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Document: **Enforcement of regulation pertaining to the cleaning of kitchen extract ductwork systems under Regulation EC852/2004.**

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Introduction and legal requirement

Regulation EC852/2004 on the hygiene of foodstuffs Annex II, Chapter 1 paragraph 5 states that :-
“There must be suitable and sufficient means of natural or mechanical ventilation. Mechanical airflow from a contaminated area to a clean area must be avoided. Ventilation systems must be so constructed as to enable filters and other parts requiring cleaning or replacement to be readily accessible.”

This regulation ratified by the European Union and translated into the local languages of member states has potential far reaching consequences to the design, construction and installation of kitchen grease extract ductwork in relation to maintenance and cleaning. Mr Nick Laverty, of The Food Standards Agency, has confirmed that under European treaty this forms part of British law. Since ductwork is a component part of a kitchen ventilation system, it falls under the requirements of EC852/2004 Annex II Chapter 1 paragraph 5. NAAD UK will be providing further advice in future guidance documents.

Guidance

The Industry Guide to Good Hygiene Practice: Catering Guide Food Safety (General Food Hygiene) Regulations 1995 used significantly by the environmental health departments within local authorities provides the following guidance to Annex II Chapter 1 paragraph 5 of EC852/2004.

“Filters and other parts of the system must be accessible either directly or through access panels.”

In order to assist with the interpretation of the legislation, NAADUK has devised the following table as guidance for the term “readily accessible”. The aim is avoidance of issues of restricted access to ducts

for cleaning and maintenance. The following are based on occurrences found at client sites and on best practice.

TABLE 1. Constraints resolutions to access and implications.

Constraints to access	Considered Resolutions (at the time of writing)	IMPLICATIONS
Duct located behind a solid ceiling with no point of access	Inspection hatches placed into the ceiling which expose the duct at intervals in accordance with the B&ES TR-19 s.7	COST AND INACCESSIBILITY POSSIBLE DAMAGE
Duct located in a surrounded riser with no point of access. For example a riser surrounded by wall fabric / brickwork	Inspection hatches fitted into the wall space which expose the duct at intervals in accordance with B&ES TR-19 s.7. Alternatively locate duct elsewhere.	INACCESSIBILITY
Low level plant, conduit, lighting or other fittings obscuring the duct	Relocate the low level plant so that the ductwork is accessible.	COST AND INACCESSIBILITY
External riser	Consider internal filtration systems to allow the systems to discharge at low level If there is no alternative consider permanent or temporary access solutions .	COST
Pitched roof exhaust	Where possible lower the discharge point or consider internal access to the exhaust.	COST
Horizontally obscured duct. Reasons include other services running alongside, above or below	Services should not be fitted to ductwork or in such close proximity that they obscure access to the duct. Ideally locate elsewhere. Room for access to duct in accordance with TR-19 s.7 must be maintained. Please see notes below.	COST AND INACCESSIBILITY
False / tiled / suspended ceilings restricting access to void and duct	The distance between ductwork and ceiling grid should be kept to a minimum to reduce the need for working at height. Please see notes below. Design considerations should include larger ceiling tiles to allow person entry without the need for dismantling,	COST POSSIBLE DAMAGE
Fan access	Design should negate the need for an electrician or engineer for cleaning. Access should be afforded via access panels or a plug fan that is easily removed. Ideally fan power should be plug-in.	COST & INACCESSIBILITY
Two or more inline components located directly next to each other in a duct system	No two inline components should be fitted next to each other without a suitable cleaning access point. Fan	COST AND INACCESSIBILITY

