



Leak Detection Investigation Report

Client	Withheld
Property	Withheld (restaurant with residential flat above, Harlesden, NW10)
Inspection date	October 2026
Investigation type	Visual inspection and tracer dye flood test

Sample report. Client, address and contact details have been removed and photographs are watermarked. Published as a worked example of our reporting.

Reason for Attendance

London Leak Specialist Ltd attended a property in Harlesden, NW10 in October 2026 following reports of intermittent water ingress from the residential flat above into the restaurant below. The reported issue had been ongoing for approximately three years, during which time numerous plumbers had attended but had not successfully identified the source of the water entry.

The water was reported to be passing from the upstairs flat into the restaurant, causing ingress through the restaurant ceiling. Access to the residential flat was therefore required to inspect the sanitaryware and associated waste pipework, while access within the restaurant was required to investigate the ceiling and concealed drainage installation beneath the suspected source. A controlled water test was also necessary to establish whether the reported leak could be reproduced and traced.

Investigation and Findings

Upon arrival, access was gained to the residential flat above the restaurant and a visual inspection was commenced. The kitchen sink and its associated waste pipework were checked first, followed by the toilet and surrounding connections, the bath and associated waste connections, the wash basin and waste pipework, and the shower area with its accessible plumbing connections. The initial inspection did not establish the precise point of failure, and controlled testing was therefore undertaken to determine whether the reported water ingress could be reproduced.

The kitchen sink was filled with warm water containing tracer dye. The use of dyed water allowed the movement of water to be monitored during the investigation. The sink was then allowed to discharge in a controlled manner while the area below was observed. The test continued for approximately 15 minutes, during which water ingress was observed coming through the ceiling of the restaurant below.

The controlled test confirmed that the reported leak could be reproduced when the upstairs kitchen sink was discharged. Following confirmation of the ingress, an inspection opening was formed in the restaurant ceiling within the boxed-in section containing the waste pipework. Once the ceiling had been opened, active dripping was observed from the area of the main soil and waste stack.

The observed dripping established a direct correlation between the upstairs kitchen sink test and the water entering the restaurant ceiling. The affected stack area was found to be partially concealed within the brickwork and partially enclosed within the ceiling void. This restricted access from the restaurant side and prevented the full length of the affected section from being exposed during the visit.

The inspection successfully narrowed the source area to the concealed main stack and its connections within the building. However, the exact defective joint, connection or section of pipework was not established because the relevant installation remained substantially concealed. Further opening-up will be required before the precise repair specification can be confirmed.

Cause

The confirmed source area associated with the intermittent water ingress is the concealed main soil and waste stack or one of its connections serving the residential flat above the restaurant. This was established by reproducing the leak through controlled discharge of the upstairs kitchen sink and observing active dripping from the stack area after the restaurant ceiling was opened.

The investigation did not expose sufficient pipework to identify whether the failure is located at a specific joint, connection or section of the stack. Accordingly, the mechanism of failure and the precise defective component were not established during this visit. The restricted access caused by the stack being concealed within the brickwork and ceiling void prevented confirmation of the exact point requiring repair.

Works Carried Out and Next Stage

No permanent repair was completed during this visit. The inspection was limited to locating and confirming the source area of the water ingress. An inspection opening was formed in the restaurant ceiling to observe the concealed stack, but the available opening did not provide sufficient access to expose and repair the defective section.

The recommended next stage is to investigate access from the flat roof above the residential property, subject to confirmation of the roof construction, the exact position of the stack, the suitability of the proposed access route and the necessary permissions. The stack should then be exposed sufficiently to identify the defective joint, connection or pipe section, after which the required repair or replacement can be undertaken.

Once the defective pipework has been repaired, the roof access opening should be reinstated using an appropriate waterproof roof repair system, with suitable fire-stopping where required. The relevant water testing should then be repeated, including controlled discharge from the upstairs kitchen sink, to confirm that the leak has been rectified and that no further water ingress is occurring. Internal ceiling reinstatement and decorative making-good were not undertaken and should be assessed after the pipework repair has been verified.

Conclusion

The investigation confirmed that the intermittent water ingress affecting the restaurant originates from the concealed main stack area associated with the residential flat above. The leak was reproduced by filling and discharging the upstairs kitchen sink with warm tracer-dyed water for approximately 15 minutes, after which active dripping was observed from the stack area through an inspection opening formed in the restaurant ceiling.

The exact defective joint, connection or pipe section remains concealed and could not be confirmed during this visit. No permanent repair has therefore been completed. Carefully planned access from the flat roof is recommended as the preferred route for exposing the affected section while limiting the extent of disruption to the restaurant. Final testing and confirmation of the repair will be required after the concealed pipework has been accessed and remedial works completed.

Recommendations

1. Arrange a further visit to confirm the position of the concealed main stack from the flat roof and obtain the necessary permissions and access arrangements before any cutting or opening-up is undertaken.
2. Before forming the proposed roof access opening, confirm the roof construction and check for concealed services, structural elements and the existing waterproofing system to avoid causing additional damage.
3. Expose the affected section of the main soil and waste stack from the agreed access route and inspect the pipework fully so that the precise defective joint, connection or section can be identified and permanently repaired or replaced.
4. Following completion of the pipework repair, reinstate the roof opening with a suitable waterproof system and provide appropriate fire-stopping where required, then repeat the controlled kitchen sink discharge test to verify that no further water ingress is occurring.
5. Assess and agree any required reinstatement of the restaurant ceiling, surrounding finishes and any internal decorative making-good only after the repair has been tested and the affected areas have had suitable opportunity to dry.

Photographs



Tracer dye test: the upstairs kitchen sink filled with warm dyed water



Inspection openings in the boxed-in ceiling section below



The main soil and waste stack exposed in the ceiling void



Stack, branch connection and water-stained timber in the void



Inspection camera view inside the concealed void



The boxed-in section after the inspection, opening covered