

Notes to Owners/Occupants
General Procedures for Investigating Water Seepage in Pilot Districts¹
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 the 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 abate the nuisance arising from water seepage actionable under the 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 (BD)'s website for carrying out the repair works.

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



¹ The pilot districts are Central and Western, Wan Chai, Eastern, Kowloon City, Sham Shui Po, Wong Tai Sin, Kwai Tsing, Tuen Mun, Yuen Long, Tai Po, Sai Kung and North.

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 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. If the source of seepage causing nuisance is identified during the 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 there is no substantive evidence to prove any contravention of the provisions of the PHMSO, JO will have no legal basis to take any enforcement action.
10. If building / drainage pipe defects or wastage of water² caused by a defective water supply pipe is found during the investigation, JO will refer the case to BD or the Water Supplies Department (WSD), for follow-up and enforcement action in accordance with the Buildings Ordinance (Cap. 123) or the Waterworks Ordinance (Cap. 102) respectively.

² WSD will not intervene in a private dispute arising from a mild water seepage nuisance where there is no evidence of wastage of water.

Investigating Water Seepage Problems

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

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

12. 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%³ and the seepage problem is suspected to have been caused by other premises, Stage II – Initial Investigation will be carried out.

Stage II – Initial Investigation (normally by JO staff)

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

Test method	Test location	Premises involved	Time required⁴
Moisture Content Monitoring (using moisture meter)	Wall surface/ceiling	Informant's premises	About 0.5 hour
Colour Water Test ⁵ (using colour water ⁶)	Drainage outlet	Suspected premises	About 1 hour
Reversible Pressure Test ⁷	Water supply pipe and seepage area	Suspected premises and informant's premises	About 3 to 5 hours

14. 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.

³ JO will not investigate water seepage reports with moisture content below 35%.

⁴ Time required for each test may vary according to site condition.

⁵ 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.

⁶ Appropriate precautionary measures will be taken according to site circumstances and needs to avoid spillage of colour water outside the testing areas.

⁷ 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.

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

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

Test method	Test location	Premises involved	Time required⁸
Moisture Content Monitoring (using moisture meter)	Wall surface/ceiling	Informant’s premises	About 0.5 hour
Ponding Test for Floor ⁹ (using colour water ¹⁰)	Floor slab of bathroom/shower compartment/kitchen	Suspected premises	About 1 to 2 hours
Spray Test for Wall ¹¹ (using colour water ¹⁰)	Wall surface of bath tub/shower tray/shower compartment	Suspected premises	About 15 minutes
Reversible Pressure Test (if not carried out in Stage II)	Water supply pipe and seepage area	Suspected premises and informant’s premises	About 3 to 5 hours
Infrared Thermography ¹²	Seepage area (normally for ceiling)	Informant’s premises	About 0.5 hour
Microwave Tomography ¹³	Seepage area (normally for ceiling)	Informant’s premises	About 2 to 4 hours

16. Normally, JO’s 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.

17. Before the visit, JO will issue a letter to inform the occupants of the premises concerned of the appointment of the consultant, the names and contact telephone numbers of the staff of JO and the consultant, and a sample of the consultant's staff card issued by JO. When visiting the premises

⁸ Time required for each test may vary according to site condition.

⁹ 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.

¹⁰ Appropriate precautionary measures will be taken according to site circumstances and needs to avoid spillage of colour water outside the testing areas.

¹¹ 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.

¹² If the site circumstances are considered suitable, infrared thermographic imagers may be used to record infrared images of the seepage areas for investigating the location and extent of seepage.

¹³ If the site circumstances are considered suitable, microwave moisture sensing device may be used to measure the referenced moisture content data of the sub-layers of the concrete floor slab for analysing the source of seepage. However, the test cannot be effectively applied under some circumstances such as cases involving ceilings with concrete spalling, blockage by pipes or other facilities, ceilings with tile finishes, etc.

concerned, the consultant's staff should bring along their staff cards for identification and verification by the public. The public may also contact JO and the consultant to verify the identification of the consultant's staff.

Names and contact telephone numbers of consultants employed by JO for water seepage investigation can be downloaded from the website below:

https://www.bd.gov.hk/doc/en/resources/faq/Water_Seepage_Problem_Consultants_List_e.pdf



Request for Copy of Investigation Report

18. If the owners concerned wish to obtain a copy of the water seepage investigation report, request may be made under the Code on Access to Information. The applicant should submit an application form to JO through mail or facsimile. The application form can be downloaded from the website below:

<http://www.info.gov.hk/forms/ati.pdf>



The addresses and facsimile numbers of JO are available at the Food and Environmental Hygiene Department (FEHD)'s website below:

https://www.fehd.gov.hk/english/comments/joint_offices.html



For obtaining a copy of Stage I and II investigation report, the photocopying charges are listed on the FEHD's webpage below:

https://www.fehd.gov.hk/english/department/code_on_access_info_proce.html



For obtaining a copy of Stage III investigation report, the photocopying charges are listed on BD's webpage below:

https://www.bd.gov.hk/en/resources/request-for-information/index_fees.html



Resolving Seepage Problems by Owners

19. 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 (HKIS)¹⁴:

List of Experts and Consultancy Firms providing Advice on Water Seepage Problems:

https://www.hkis.org.hk/hkis/general/bsd/companylist/BS%20Company%20List202005_11.pdf



List of Experts on Water Seepage Investigation:

<https://www.hkis.org.hk/en/experts.html?category=1>



20. If water seepage problems involve the water supply system, owners may appoint a 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 WSD's webpage below:

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



21. 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. Owners may also consider approaching the Hong Kong International Arbitration Centre (tel: 2525 2381) to assist in mediation.

¹⁴ 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 HKIS should be contacted. The lists are compiled, 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.

Assistance Schemes

22. 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. Home Renovation Interest-free Loan, Building Maintenance Grant Scheme for Needy 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 webpage below:

<https://brplatform.org.hk/en/subsidy-and-assistance/integrated-building-rehabilitation-assistance-scheme>



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