



Instant Risk Guidance

**TR 07 Fire Safety in
Commercial Kitchens**

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Fires resulting from cooking facilities in commercial kitchens are a common occurrence, often involving deep fat frying, causing widespread damage and major business interruption. Guidance on effectively managing the risk of fires in kitchens includes the following measures:

- A fire risk assessment should be carried out and periodically reviewed in compliance with statutory obligations (as part of the overall premises assessment of the risk of fire).
- Care should be taken to ensure that all cooking equipment (including deep fat fryers) is installed, operated and maintained in accordance with the manufacturer's instructions. In the case of gas equipment, installation and maintenance needs to be entrusted to a Gas Safe registered engineer.
- Close attention should be given to ensuring cleanliness of the extract ventilation system (see below).
- Deep fat fryers should have a separate high temperature limit control of a non-self-resetting type, designed to shut off the heat source if the temperature of the fat exceeds 230°C. (Before retro-fitting thermostats and other temperature controls, the equipment manufacturer should be consulted).
- With deep fat fryers, care should be taken to ensure cooking oil levels are maintained within the manufacturer's recommended maximum and minimum levels.
- Deep fat fryers should not be left unattended when in use.
- Means should be provided for the remote emergency shutdown of power, fuel supply and the extraction system to all cooking equipment. Devices should be clearly labelled and located in safe positions, adjacent to the main escape route.
- Appropriate fire extinguishers should be provided which should include at least one fire blanket and a Type F fire extinguisher. Extinguishers should

be easily and safely accessible and maintained annually by a specialist firm.

- Ensure that all employees are trained in fire emergency procedures.
- Where arising from a risk assessment, a fixed fire suppression system approved to Loss Prevention Certification Board (LPCB) Standard LPS 1223 or equivalent may require to be installed, protecting the cooking equipment, overhead canopy and ducting system and incorporate both manual and automatic operation. The system should be installed by a company which is approved by a suitable third-party certification scheme, of which the *Loss Prevention Certification Board (LPCB) LPS 1204* and the *British Approvals for Fire Equipment (BAFE) SP 206* schemes are examples. A certificate of conformity is to be issued on completion.
- Details of LPCB approved installers can be found at <https://www.redbooklive.com> and BAFE registered installers at [BAFE registered installers](#)

Daily checks are to be made to ensure that the nozzle caps on the spray heads of the fire suppression system are in place to prevent oil and fat from building up and compromising the effective action of the system. In addition, a visual inspection of the entire suppression system should be carried out by the owner at intervals of at least monthly in accordance with the manufacturer's design, installation and maintenance manual.

Extract Ventilation System

- Extract filters, grease traps and canopies should be cleaned at regular intervals as determined by a risk assessment (commonly weekly) and at least as frequently as recommended by the manufacturers. A record of all cleaning activity is to be kept.
- Ductwork (throughout its entire length) and fans should be cleaned internally at periodic intervals to prevent the build-up of grease deposits, the frequency of which should be determined by a risk assessment based upon accurate historical levels of grease accumulation to maintain grease deposit levels below 200 microns as a mean across the system. For guidance on this matter, reference should be made to document TR19®

Grease: Specification for fire risk management of grease accumulation within kitchen extraction systems, published by the Building Engineering Services Association (BESA), available at www.thebesa.com

Where this is impractical such as with a new installation, the initial cleaning frequency should depend on the level of use of the cooking equipment for which the following is recommended:

- Heavy use (over 12 hours per day) - 3 monthly
- Moderate use (6/12 hours per day) - 6 monthly
- Light use (under 6 hours per day) – annually

Subsequent inspection of the extract system should be conducted, in order to determine whether the above frequencies should be adjusted to suit the observed hazard.

It is recommended that ductwork cleaning be conducted in accordance with the Building Engineering Services Association *Guide to Good Practice TR19® - Internal Cleanliness of Ventilation Systems*, by a competent specialist contractor approved by Building Engineering Services Competency Assessment (BESCA) through its *Vent Hygiene Elite scheme*, or by the Loss Prevention Council Certification Board (LPCB) under LPS2084: *Requirements for the LPC approval and listing of companies carrying out inspection, cleaning and maintenance of ductwork systems*.

Details of BECSA member companies are to be found at www.besca.org.uk and LPCB approved companies at www.redbooklive.co.uk

- Where ducting from the extract system passes through combustible structural material such as timber flooring, roof decking, combustible linings and partitions, such material should be cut back by a distance of at least 150mm and the space filled with non-combustible insulation.

Additional guidance is contained in RC44: *Recommendations for Fire Risk Assessment of Catering Extract Ventilation Units*, published by the RISC Authority, available at [RC44 - Recommendations for fire risk assessment of catering extract ventilation units](#)



For further information, reference should be made to RISC Authority publication *RC68: Recommendations for fire safety in catering establishments*, available at www.riscauthority.co.uk/search?q=RC68