#### **Notes to Owners/Occupants**

# General Procedures for Investigating Water Seepage Joint Office of the Buildings Department and the Food and Environmental Hygiene Department

# Responsibilities of Owners and Occupants

- 1. Water seepage in buildings is generally caused by defective building fabric or installations and lack of proper maintenance. Proper management, maintenance and repair of buildings, including resolving water seepage problems, are the responsibilities of building owners and occupants. The co-operation of owners and occupants concerned is essential for resolving water seepage problems. In general, if water seepage occurs in private buildings, owners should first arrange their own investigation into the cause of seepage and, as appropriate, co-ordinate with the occupants and other owners concerned for repair works.
- 2. Under normal circumstances, seepage originated from **penetration of rainwater** through roofs, flat roofs, balconies, external walls or windows of a building or from leaking water pipes will not cause any public health implications and is not nuisance actionable by the Joint Office (JO) under the Public Health and Municipal Services Ordinance (PHMSO)(Cap. 132).

# **Objective of the Joint Office**

- 3. The objective of JO is to identify the source of seepage by means of systematic investigation through the powers conferred by PHMSO and the professional expertise of the relevant government departments, as well as the co-operation of the owners and occupants, with a view to requiring the owners concerned to carry out repair in order to resolve the nuisance arising from water seepage actionable under PHMSO.
- 4. Reinstatement or repair of the affected premises or areas will not be undertaken by JO. Owners may make reference to the guidelines in Chapter 4.1.3 of the Building Maintenance Guidebook uploaded on Buildings Department's website for carrying out the repair works.

https://www.bd.gov.hk/en/resources/codes-and-references/codes-and-design-manuals/bmg.html

#### **General Procedures**

- 5. Within 6 working days upon receipt of a report, JO staff will contact the informant to arrange an inspection to the affected premises. The informant should assist JO staff in arranging access to the affected premises or area, and remove any obstruction (e.g. false ceiling, personal belongings, etc.) that tends to conceal the seepage location in order to facilitate the investigation.
- 6. If water seepage nuisance is identified, JO staff will carry out investigation and non-destructive tests systematically at the premises suspected to have caused the seepage (suspected premises) so as to identify the source of seepage. For simple and straightforward cases with the co-operation of the owners and occupants concerned, JO normally will complete the investigation and tests and inform the informant of the outcome within 90 working days. If the investigation cannot be completed within 90 working days, JO will notify the informant of the investigation progress.
- 7. In the case that access to the suspected premises for investigation is denied, JO may apply for a warrant to effect entry into premises from the Court in order to proceed with the investigation and tests.
- 8. Once the source of seepage causing nuisance has been identified after investigation, JO will issue a nuisance notice to the person concerned under the PHMSO, requiring the abatement of nuisance within a specified period of time. JO will instigate prosecution against non-compliance with the nuisance notice.
- 9. If the seepage becomes mild or improves significantly during investigation or the source of seepage cannot be identified after tests, the investigation of JO will cease. If a building safety problem or wastage of water caused by defective water supply pipes is found during the investigation, JO will refer the case to the Buildings Department and the Water Supplies Department for follow-up and enforcement action in accordance with the Buildings Ordinance (Cap. 123) or the Waterworks Ordinance (Cap. 102) respectively.

### **Investigating Water Seepage Problems**

10. In general, water seepage investigation will be conducted in 3 stages.

# Stage I – Confirmation of Water Seepage Condition (by JO staff)

11. JO staff will visit the informant's premises to record the condition of the seepage location and other relevant information. If the moisture content of the seepage area is found equal to or exceeding 35% and the seepage problem is suspected to have been caused by other premises, Stage II – Initial Investigation will be carried out.

<sup>&</sup>lt;sup>1</sup> JO will not investigate water seepage reports with moisture content below 35%.

## Stage II – Initial Investigation (normally by JO staff)

12. One or several of the following tests will be conducted, depending on the circumstances of the case:

Test method	Test location	Premises involved	Time required <sup>2</sup>
Moisture Content Monitoring	Wall surface/ceiling	Informant's premises	About 0.5 hour
(using moisture meter)			
Colour Water Test <sup>3</sup> (using colour dyes)	Drainage outlet	Suspected premises	About 1 hour
Reversible Pressure Test <sup>4</sup>	Water supply pipe and seepage area	Suspected premises and informant's premises	About 3 to 5 hours

13. Normally, JO staff will visit the premises concerned once or twice for investigation and tests. For complicated cases (e.g. involving several bathrooms or seepage locations), multiple visits to the informant's premises and the suspected premises may be required for investigation, tests, reviews of test results or monitoring any changes in the seepage condition. If a case is so complicated that the source of seepage cannot be identified, JO will proceed to Stage III – Professional Investigation.