	and silencers to have an access panel fitted between them in accordance with TR19 s.7.	
Silencer / fire rated duct / insulation/ Suppression systems	Must be designed and fitted with suitable access panels in accordance with TR-19 s.7 at the time of installation to ensure full access to the system. Designer and installer responsibility.	INACCESSIBILITY
Obscured access panels	Sufficient room must be afforded to allow for the fitting, complete removal of panels and entry for cleaning. Checks at various phases of construction that all access panels can be removed.	INACCESSIBILITY
Flat roof access without edge protection	Considerations to include safety rails, try to keep duct 2 meters from edges or fall hazards.	UNSAFE ACCESS
Welded or riveted exhaust grills preventing easy removal	Release clips or screws to be used instead of rivets.	INACCESSIBILITY
Duct located directly over hoods or canopies which does not support weight for operatives to safely access for cleaning	Safe ductwork access must be provided.	INACCESSIBILITY, POSSIBLE UNSAFE ACCESS AND COST.
Open ceiling height	Keep the system as low as possible and discharge horizontally if possible.	COST
Data trunking / cabling physically restricting access	Do not run cabling systems alongside, above or below the grease extract ductwork.	INACCESSIBILITY POSSIBLE DAMAGE
Physical obstructions below the duct	Where access is required to ducts kitchen equipment should be easily moveable or duct should be relocated away from items.	INACCESSIBILITY AND COST

Notes

A potential test when considering if ductwork is accessible for cleaning and maintenance is set out below:-

1. Can all access panels be removed by an operative without being obstructed?
2. Can an operative access all panels via either a step ladder or tower?
3. Fabrications, fans, inline components should not need to be moved in order to allow access via points 1. & 2. above.

The members of NAADUK also considered the implications of the identified constraints. Alan Muse of the RICS felt this would be key to designers and installers understanding of the cost of inaccessibility.

It is hoped that taking into account the implications above will lead to the following:-

- (a) The avoidance of costly retro fit of panels / post install builders works to provide access.
- (b) Reduce the number of inaccessible sections of ductwork.

- (c) Avoid ultimate replacement of ductwork found to be inaccessible
- (d) Reduce the need for more expensive cleaning methods and specialist access equipment.
- (e) Avoid unsafe cleaning methods and work practices.

References

From http://ec.europa.eu/food/food/biosafety/hygienelegislation/comm_rules_en.htm

"Community legislation covers all stages of the production, processing, distribution and placing on the market of food intended for human consumption. 'Placing on the market' means the holding of food for the purpose of sale, including offering for sale, or any other form of transfer, whether free of charge or not, and the sale, distribution and other forms of transfer themselves.

The new hygiene rules were adopted in April 2004 by the European Parliament and the Council. They became applicable on 1 January 2006. They are provided for in the following key acts :

- [Regulation \(EC\) 852/2004](#) on the hygiene of foodstuffs, 29 April 2004
- [Regulation \(EC\) 853/2004](#) laying down specific hygiene rules for food of animal origin, 29 April 2004
- [Regulation \(EC\) 854/2004](#) laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption, 29 April 2004
- [Regulation 2004/41/EC](#) repealing certain regulations concerning food hygiene and health conditions for the production and placing on the market of certain products of animal origin intended for human consumption and amending Council Regulations 89/662/EEC and 92/118/EEC and Council Decision 95/408/EC, 21 April 2004"

"The new hygiene rules take particular account of the following principles:

- primary responsibility for food safety borne by the food business operator;
- food safety ensured throughout the food chain, starting with primary production;
- general implementation of procedures based on the HACCP principles;
- application of basic common hygiene requirements, possibly further specified for certain categories of food;
- [registration](#) or approval for certain food establishments; "
- development of [guides to good practice](#) for hygiene or for the application of HACCP principles as a valuable instrument to aid food business operators at all levels of the food chain to comply with the new rules
- flexibility provided for food produced in remote areas (high mountains, remote island) and for traditional production and methods."

