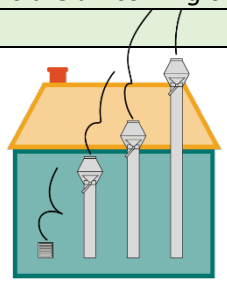
Airclean Ltd, Bays 2-3 Pattenden Lane, Marden, Tonbridge, Kent, TN12 9QS
01622 832777 | www.airclean.co.uk | sales@airclean.co.uk

Technical Bulletin - Odour Risk Assessment for Kitchen Extracts

By using this form in conjunction with industry guidance, system designers can obtain odour control equipment suggestions based on their score.

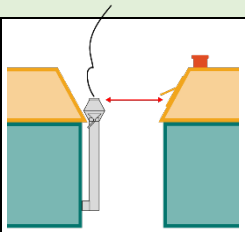
Dispersion

Where is your extract air discharging from and at what speed is the air coming out?

Rating	Score	Details		Actual Score
Good	5	Discharging 1m above ridge and at 15 m/s		
Moderate	10	Discharging 1m above eaves and at 10-15 m/s		
Poor	15	Not low level but below eaves, or discharge at below 10 m/s		
Very Poor	20	Low level discharge, discharge into courtyard or restriction on stack		

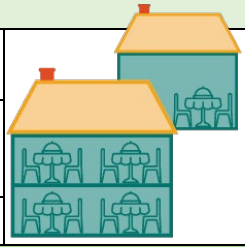
Proximity of Receptors

How far away is the nearest receptor for the odour?
e.g. neighbour's openable windows, balconies or supply air inlets.

Rating	Score	Details		Actual Score
Far	1	Closest sensitive receptor more than 100m from kitchen discharge		
Medium	5	Closest sensitive receptor between 20 and 100m from kitchen discharge		
Close	10	Closest sensitive receptor less than 20m from kitchen discharge		

Size of Kitchen

Based on number covers (seating) including outdoors or the size of take away.

Rating	Score	Details		Actual Score
Small	1	Less than 30 covers or small sized take away		
Medium	3	Between 30 and 100 covers or medium size take away		
Large	5	More than 100 covers or large size take away		

Cooking Type

Type of cuisine will affect the levels of odour and grease loading.
Solid Fuels (i.e. charcoal or wood burners) are always Very High level.

Rating	Score	Details	Actual Score
Low	1	Most pubs, Italian, French, Pizza or steakhouse	
Medium	4	Cantonese, Japanese or Chinese	
High	7	Kebab, Vietnamese, Thai or Indian	
Very High	10	Pub (high level of fried food), fried chicken, burgers or fish & chips	

Total Significance Score
Sum of scores from dispersion, proximity of receptors, size of kitchen and cooking type

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After carrying out an "Odour Risk Assessment for Kitchen Extracts" a designer can consult the following detail from the guidance to make some preliminary decisions about the odour control equipment that may be suitable for use in a kitchen extract system.

Total Significance Score*	Odour Control Requirement
Less than 20	Low to medium level odour control
20 - 35	High level odour control
More than 35	Very high level odour control

*Based on the sum of contributions from dispersion, proximity of receptors, size of kitchen and cooking type.

Low to medium level control may include:

1. Fine filtration or ESP followed by carbon filtration (carbon filters rated with a **0.1 second** residence/contact time).
2. Fine filtration followed by counteractant/neutralising system to achieve the same level of control as 1.

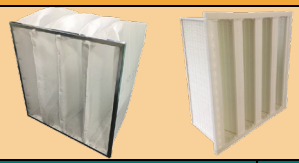
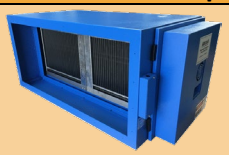
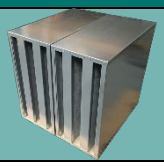
High level odour control may include:

1. Fine filtration or ESP followed by carbon filtration (carbon filters rated with a **0.2 - 0.4 second** residence/contact time).
2. Fine filtration or ESP followed by UV ozone system to achieve the same level of control as 1.

Very high level odour control may include:

1. Fine filtration or ESP followed by carbon filtration (carbon filters rated with a **0.4 - 0.8 second** residence/contact time).
2. Fine filtration or ESP followed by carbon filtration and by counteractant/neutralising system to achieve the same level of control as 1.
3. Fine filtration or ESP followed by UV ozone system to achieve the same level of control as 1.

Maintenance must be carried out to ensure these performance levels are always achieved

Fine Filtration	ESP (Electrostatic Precipitator)	
		
Activated Carbon Discarb	**Ozone**	**Odour Neutraliser**
		

Try our FREE online odour risk assessment at airclean.co.uk/odour

Should you have any questions, please contact the Airclean Team for assistance:
Call 01622 832777 or Email sales@airclean.co.uk