

Ventilation and Extraction
Proposed Drive Thru Unit at
Bartons Road, Havant.



Ventilation and extraction:

Each item of cooking equipment contains a built-in Hi-Catch Filter which removes 98% of airborne grease at source.

Extract air volumes are controlled to within the effective grease removal range of the filters established by tests carried out at the operators testing facility.

Plazma Clean injection units are installed to treat odours in the extract system by means of oxidation.

A common ducted extraction system is connected to a centrifugal extract fan, which discharges to atmosphere via an unrestricted vertical high velocity discharge to provide effective dispersal of the exhaust air.

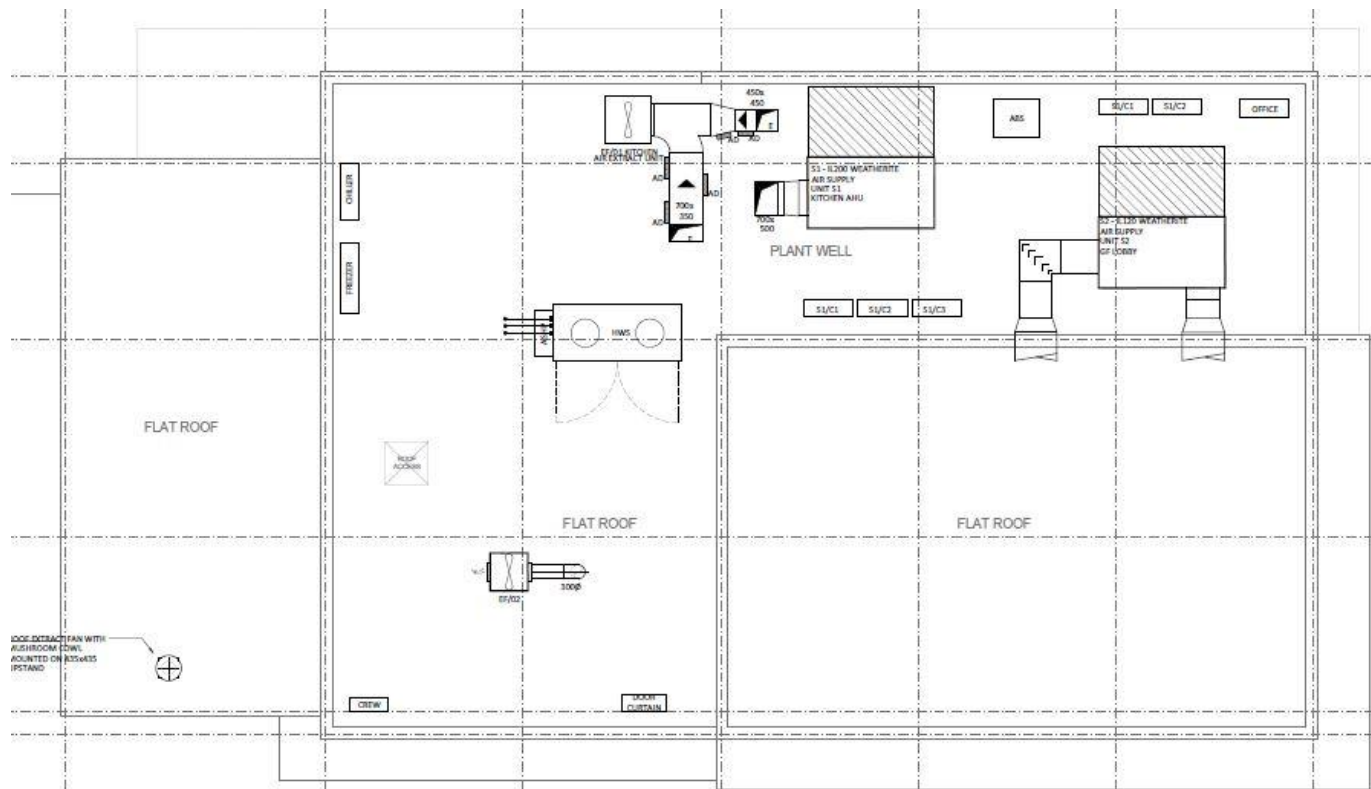
Access doors are provided in the ductwork at suitable intervals for cleaning and maintenance purposes.

Extract rates are between 30-40 air changes an hour.

The maintenance is for quarterly changing of supply system filters and six monthly servicing and kitchen extract duct cleaning.

Cleaning and maintain may vary dependent on specific store characteristics.

Fan Schedule													
Reference	Description Location	Design Volume m3/s	RQD Margin %	Design ESP Pa	Required Margin %	Electrical					Speed		Comments/Manufacture/Model
						Min SFP (W/l/s)	Rating (kW)	Ph	RC (A)	Starting Method	Fan	Motor	
EF/01	Kitchen (Roof Plant)	2.8	+10%	1000	+21%			3	15.2	BMS	-	-	RHF BW 10-500 Run/Standby motors, invert control. Final extract air volume to be confirmed by kitchen specialist
EF/02	WC's (Roof Plant)	0.17	+10%	150	+21%	0.6	0.45	1	2.9	-			Nuaire/Dave Extract Fan DE6-ES with weather protection
EF/03	Energizer (Store)	0.16	+10%	15	+21%	0.3	0.056	1	0.48				Systemair DHS 310EV with weather protection



Equipment Schedule									
Reference	Location	Service	m3/s	Ext Pa	Capacity	Manufacture	Model	Weight	Accessories
S1	Roof	Kitchen Supply	2.4	400	63 kW Cooling	Weatherite	Y200	905	
S1/C1, C2 & C3	Roof	S1 Condensers 1,2 & 3				Mitsubishi	ZRP250		FTC Controller Per Condenser. AHU Panel Mounted Remote Controller
S2	Roof	GF Dining Supply	1.65	400	38kW Cooling	Weatherite	Y120	905	
S2/C1 & C2	Roof	S2 Condensers 1&2				Mitsubishi	ZRP200		FTC Controller Per Condenser. AHU Panel Mounted Remote Controller
AC01	Manger Office	Split AC Indoor Unit			3.22kW Cooling, 3.4kW Heating	Mitsubishi	SLZ-M35FA	15	MAC3971F-E Trend Enable Interface. Par 31 controller
AC01/C1	Roof	Condenser				Mitsubishi	SUZ-M35VA	41	Trend Enable Interface
AC02	Crew Room	Split AC Indoor Unit			4.25kW Cooling, 4.42kW Heating	Mitsubishi	SLZ-M50FA	13	MAC3971F-E Trend Enable Interface. Par 31 controller
AC02/C1	Roof	Condenser				Mitsubishi	SUZ-M50VA	35	Procon Trend Enable Interface
AC03	GF Floor Dining	Air Curtain	0.364		8.3 kW Heating	Thermoscreen	HP 1000RDXE	52	Procon Trend Enable Interface
AC03/C1	Roof	Condenser				Mitsubishi	PUZ-ZM71VHA	70	
E1	Roof	Kitchen Extract	2.8	1200	5.5kW	RHF	BW10 500	400	Standard McDonalds Spac. EFF1 Motors. Spring AVM's. Flexible connection. Roller bearings (SN)