



Commercial Kitchen Extraction & Ventilation Systems Specialists
ESTABLISHED 2005

Specification & Report

Project: 20 Market Place Reading RG1 2EG

Prepared by: Fan Rescue Ltd

Date: 26th March 2020

Risk Assessment for Odour

We are pleased to provide an equipment selection for an odour control solution.

As with any project we get involved in we always recommend to our clients that they should closely follow the BESA DW 172/144 and EMAQ+dated 2018 specifications guide for guidance on odour control equipment selection.

This ensures that what they propose will be in line with local authority's requirements and if the system is maintained correctly they will not exhaust nuisance odours leading to complaints from nearby residents.

With this in mind we carried out a risk assessment as BESA DW 172/144 and EMAQ+dated 2018 specifications Guide.

Taking into consideration the level of discharge, proximity of receptors, size of kitchen and cooking type your project requires a high level of odour control to comply.

We have scored as below;

Dispersion: Moderate = 10 high Level Discharging 1m above eaves, or Discharge at 10-15m/s

Proximity of receptors: Close = 10 Sensitive receptors within 20m of kitchen discharge

Size of kitchen : medium = 3 sized Restaurant

Cooking type : High = 7

Total score = 30 High Level odour Control required

Impact Risk	Odour Control Requirement	Significance Score*
Low to Medium	Low level odour control	Less than 20
High	High level odour control	20 to 35
Very high	Very high level odour control	more than 35

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

Criteria	Score	Score	Details
Dispersion	Very poor	20	Low level discharge, discharge into courtyard or restriction on stack.
	Poor	15	Not low level but below eaves, or discharge at below 10 m/s.
	Moderate	10	Discharging 1m above eaves at 10 -15 m/s.
	Good	5	Discharging 1m above ridge at 15 m/s.
Proximity of receptors	Close	10	Closest sensitive receptor less than 20m from kitchen discharge.
	Medium	5	Closest sensitive receptor between 20 and 100m from kitchen discharge.
	Far	1	Closest sensitive receptor more than 100m from kitchen discharge.
Size of kitchen	Large	5	More than 100 covers or large sized take away.
	Medium	3	Between 30 and 100 covers or medium sized take away.
	Small	1	Less than 30 covers or small take away.
Cooking type (odour and grease loading)	Very high	10	Pub (high level of fried food), fried chicken, burgers or fish & chips.
	High	7	Kebab, Vietnamese, Thai or Indian.
	Medium	4	Cantonese, Japanese or Chinese.
	Low	1	Most pubs, Italian, French, Pizza or steakhouse.

The type of odour abatement system that complies is as below;

The System

High level odour filtration system , the filtration system consist of 2 no of ESP 5000B unit with UV lamps to eliminate cooking grease, smoke and odour, recommended to be serviced every 3 - 6 months depending on the usage , then followed by 200kg of extra duty carbon filter unit & Casing , to give dwell time of 0.4 sec, carbon filters use panels of activated carbon to remove the malodorous gases within the commercial kitchen extract duct through the process of chemical adsorption, recommended to be replaced every 6-12 months depending on the usage.

As you can see the system that has been specified is inline with BESA DW 172/144 and EMAQ+dated 2018 specifications guidance.



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