

GENERAL NOTES:

- 1. PREWORK RISKS AND PLANT POSITIONS ARE INDICATIVE ONLY.
- 2. ALL HEATING PREWORK WILL BE COPPER TO BS2327.
- 3. ALL MCV AND OHW PREWORK WILL BE INSTALLED IN COPPER TO BS2327.
- 4. AUTOMATIC AIR VENTS AND BRANCOCKS WILL BE PROVIDED TO ALL SYSTEMS AT HIGH AND LOW POINTS RESPECTIVELY.
- 5. ALL PREWORK RISKS AND TESTS WILL BE SWEPT.
- 6. ALL SOIL PREWORK WILL BE INSTALLED WITH A MINIMUM FALL OF 10mm PER METER.
- 7. DRINKING WATER LABEL TO BE INSTALLED ABOVE RELEVANT BASIN IN MALE AND FEMALE TOILETS.

BUILDING CONTROL

ALL SYSTEM WILL BE DESIGNED TO COMPLY WITH THE FF.

- PART B - FIRE SAFETY
- PART F - RESISTANCE TO PASSAGE OF SOUND
- PART F - VENTILATION
- PART H - DAMAGE AND WASTE DISPOSAL.
- PART J - CONSERVATION OF FUEL AND POWER
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- PART B - FIRE SAFETY
- CEILING SUITABLE FIRE RATED TO REMOVE THE NEED FOR SMOKE DAMPER INSTALLATION.
- ALL SERVICES PENETRATIONS THROUGH FLOORS/WALLS WILL BE STEELED AND SEALED WITH INTIMESSENT BLOCK SEALANT BY MAIN CONTRACTOR.

PART E - RESISTANCE TO PASSAGE SOUND
IN ADDITION TO BE DBA RATINGS INDICATED ON THE PLANT DATA SCHEDULE ATTENUATION WILL BE INSTALLED ON ALL INTAKE AND DISCHARGE OUTLETWORK TO ACHIEVE THE NOISE RATINGS REQUIRED AS INDICATED ON THE 24 ACUSTIC REPORTS PAGES 29-31 DATED 8th FEBRUARY 2012.

ALL MECHANICAL PLANT WILL BE INSTALLED ON ACUSTICALLY AMORTISED MOUNTINGS.

ALL PUMPS WILL BE SECURELY FIXED ON BLOCKS AND INSTALLED TO MANUFACTURERS RECOMMENDATIONS.

PART J - CONDUSTION APPLIANCES AND FUEL STORAGE SYSTEMS.
BOLLER PLANT SHOULD BE INSTALLED INLINE WITH ALL MANUFACTURERS RECOMMENDATIONS.
FLUE TERMINALS WILL BE INSTALLED INLINE WITH ALL MANUFACTURERS RECOMMENDATIONS AS WELL AS COMPLYING WITH THE REQUIREMENTS OF THE CLEAN AIR ACT.
FOR POSITIONING OF THE OPEN FLUE TERMINALS REFERENCE SHOULD BE MADE TO BS544 P1.
FOR BOLLER INSTALLATIONS WITH A TOTAL HEAT INPUT OF 70kW REFERENCE SHOULD BE MADE TO BS544 (IN IE REFER TO L5302200)

PART K - PROTECTION FROM FALLING COLLISION AND IMPACT.