## Stage III – Professional Investigation (normally by JO's consultants)

14. One or several of the following tests will be conducted, depending on the circumstances of the case:

Test method	Test location	Premises involved	Time required <sup>5</sup>
Moisture Content Monitoring	Wall surface/ceiling	Informant's premises	About 0.5 hour
(using moisture meter)			
Ponding Test for Floor <sup>6</sup>	Floor slab of	Suspected premises	About 1 to 2
(using colour water)	bathroom/shower		hours
	compartment/kitchen		

Colour water will be poured into the drainage outlets. The seepage area in the informant's premises will be reviewed for any seepage of colour water.

Time required for each test may vary according to site condition.

Applicable to suspected leakage from water supply pipes and continuous water dripping in the seepage area. The rate of water dripping or moisture content will first be recorded. Then, the water supply mains at the suspected premises will be turned off and all taps will be turned on to drain off the water and release the pressure inside the pipes. The change in water dripping or moisture content will be monitored and recorded afterwards. The water supply mains at the suspected premises will then be turned on and all taps will be turned off to resume the pressure inside the pipes. The change in water dripping or moisture content will then be monitored and recorded again.

Time required for each test may vary according to site condition.

The drainage outlet will be plugged before the test. The test area will be flooded with colour water and cleaned with clear water after the test. Upon completion of the test, the seepage area in the informant's premises will be reviewed for any seepage of colour water.

Spray Test for Wall <sup>7</sup>	Wall surface of bath	Suspected premises	About 5 to 15
(using colour water)	tub/shower tray/shower		minutes
	compartment		
Reversible Pressure Test (if	Water supply pipe and	Suspected premises and	About 3 to 5
not carried out in Stage II)	seepage area	informant's premises	hours

15. Normally, JO staff/consultants will visit the premises concerned once or twice for investigation and tests. For complicated cases (e.g. involving several bathrooms or seepage locations), multiple visits to the informant's premises and the suspected premises may be required for investigation, tests, reviews of test results or monitoring any changes in the seepage condition.

## **Resolving Seepage Problems by Owners**

16. Apart from seeking assistance from JO, owners or occupants may cooperate among each other to engage professionals/consultants for carrying out investigation to identify the source of seepage and conducting necessary repair works to resolve the water seepage problems. Consultants/professionals are available in the market to provide services for investigating and resolving water seepage problems. The following hyperlinks are provided by the Hong Kong Institute of Surveyors<sup>8</sup>:

List of Experts and Consultancy Firms providing Advice on Water Seepage Problems: <a href="http://www.hkis.org.hk/hkis/general/bsd/companylist/BS%20Company%20List\_11.pdf">http://www.hkis.org.hk/hkis/general/bsd/companylist/BS%20Company%20List\_11.pdf</a>
List of Experts on Water Seepage Investigation: <a href="https://www.hkis.org.hk/en/experts.html?category=1">https://www.hkis.org.hk/en/experts.html?category=1</a>

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Colour water will be sprayed on the walls of bath tub, shower tray or shower compartment. Upon completion of the test, the seepage area in the informant's premises will be reviewed for any seepage of colour water.

Owners are responsible for making their own assessment of the information in the lists. Should there be any queries on any matters regarding the lists, the Hong Kong Institute of Surveyors (HKIS) should be contacted. The lists are complied, maintained and provided by HKIS. JO plays no part in the compilation of the lists and shall not be responsible for any inaccuracies in the lists nor any errors/incomplete information nor any loss or damage whatsoever arising out of or in connection with any information or the performance of the service providers in the lists. The service providers in the lists should neither be regarded as endorsed or recommended by JO nor implied that JO promotes their business.

17. If water seepage problems involve the water supply system, owners may appoint a licensed plumber licensed under the Waterworks Regulations (Cap. 102A) for checking the system and carrying out the necessary repair works. The Licensed Plumber Directory is available on the following webpage of the Water Supplies Department:

http://www.wsd.gov.hk/en/plumbing-engineering/licensed-plumbers/index.html

18. If necessary, owners may consider mediation or seeking legal advice on instigation of civil action as an alternative dispute resolution mechanism for resolving water seepage problems.

#### **Assistance Schemes**

19. The Integrated Building Rehabilitation Assistance Scheme (IBRAS) is a one-stop service coordinated by the Urban Renewal Authority, providing financial assistance and technical support to building owners. Common Area Repair Works Hardship Grant, Home Renovation Interest-free Loan, Building Maintenance Grant Scheme for Elderly Owners and Building Safety Loan Scheme under IBRAS are applicable to water seepage related repair works. Eligible persons may apply for a loan or subsidy for carrying out water seepage related repair works. Details are available on the following webpage:

http://www.buildingrehab.org.hk/Rehabilitation-Resources/IBRAS?sponsorType=2&lang=en-US



Joint Office of

**Buildings Department and Food and Environmental Hygiene Department** 

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