

Good morning Cliff,

Thankyou for taking the time to show us around site last week.

We have reviewed the information supplied and have produced a selection of comments and recommendations which can be found in the following text and throughout the report attached.

Your primary question was:-

“Can you please advise if the flow rates specified by McKees are acceptable for the hoods that we are using?”

Secondary to this was:-

Confirm the recommendations for smoke and odour removal at roof level.

Calculations

All calculations are compliant with CIBSE, DW172 and building regulation requirements utilising the SEFR (Specific Extract Flow Rate) method. The extract flow rate sheets are attached but the summary is as follows:

Kitchen	Extract Calculation	Supply Air Calculation @ 85%	Purified Air ESP Requirement – Smoke and Grease Removal	Purified Air UV-Requirement – Grease and Odour Removal	Purified Air UVO Requirement (Locate within kitchen for maximum effectiveness) – Odour Removal
Ground Floor Kitchen	5.08 m3/s	4.31 m3/s	2no ESP 6000E Units		2no UVO 1000 1no UVO 500
Mez Kitchen	1.75 m3/s	1.48 m3/s			1no UVO 1000
Mez Kitchen Dishwash	0.60 m3/s	0.51 m3/s			1no UVO 500 (if combined with Mez Kitchen).
Sky Bar Kitchen	2.01 m3/s	1.71 m3/s	2no ESP 4500 Units (Double pass due to output from charcoal oven) – must be sited before UV for effectiveness.	1no UVC 4500 Unit – note dwell time required in extract duct.	

Recommendations based on site report:-

	Ground Floor Kitchen	Mez Floor Kitchen
Recommended solution	Consider replacing extract canopy with new hood complete with sufficient overhangs for catering equipment installed underneath. Include for UL listed baffle filters and LED lighting. Suggest that some of the fresh air requirement be introduced through supply air diffusers in the sides of the canopy with the remainder introduced through ceiling grilles to permeate the space evenly.	Consider replacing extract canopy with new hood complete with sufficient overhangs for catering equipment installed underneath. Include for UL listed baffle filters and LED lighting.
Consideration for amendments to existing hoods.	Whilst it is possible to cut access panels into the sides of the existing hood, retro-fit new lighting and amend the existing filter housings to accept listed baffle filters the overhangs of the hood would still be insufficient resulting potentially in refusal by a gas engineer to recommission the equipment.	Whilst it is possible to cut access panels into the sides of the existing hood, retro-fit new lighting and amend the existing filter housings to accept listed baffle filters the overhangs of the hood would still be insufficient resulting potentially in refusal by a gas engineer to recommission the equipment.
Works that must be completed	Cleaning and accessibility to internal skins of existing hoods to remove fire risk and health hazard of aged grease liquifying and dripping back onto the cooking zone. Re-routing of the gas pipe from above the salamander flue.	Cleaning and accessibility to internal skins of existing hoods to remove fire risk and health hazard of aged grease liquifying and dripping back onto the cooking zone.

I’m sure that there will be questions and I am happy to jump on a call with your design team should you have any further questions.

Tony

Kind regards

Tony Bright
Director

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