T4- M&E

13 Warren Street, London

W1T 5LH

June 2021

Steam Extraction Hood System

- The proposed extraction hood is design to capture, condense and remove steam produced by cooking pots with various types of tea leaves using electric induction hobs used by T4. There is no other boiling or cooking requirements and the steam extraction hoods are only design for low grease emission level or where grease filtration is not required.
- The extraction system is required as steam builds up from the boiling process creating condensation within the kitchen area.
- The steam extraction hood (condensation hood as commonly known) will capture the moisture in the air from high steam outputs. The steam itself is drawn through the canopy where upon contact turns to water and is then drained away via a condensate drain into the drainage connection normally next to the sinks adjacent or via a Hepvo Valve.
- An extract duct is fitted above with a fan Helios RR315B and Airclean-Activated Carbon Filters which will draw the heat away via an external grille (existing high level louver as shown in dwg).
- As there is no other cooking operations involved there is no grease elimination required and condensate hoods (Steam hoods) are designed for this type of operation as T4.

Proposed HVAC Fans in void area

Steel In-Line centrifugal fans 100 to 315 mm diameter

Hotline: 01206 228 500

Helios HighVent®

Single phase models 230 V / 1 ph. / 50 Hz

SELECTION DATA

Fan code	Speed high / low	Volume flow m³/s against static pressure Pa. at high speed												Motor power	Current	Max. air flow temperature	Speed controller		Weight	Sound level @ 4 m
	rpm	0	50	100	150	200	250	300	400	450	500	600	700	Watts	Amps	+°C	Transformer	Electronic	kg	dB(A)
RR 100 A	1730	0.069	0.056	0.043	0.035	0.026	0.018	0.008						41	0.18	80	TSW 0.3	ESA 1	2.9	46
RR 100 C	2530/1265	0.092	0.075	0.068	0.056	0.043	0.031	0.019						62/49	0.27/0.22	70	TSW 0.3	ESA 1	2.9	50
RR 125 C	2480/1240	0.133	0.117	0.097	0.074	0.051	0.036	0.021						62/47	0.27/0.21	70	TSW 0.3	ESA 1	2.9	50
RR 150 B	2540/1270	0.147	0.131	0.107	0.086	0.068	0.049	0.028						62/49	0.27/0.22	70	TSW 0.3	ESA 1	3.2	49
RR 150 C	2480/1240	0.242	0.224	0.201	0.171	0.136	0.111	0.089						101/66	0.44/0.29	65	TSW 1.5	ESA 1	4.3	53
RR 160 B	2540/1270	0.147	0.131	0.107	0.086	0.068	0.049	0.028						62/49	0.27/0.22	70	TSW 0.3	ESA 1	3.2	49
RR 160 C	2480/1240	0.242	0.224	0.201	0.171	0.136	0.111	0.089						101/66	0.44/0.29	65	TSW 1.5	ESA 1	4.3	53
RR 200 A	2580/1290	0.258	0.238	0.219	0.200	0.175	0.146	0.108	0.039					115/94	0.51/0.44	60	TSW 1.5	ESA 1	4.6	52
RR 200 B	2500/1250	0.294	0.276	0.258	0.235	0.208	0.178	0.147	0.090	0.061	0.035			165/105	0.71/0.48	60	TSW 1.5	ESA 1	5.1	53
RR 250 A	2580/1290	0.258	0.235	0.213	0.189	0.165	0.138	0.106						115/95	0.50/0.44	60	TSW 1.5	ESA 1	4.6	54
RR 250 C	2420/1210	0.314	0.29	0.267	0.244	0.219	0.194	0.167	0.108	0.075	0.040			185/130	0.81/0.59	55	TSW 1.5	ESA 1	5.3	54