are the details? With reference to the written reply (Reply Serial No. DEVB(PL)090) to the Special Meetings of the Finance Committee last year, the authorities has applied new technological methods in pilot districts in the past financial year. Please list the types of new technological methods applied and their effectiveness and practicability in each pilot district. Is there a proposed timetable for the authorities to adopt the effective new technological methods for comprehensive application?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 1001)

Reply:

The consultancy study commissioned by the Buildings Department (BD) recommended that the following five new testing methods may be applied for Stage III investigation:

- (a) Infrared thermographic test (IT);
- (b) Microwave concrete sub-layer moisture content test (MT);
- (c) Radar scanning survey;
- (d) Static pressure test; and
- (e) Material analysis by micro-spectroscopy inspection.

The consultant had conducted an in-depth study on the above testing methods including carrying out field tests to assess the methods and considered that the tests are technically feasible to assist the identification of the source of water seepage in buildings. The new testing methods have their respective strengths and limitations. For example, while MT and IT could be effective in investigating seepage through concrete slabs, they could not be effectively applied under some circumstances such as ceilings with concrete spalling, ceilings with tiles finishes and blockage by pipes/building services. Where the new testing technologies could not be effectively applied, the Joint Office (JO) set up by the Food and Environmental Hygiene Department and BD has to resort to conventional testing methods.

Since the second half of June 2018, JO has applied new testing technologies such as IT and MT in three pilot districts (i.e. Kowloon City, Wanchai and Central and Western). With the experience gained and data obtained through the pilot application of the new testing methods, JO will evaluate the effectiveness of the new testing technologies and refine the technical guidelines and procedures relating to the use of the testing methods. JO will progressively extend the use of the new testing methods to other pilot districts in the third quarter of 2019.

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