Specifics on EC 852/2004 taken from link:- <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:139:0001:0054:en:PDF>

Catering Guide Food Safety (General Food Hygiene) Regulations 1995 produced by Chadwick House Group Ltd – Industry Guides to Good Hygiene Practice. The Industry Guide to Good Hygiene Practice: Catering Guide was produced for the previous hygiene regulations Food Safety (General Food Hygiene) Regulations 1995 and Food Safety (Temperature Control) Regulations 1995. These previous regulations enacted into UK law Regulation 93/43/EEC.

Regulation (EC) No. 852/2004 Annex II Chapter 1

EC 852/2004 legislation covers all stages of the production, processing, distribution and placing on the market of food intended for human consumption. 'Placing on the market' means the holding of food for the purpose of sale.

The new hygiene rules were adopted in April 2004 by the European Parliament and the Council. They became applicable on 1 January 2006. The Food Standards Agency has confirmed that under European treaty this forms part of British law.

The following table is extracted from Food Safety (General Food Hygiene) Regulations 1995 – Guide to compliance by Caterers:

Legal Requirement	Guide to Compliance
1. Food Premises are to be kept clean and maintained in good repair and condition	The internal surfaces of the structure and equipment fixed to the structure, including light fittings, ventilation and any other equipment must be visually clean and in a good state of repair.
2. The layout, design, construction and size of food premises shall : (a) permit adequate cleaning and / or disinfection	The criterion is cleanability. Layout and design should allow access for effective cleaning. Alternatively equipment must be mobile to enable adequate cleaning and disinfection. The amount and type of cleaning needed will relate to the area of the premises and the use to which it is put. Materials of construction must be suitable to allow the type of cleaning appropriate to that area. More information is given in Chapter 2. Paragraph 2. The layout, design, construction, siting and size of food premises are to: (a) permit adequate maintenance, cleaning and/or disinfection, avoid or minimise air-borne contamination, and provide adequate working space to allow for the hygienic performance of all operations;
5. There must be suitable and sufficient means of natural or mechanical ventilation. Mechanical airflow from a contaminated area to a clean area must be avoided. Ventilation systems must be so constructed as to enable filters and other parts requiring cleaning or replacement to be readily accessible.	Filters and other parts of the system must be accessible either directly or through access panels.

Notes:

- Paragraph 2 requirements may be read in its entirety and may be interpreted by a Court as referring to only inside food businesses where food is handled, prepared or stored.
- Paragraph 5 requirements do not mention “hygienic performance” so should be applicable to the entire ventilation system.

Article 8 - National Guides

5. Guides to good practice drawn up under Regulation 93/43/EEC shall continue to apply after the entry into force of this Regulation, provided that they are compatible with its objectives.

A number of National Guides under the 852/2004 regulations have been produced for more niche areas of Catering such as Sandwich Makers. As a new Catering Guide has not been produced the old guide is still applicable. The major change brought in by the 852/2004 is the requirement for a food safety policy based upon HACCP. The general hygiene requirements to keep food business clean and for ventilation systems to be accessible for cleaning and maintenance are more or less word for word the same.

Annex II contains Chapters of Regulations covering hygiene requirements for all food businesses (except businesses dealt with in Annex I).

Further reading

HSE information sheet – Ventilation in catering Kitchens (Catering Information Sheet No 10)

“Effective kitchen ventilation systems. The objectives of an effective kitchen ventilation system are to ... be easy to clean, avoiding build-up of fat residues and blocked air inlets, which lead to loss of efficiency and increased risk of fire.”

“The ventilation system design needs to take account of the ... need for easy cleaning and maintenance.”

Design considerations in this document include “There should be suitable access to the ductwork, to allow regular cleaning to prevent accumulation of fat etc.”

