

Safelab Scope of Works – Testing of a Ducted Fume Cupboard with Duct Pressure Monitoring

The routine testing of a ducted fume cupboard including duct pressure monitoring and smoke testing. Routine testing enables you to comply with the requirements of COSHH Regulation Nine which stipulates that a fume cupboard should be tested at least once every fourteen months by a competent person.

Routine testing consistent with (exceptions might apply):

- BS EN14175-4:2004 Ducted Fume Cupboards (on site test methods)
- COSHH REG 9 Control of substances hazardous to health
- HSG 258 Controlling airborne contaminants

Ideally the fume cupboard should be empty before testing commences. Safelab's routine testing includes:

A review by the engineer of (where available):

- System commissioning report
- User manual
- Logbook
- Previous statutory report / service card
- Confirm no changes to unit, system or process since last test

The engineer will check and advise on possible containment interference factors such as:

- AHU
- Doors and windows
- Busy thoroughfares
- Equipment in unit
- Operator / process

The engineer will perform a visible inspection and check the operation of unit including the following (where applicable)

- Hinges and sash stop mechanism
- Baffles and baffle fixings
- Sash and sash guides
- Glazing and panels: Seating, sealing and damage inspection
- Worktops: Seating and damage inspection
- Fan control
- Control panel operation / display
- Reset service counter
- Sash high alarm
- Low airflow alarm
- Pressure gauge
- Light

The engineer will check operation and the condition of services (where fitted)

- Electric sockets
- Water and Gas remotes (taps) and outlets
- Waste, traps and pipe-work

The engineer will perform qualitative and quantitative airflow assessments

- Airflow measurements (Face velocity tests) see notes below*
- Visualise process capture effectiveness through the use of smoke tubes see notes below**

The single source for the complete clean air solution

The engineer will check the operation and condition of the external fan (providing safe, working access is available to the engineer) see notes below ***

- Location
- Seating
- Rust / damage / condition/fan direction
- Housing integrity
- Where applicable check and record inverter settings

The engineer will check the condition of ductwork (providing safe, working access is available to the engineer) see notes below ***

- Fixings (secure) - visual check in addition to duct pressure monitoring
- Joints (intact) - visual check in addition to duct pressure monitoring
- Location
- Damper operation (where applicable check and record damper settings)
- Duct pressure monitoring will be performed and the results recorded

A full written report which includes a detailed diagram of the system, for each ducted fume cupboard tested, will be produced by the engineer which records the results of the tests and checks performed. A copy will be e-mailed to the e-mail address provided by the point of contact or a copy of the report can be requested from Safelab by e-mailing: service@safelab.co.uk

The fume cupboard's service record card will be updated following the thorough test and examination.

Testing protocol details:

*** Airflow testing** (Face velocity)

Using a calibrated vane anemometer a number (depending on unit type and size) of airflow readings are measured across the unit's face. These measurements are recorded and averaged to provide a quantitative performance result. The required results vary depending on the type of unit and the application.

**** Smoke capture test**

Smoke capture tests provide qualitative support to the quantitative face velocity tests. Where the operational environment allows a small controlled source of smoke is introduced to the LEV. The smoke capture is visually observed and where applicable a capture distance is measured. The capture distance is relevant on capturing and receiving hoods as well as arms. Due to the enclosed design of a fume cupboard capture distance is not required. In this case the smoke test offers visual confirmation of satisfactory containment and air movement around the face.

***** External fan & ductwork inspection**

Ductwork and fan units are located in a variety of ways and where possible Safelab will carry out a full visual inspection of both. This will only be done providing safe access and a safe method of working is available to the engineer. Where it is unsafe to access the whole system all reasonable efforts will be made to assess ductwork and fan systems visually in a safe manner.

Terms and Conditions

The purchaser is deemed to accept Safelabs' standard terms and conditions which are readily accessible on our website (www.safelab.co.uk/standard_terms_conditions.htm)

Excluded From Quote (unless otherwise stated)

Consumable items such as internal lights, sash stops

Cleaning or de-contamination

PAT Testing / SF6 testing

Access equipment

Any additional items or works not specified

Any remedial works identified at time of test will be quoted for separately