

1. Pizza Oven Ventilation Systems Description

1.1 Pizza Oven Extract Ventilation System

The pizza oven manufacturers do not specify an extract air rate, only a minimum extract rate, so using the thermal convection method, an extract air volume of 1.034m³/s has been calculated.

The EMAQ risk assessment for the pizza extract system, would indicate a high level of odour control, due to exhaust being at low level.

The pizza oven would be sited under a stainless steel canopy, which would be floor mounted on legs, and would have grease filters along the rear section, and integral LED light

The pizza oven extract fan would be a Flakt Woods Estoc Targe (Powerbox) model 67-450-1, high temperature rated with the motor out of the airstream, and with an external pressure availability of 275pa, however, once the final ductwork route has been established/confirmed, the system pressure should be recalculated, if different from the design drawing layout,

The fan should have a high temperature rated sound attenuator at the outlet of the extract fan.

The fan should have a speed controller.

Extract ventilation ductwork, would be galvanised sheet steel, manufactured and installed in accordance with the HVCA DW172 specification for commercial kitchens.

The diameter of the extract ductwork would be 400mm dia, giving an extract air velocity of 7.5m/s

The ductwork should include sufficient access/cleaning doors for internal cleaning of the ductwork system

Odour Control will comprise:- 1 x MFU600 multi filtration unit, containing panel and carbon filters.

The odour control equipment should be manufactured by Purified Air Ltd

The exhaust terminal, would be a standard weather louvre, built into the new proposed partition wall, sited inside the existing steel 'concertina' door.

The louvre would be approx. 650mm x 650mm giving an exhaust velocity of approx 3m/s

