

Version 1.1
July 2024

Smoke Shaft Air Leakage Testing

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1. Build stage

It's important that all smoke shafts we are testing have been completed and made airtight.

2. Drawings

In advance of the test, please send drawings of the smoke shaft to your Relationship Manager, as they help us calculate the envelope area before our visit. Without this, we can't accurately determine the leakage rate.

3. Target

Typically, smoke shafts have a standard leakage rate of $3.8\text{m}^3/\text{hr}/\text{m}^2$ at 50 Pa pressure. However, this can vary, so please inform us if yours is different.

4. Power

We require 110V / 240V sockets near the smoke shaft opening; if the distance to the power supply exceeds 10 meters, an extension lead must be supplied. **No power means no air leakage test.**

5. Temporary air sealing / fan door allocation

(a) Smoke shaft and automatic opening vents (AOVs) For best results, finish the smoke shaft and seal AOVs with air-sealing tape, not just dampers. Seal the AOVs from the inside for better results, which might mean waiting to install AOVs until after testing.

(b) Floor openings Ensure all floor openings have the louvres removed. Seal the openings airtight with plasterboard or similar material. Use a sealant, such as mastic, to make the seal airtight.



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(c) **Fan placement** Ensure someone on site can cut an opening into the plasterboard louvre covers on one of the floors for fan placement. This must be done when the engineer is on-site to ensure the fan fits snugly. **If the louvre opening is elevated from the floor, a platform will be required to support the fan.**

6. Parking

We need a parking spot within 20 meters of the plot we are testing, as the equipment is heavy and very expensive. If no parking can be provided please notify your relationship manager, as parking charges will be added to the final invoice.

7. Location and site address

We aim to arrive at the designated time window, so to help us be as efficient as we can, let us know if there are any difficulties finding the site. Ideally, send us what3words. For your certification records we will require the registered site address. Please ensure the correct address is used on all correspondence, as changes will incur an additional cost.

8. Signature

A site manager or representative must be present throughout the duration of the testing—for our own safety—and be able to provide a signature once we are finished.