

EXTRACTION CLEANING AND MAINTENANCE STRATEGY

25 KING ST, MANCHESTER

1. The cleaning and maintenance of fans, filters, ductwork and fume and odour abatement equipment will follow the guidelines of NAAD-21 and TR19.
2. All interior surface of the ductwork shall be accessible for cleaning and inspection purposes. The installation will have access doors installed every 2m, enabling full cleaning of the system without manned entry. The panels shall be of at least the same thickness material as the ductwork, be grease tight using a heat-proof gasket and contain minimum projections into the duct. Items such as the fans will have integrated access hatches for cleaning and maintenance.
3. The interval between visual inspections of elements of the system incorporated in the kitchen should be determined by the particular cooking process, but will not be more than once a week. All metal surfaces will be checked to ensure there is no accumulation of grease or dirt and that there is no surface damage.
4. Checks shall be made to ensure that stiffening channel is free from debris and that installed lights are working. Filters will be easily removable and the inside of all housings and grease collection drawers, where fitted, will be cleaned regularly.
5. Typically the minimum cleaning period for baffle type self draining separators and collection drawers is once each week, for secondary mesh filters at least twice a week. The baffle filters are to be cleaned 2-3 times per week.
6. It should be considered that the area immediately above any cooking appliances, including extract plenums, pose the greatest risk of the ignition of any accumulated grease. Extract plenums for both canopies and ventilated ceilings are considered as a specific section of the grease extract system; in the course of a scheduled specialist duct clean, extract plenums should be included by them as part of the clean.
7. Compliance with the appropriate COSHH Regulations must be ensured with all cleaning materials and for thorough examination and testing of ventilation systems serving solid fuel appliances.
8. Where the canopy/ventilated ceiling contains removable filters or cartridges the filter manufacturers cleaning instructions shall be followed. They shall only be removed for cleaning after the system has been shut-down to avoid grease contaminated air depositing on the internal surfaces of the ductwork and therefore causing a future potential fire hazard. Extreme caution will be exercised if removing filters from above hot appliances. In general most filters are designed to fit inside, and be put through the cleaning cycle of most commercial dishwashers. In heavy duty applications decarbonising and/or soak tanks may prove to be a more effective cleaning method, whilst in lighter applications hand washing in hot water using a standard dilution of a proprietary de-greasing agent or washing-up liquid may be adequate.

9. Where a cartridge system has been installed, then the plenum forms an integral part of the design, it shall be cleaned at the same time as the cartridge. The efficiency of these systems will depend upon the extracted grease that is collected in the plenum being removed by regular cleaning at least twice a week.
10. Where canopies/ventilated ceilings are provided with integral make-up air system, the airways and supply filters should be kept clean to maintain airflow. Dirt accumulation and blockages will increase resistance and affect the system performance.
11. In addition to daily cleaning a weekly maintenance programme a specialist ventilation hygiene contractor (Premier Commercial Kitchens) will be appointed to clean and maintain the grease extraction system and make up air system.
12. The following frequency of cleaning extract system will be followed in accordance with industry specification TR19:

FREQUENCY	Hours Per Day	Clean Required
Heavy use of cooking equipment	12-16 hrs	3 monthly frequency
Moderate use of cooking equipment	6-12 hrs	6 monthly frequency

13. The kitchen is expected to be open for 12 hours per day and therefore the system will be cleaned every 3 months.
14. The following are the most common manual methods of cleaning that may be used:

Most Common Manual Methods	Type of Contamination
Hand wiping: wiping grease from surface with a cloth	Light contamination
Scraping: removing grease by hand scraping	Heavy contamination
Steam cleaning: hot water under pressure to dissolve grease (NAADUK do not recommend the use of steam –see CAUTION)	Burnt on
Rotary brushing with chemical: brush & spraying to remove grease	Burnt on
Hot chemical foam: spray foam to hang and dissolve grease	Burnt on and heavy
Chemical: to soften grease for easier removal	Burnt on and heavy

Fan maintenance

15. Fans, motors and drives may be heavily contaminated especially if oil or grease has leaked. Impellers may have heavy deposits on the blades. Fans will be kept clean and dust-free. The windings of a motor are closely wrapped and separated only by a thin layer of insulating lacquer. This lacquer can deteriorate due to age, weather changes and heat. The insulation

generally lasts a life cycle but can lose its properties more quickly if there is a lot of grease, dirt and dust. Kitchen extract fans operate under increased strain and are therefore particularly prone to burn-out due to the heat, grease-laden and oily environment they operate within. The likelihood of this occurrence increases with age. This is particularly so where there is a significant build-up of heat modified oil due to a lack of regular cleaning. A clean motor will dissipate heat more effectively than a dirty motor, therefore lasting longer. Regular cleaning will prevent imbalance which leads to increased vibration.

16. Fans will be electrically isolated and locked off before carrying out inspection or cleaning works. For full cleaning, partial dismantling may be required.

Filters, ESP and Ozone system

17. The cleaning and maintenance of the Filters, ESP and Ozone system will also be undertaken by Premier Commercial Kitchens.
18. Baffle filters are to be cleaned 2-3 times per week.
19. Fine filtration filters are to be cleaned every 2-3 weeks and changed every 4-6 months.
20. System cleans will be undertaken 3 times per year.
21. ESP:
 - Will be cleaned on each cleaning service every 3 months. They are designed to be nearly maintenance free. All that is required is for the cells to be cleaned on each cleaning service. They will self-drain into their own reservoir which is emptied ready for the next service.
22. Ozone:
 - Will have an annual service of inspection. They are designed to be otherwise maintenance free (there are no UV tubes/bulbs that would break and uses HID instead). There is also no grease going through the ozone system.
23. Frequency of cleaning may change after more data is gathered after opening of the restaurant. More accurate frequency of cleaning will be established via micron readings at the beginning, middle and end of system. Any sections that are over 203 microns will need to be booked for a clean.