

Title: Proposed Kitchen Ventilation System.

Address: Central Café – Widewater Place, Moorhall Road, Uxbridge UB9 6NS.

Kitchen Extract System. The extract system would consist of a 6.0m long x 1.20 wide x 500mm high Stainless steel canopy fitted with stainless steel baffle filters, the canopy would also have fresh air induction to the front section of the canopy. On top of the canopy a galvanised steel plenum 600 x 200 with 3no openings 600 x 400 into the canopy, a 600 x 600 duct up through the roof with a timber upstand weathered to the roof, bend over towards the right of the roof the ducting tapering to 1200 x 600 the filter housing would include washable pre-filters, throw away bag filters, carbon blocks, square to round to a silencer, extract fan, bend towards the front of the roof, silencer, bend up and discharge through a jet cowl, the canopy would be supported from the roof in the ceiling void in the kitchen area, and the roof items would be supported on rubber feet, and the extract system would also incorporate removable access panels for future duct cleaning.

Extract Fan: This would be a Helios GBW 560/4 1ph Gigabox centrifugal fan. The max air volume would be 9123m³/hr at free air. The fan would be controlled by a Helios transformer speed controller. The extract fan will be supported on anti-vibe mounts to reduce any vibration onto the structure.

Silencer: 2no Flakt Woods 560 dia 1120 long, the silencers would reduce the noise levels by 10 - 13dB at 3 metres from listener.

Filter Section: The filter section would incorporate 2 no 595 x 595 x 45 washable mesh filters, 2 no 595 x 595 x 380 long throw away bag filters and 2 no 595 x 595 x 600 long carbon blocks.

Gas Interlock Control: The extract fan interlock with the gas solenoid valve through a control panel.

Kitchen Fresh Air The fresh air system would consist of a plenum on top of the front section of the canopy 600 x 200 with three opening 500 x 400 into the canopy, a 500 x 500 duct up through the roof with a timber upstand weathered to the roof, bend over towards the front of the roof square to round, silencer, fan, silencer, bend, filter housing and discharge with a bird beak. The items on the roof would be supported on rubber feet.

Supply Fan: This would be a Flakt Woods 50JM/20/4/6/32/1ph long cased axial fan. The fan will have a speed controller. The fan would be supported on anti-vibe mounts to reduce any vibration onto the structure.

Silencers: 2no Flakt woods silencer 500dia x 500 long, the silencer would reduce the noise levels by 10 – 12dB at 3 metres from listener.

Filter Section: The filter section would incorporate 1no 600 x 600 metal mesh filter.

Maintenance: Access doors fitted to the ducting, and a cleaning contract to maintain the system will be given, the mesh filters would need to be cleaned regularly (every two months) and the bag filters replaced to protect the carbon blocks, the fresh air filter cleaned every six months.

12th November 2024

Catering Equipment Solutions Ltd. Unit 2 Wallingford Road, Uxbridge UB8 2RW