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HASAWA (sec 2, 3, 4)

CDM regulations 2015 (designers duties, H&S file)

DW172 section 25 Cleaning and Maintenance

Management of H&S Regulations (cooperation, contractors)

Building Regulations (fire safety)

Provision and use of work equipment regulations

COSHH regulations (LEV)

BS EN 15780:2011 ('Ventilation for Buildings - Ductwork - Cleanliness of Ventilation Systems')

TR/19 (cleanliness of ventilation systems)

RC16B (Recommendations for Fire Safety in Commercial Kitchens) Ventilation of kitchens in catering establishments HSE Catering

Information Sheet 10 (Sudbury: HSE Books) (2007) (available at

<http://www.hse.gov.uk/pubns/index.htm>) (accessed May 2009)

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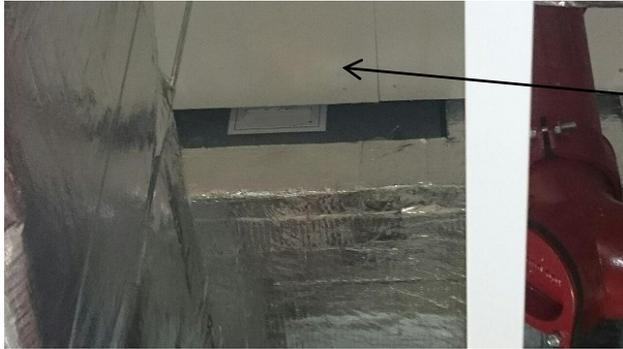
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Visual guidance for obstructions and inaccessibility encountered on existing constructions.

The purpose of this section is to provide real scenarios pictorially to better illustrate the importance of informed design of kitchen grease extract systems. The ventilation systems contained within these photographs may be classified as not “readily accessible” due to the impracticability's identified.



Fabric of the building

A newly fitted access panel is prevented from being removed due to a support beam.

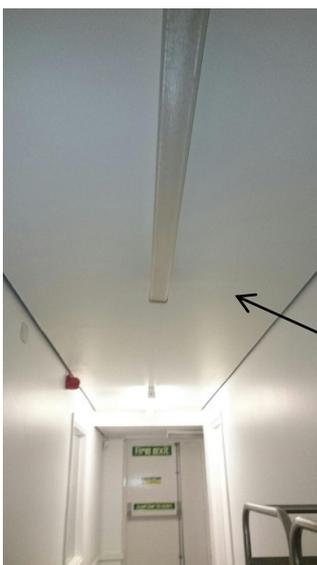


A conservatory has been built between two walls preventing access to the visible riser.



Riser in between two walls, this runs for approximately 30 metres

Pitching of the roof leads to a small flat area and a further pitching. The flat space in between pitches is not sufficient to safely walk across.



Solid ceiling prevents access to the grease extract which runs directly above the lighting strips. This represents an unknown as further obstructions will be present above the ceiling. Introducing false hatches in obstructed areas may lead to several remedial works being required to correct.

Encased grease extract.

It is acceptable to undertake this however provisions must be made for access panels to be fitted prior to the boarding being fitted. The boarding may be fitted around the access panel once it is in place with additional boarding being placed over the top of the access panel and sealed in place with appropriate sealant. Please note, it is important to identify appropriately where these access panels are situated on the boarding.



Riser heading into a breeze block cavity.

In this example it may not be possible to fit a false ceiling hatch in order to gain access due to several factors;

- 1) The width of a breeze block.
- 2) The gap between the breeze block and the boarding.
- 3) The potential gap between the boarding and the grease extract.

The test will be, is this distance equal to the length of an arm.

In this circumstance rope access would be considered.

Height of grease extract

Background: The height between the floor and the false ceiling grid is 3.14 metres. The bottom of the ceiling grid and the grease extract is 1.82 metres. This will require a scaffold tower in order to gain access. Please note this also rises vertically from canopy centre.



Multiple service /physical obstructions

There are several obstructions within this image.

- 1) The air extract is directly below the grease extract.
- 2) The suspended ceiling supports reduce accessibility.
- 3) The data trays reduce access to the grease extract.

Position of grease extract

The canopy is slanted and prevents access to the second and third metre of grease extract (the first metre can be reached from the plenum chamber)

