

# OPERATING & MAINTENANCE INSTRUCTIONS FOR EXTRACTION SYSTEMS

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## EXTRACTION SYSTEMS OPERATION AND MAINTENANCE

## See table 1 (below) for cleaning frequencies.

## 1) EXTRACTION CANOPY CLEANING

Generally the extraction canopy will be manufactured from 430-Grade Dull Buff Stainless Steel or 304-Grade if specified.

To clean the stainless steel, we recommend a mild detergent with vinegar, which will remove light grease marks etc.

The grease collection trays at the bottom of the extraction plenum will collect any excess grease/oil. These cups will collect any waste material over a long period and should be checked at regular intervals (see table 1).

## 2) MESH TYPE AND BAFFLE TYPE GREASE FILTERS.

Both mesh and baffle type grease filters should be cleaned at regular intervals according to use (see table 1).

The filters will fit into a Commercial Dishwash Machine or alternatively can be placed in very hot water with a detergent overnight and washed out under a tap to clear grease. *Do not use any caustic materials as this may damage the filters.* 

## 3) FANS AND CONTROLS

Each extract / fresh air system fan is selected at design stage depending on the size of the canopy, the length and size of ductwork, the type of filtration system, and the type of cooking equipment being used.

Any speed controllers fitted MUST be set at full speed on every occasion before the extract and air supply fans are switched on (see figure 1). Failure to do this may result in the fan motor burning out and the invalidation of any warranty on the fans.



Fig 1 - Fan controls set at full speed (Typical speed controllers shown)

There is very little maintenance to fans and controllers required but fans should be checked periodically for cleanliness and heavy grease deposits which could, in time, increase system resistance and cause fans to fail. It is not possible to service a fan as they are sealed units but cleaning by a professional company if grease deposits build up will prolong fan life.

#### 4) FRESH AIR INLET FILTERS

Dust filters (either in panel cartridge or bag form) are usually installed between the fresh air inlet and the supply fan. These should be inspected and cleaned or removed and replaced as necessary (See system drawing for filter location).

## 5) GAS INTERLOCK not supplied

#### 6) EXTRACT DUCTWORK

It is not possible to provide a general rule for the frequency of ductwork cleaning required because of the variation in hours of usage and level of contamination in the system. We recommend that a regular inspection is made and a risk assessment is made to determine the ongoing cleaning frequency (See Table 1 below). Further guidance is available in TR/19: Guide to Good Practice – Internal Cleanliness of Ventilation Systems published by the HVCA (www.hvca.org.uk).

## 7) GAS AND ELECTRICAL INSTALLATIONS

The inspection and testing of these should be included in the planned maintenance programme for the full catering facility to comply with the appropriate regulations.

#### FREQUENCY OF CLEANING.

The need for specialist cleaning of extraction systems will depend on the level of usage of the cooking equipment, types and quantity of cooking and other risk factors such as vulnerability of the system to ignition and of the building and its occupant / users to system fire, hygiene, vermin and mechanical hazards. Typical cleaning intervals are shown below Table 1: Typical Cleaning Frequencies for Extraction System Components at Different Usage Levels

SYSTEM COMPONENT	LIGHT USAGE 2–6 Hours per day	MEDIUM USAGE 6-12 Hours per day	HEAVY USAGE 12–16 Hours per day
CANOPY			
(clean accessible	Every	Weekly	Twice
internal and	2-3 weeks		weekly
external surfaces			
and check			
collection trays)			
GREASE FILTERS	Weekly	Twice	Daily
(clean)		Weekly	
FANS			
(check and clean as	12 monthly	6 monthly	3 Monthly
necessary)			
FRESH AIR FILTERS			
(check and clean as	6 monthly	4 monthly	3 Monthly
necessary)			
EXTRACT			
DUCTWORK	12 monthly	8 monthly	6 Monthly
(check and clean as			
necessary)			

\* Refer to manufacturers' guidance for UV/ESP/Ozone Systems

Systems with heavy usage of chargrills, salamander grills and chinese cookers may need to be cleaned even more frequently.

Please refer to TR/19: Guide to Good Practice - Internal Cleanliness of Ventilation Systems (HVCA www.hvca.org.uk) for more information.