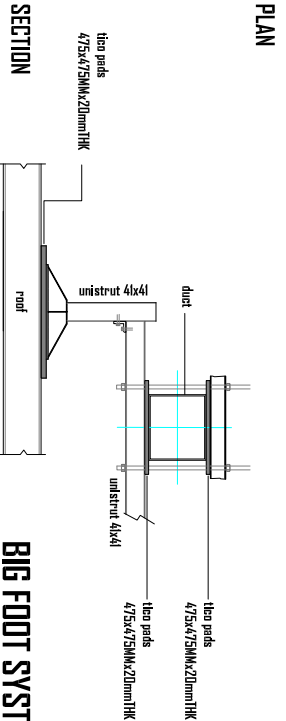
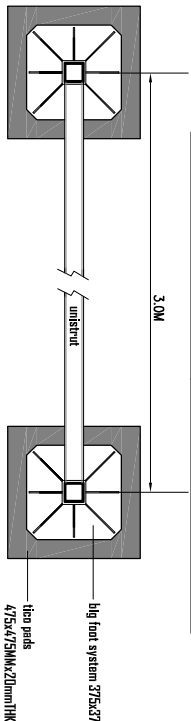
PART L - CONSERVATION OF FUEL AND POWER
ALL HEATING AND HOT WATER PREWORK WITHIN PLANTROOMS/CEILING VOIDS AND SERVICE RISERS WILL BE INSULATED WITH CLASS 0 FILL FACED INSTALLATION.

THE MECHANICAL DESIGN WILL INCORPORATE ALL REASONABLE PROVISIONS FOR CONSERVATION OF FUEL AND POWER IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS SO FAR AS IS REASONABLY ACHIEVABLE FROM THE CLIENT BRIEF.



GROUND KITCHEN EXTRACT FAN	
MANUFACTURER: ECE	
CATALOGUE NO: SDC-5	
INPELLER DIA./SIZE (mm): 056	
FAN TYPE: CENTRIF	
VOLUME (m³/s): 2.26	
STATIC PRESSURE (Pa): 300	
FAN SPEED (RPM): 1450	
SOUND PRESSURE (dBA): 78 @ 3m	
MOTOR POWER (kW): 4.0kW	
ELECTRICAL SUPPLY: 400V / 3 Ph / 50Hz	
CURRENT IEC: 8.5AMP	

GROUND KITCHEN SUPPLY FAN	
MANUFACTURER: ECE	
CATALOGUE NO: SDC-4	
INPELLER DIA./SIZE (mm): 056	
FAN TYPE: CENTRIF	
VOLUME (m³/s): 1.5	
STATIC PRESSURE (Pa): 450	
FAN SPEED (RPM): 2280	
SOUND PRESSURE (dBA): 77 @ 3m	
MOTOR POWER (kW): 2.2kW	
ELECTRICAL SUPPLY: 400V / 3 Ph / 50Hz	
CURRENT IEC: 4.5AMP	



AHU / OUTDOOR UNIT SCHEDULE									
REF	MODEL	SIZE	WT (KG)	NOISE (dBA)	ELECTRICAL SUPPLY (AMP)	PHASE	RISK		
Restaurant DX	PURV-45450SJM-A1	(920x920)W X 700d X 710H	240-240	59.5	380-455, 50Hz	3	20/20		
Supply AHU DX	PURV-45450SJM-A1	(920x920)W X 700d X 710H	240-240	59.5	380-455, 50Hz	3	20/20		
Extract AHU	AHU size	3450d X 2280 X 1000H	695	78	380-455, 50Hz	3	20		
Supply AHU	AHU size	3550d X 1950d X 710H	420	77	380-455, 50Hz	3	20		

WATER WASH SYSTEM

The water wash system is designed to remove grease and contaminants from through keeping daily maintenance to a minimum. In place of conventional filters the grease particles in the canopy are separated by special designed baffle. The air moves through the canopy at a high speed and is forced to make a series of turns around the baffle. The grease is collected in the trough. The extracted grease is collected in the trough. The water cycle is activated each time the water is turned down. The water and detergent is sprayed into the canopy for pre-programmed time from a control cabinet which regulates the dosage of the detergent required to clean the system. A high standard of hygiene is maintained and the installation is better protected against the build-up of grease deposits which constitute a fire hazard. The baffle reduces the turbulence we recommend a protection system (optional) to be integrated into the system.

AIR SUPPLY

To compensate for some of the loss of the air extracted from the kitchen the system is designed to supply make-up air. This can be done by using Jet Stream principle which passes over a diffuser plate and is delivered through a series of slots arranged along internal front edge of the canopy and represents a maximum 15% of the extract air flow. This contains the thermal plume generated by cooking process. A further 75% of the supply air flow is discharged through vertical perforated front face of the canopy ensuring an even distribution of supply air over the full length of the canopy at low velocity without draught. For areas where stringent environmental regulations are in force, the water wash system are an excellent choice combined with Grease Shield.

DESCRIPTION

The Water Wash System can be used in any kitchen canopy and is suitable for use with all types of cooking equipment, especially where cooking activity is high and great deal of grease is produced during cooking. The water wash system does not use the famous FETON filter's but instead the air passes over a series of horizontal stainless steel grease baffle positioned to increase the air velocity and force severe changes in direction which ensure the grease is separated from the exhaust air stream and collects on the surface of the baffle. The canopy extract plenum houses a series of water spray nozzles which can be activated at the end of each day to wash down the baffle surfaces. A control panel controls the water wash cycle. The frequency and wash duration and being fully automated the system requires no input from the kitchen staff also ensuring minimum of maintenance and service.

The water wash system can also be incorporated in canopies that also feature Water-Wash air and UV-C disinfection.

CONSTRUCTION

The Water Wash System is fully welded (1.2mm thick) type 304 stainless steel assembly. Grease collection channels run the full length of the canopy. Full length integral access panel mounted with gas filled dampers and lockets with captive quick release fastenings allow easy access to the plenum interior - water pipe work and spray nozzles for inspection purposes.

The control panel is fabricated in type 304 stainless steel and measures 800 x 300 x 250mm and is secured by a lock. A tank containing detergent is housed within the panel which also features a digital display monitor. The system, a man hot water feed is required to a 3/4" water connection. The recommended water supply temperature is 55°C.

ADVANTAGES

- High grease removal rate ensure high level of hygiene.
- Constant air pressure from over canopy.
- System efficiency does not depend on volume of cleaning staff.
- Requires minimum maintenance.
- Excellent environmental conditions.
- In case of fire the water wash system can be automatically activated.

WATER WASH MISTRY SYSTEM

The Water Wash Mistry System reduces the risk of fire caused by grease during cooking process, especially from overhead grills. The Water Wash Mistry System can be applied to the Water Wash system. A separate piping system for the cold water is integrated into the canopy. The nozzles of the water mistry system release a continuous fine mist of water during the cooking process. The highly efficient method of filtration also changes the grease from its gaseous state to condensed grease particles in the cold water mist. The contaminated water contain the extract is collected in the same dedicated channels and runs off to the drainage system. The system can also be equipped with the Grease Shield (detergent free automatic grease removal) and Water Recycling System. The Water Wash Mistry System operates on a constant cold water feed to generate the water mist. To safeguard the operation of the system the first 3-4 m of the extract ductwork is waterproofed and moisture eliminator is mounted on top of the canopy. The controls of the Water Wash Mistry system is integrated in Water Wash control cabinet.

- Cold water connection : 3/4" water-thread
- Water consumption : 0.78 litre/min. p/ meter (wall model)
- Water flowage : 158 litre/min. p/ meter (ceiling model)
- Water backage : 7" water-thread
- Water temperature : 5°C
- Water pressure : 2.0Bar

NOTES:

1. REFER AS/STAN DRAWING FOR PLANT DECK STRUCTURE.
2. STEEL BAR GRATING TO SUPPORT PLANT AND FOR ACCESS.
3. THE DUCT WORK HAS BEEN INSTALLED USING TOP PADS BETWEEN THE METAL UNISTRUT AND THE DUCT WORK TO AVOID ANY VIBRATION. ALL THE PLANT HAS BEEN INSTALLED ON ANTI-VIBRATION STAKES/ TIED PADS. THE MAIN PLANT IS SEPARATED BY ANTI-VIBRATION MOUNTS WITHIN THE UNITS PROVIDED BY THE MANUFACTURER.



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Client	Q CHALKFARM	Date	04.12.13
Project	PLANT LAYOUT	System	RC
Drawn	IC	Checked	IC
Reviewed	IC	Approved	IC

Drawing No. LP/0767/P01