

1. Ventilation Systems Description

1.1 Extract Ventilation System

The purpose built 'kitchen trailer' will have an integral extract hood, positioned over the cookline.

The cookline consists of:-

1 x Lincat 600 Induction Hob, SL142 6kW

1 x Falcon E350/39 Twin Tank Fryer 10.5kW

The trailer is equipped with a 360mm dia exhaust duct on the roof, to which the extract ventilation system ductwork will be connected.

The ductwork should be manufactured and installed in accordance with the HVCA DW172 specification, with sufficient access/cleaning doors.

The fan provided by the trailer manufacturers should be removed and discarded, as it will not be powerful enough to overcome the pressure drops over the odour control equipment and ductwork.

The extract air volume has been calculated at 0.3m³/s in accordance with DEFRA guidelines and DW172 specification, thermal calculation method.

The new extract ventilation fan is a high temperature rated, box fan, with the motor out of the airstream, configured with a side entry and a vertical exhaust, as indicated on design drawing No. C617/1.

The system resistance has been calculated at 375pa, however this should be recalculated once exact duct routes are confirmed.

The DEFRA risk assessment score is 27, which is a 'high' level of odour control.

The odour control equipment is as follows.

1 x Purified Air ESP1500 module

1 x Purified Air Carbon Filter module, containing 3 x site safe carbon cassettes.

The fan will have fore and aft sound attenuators, 800mm long, and the vertical discharge will terminate in a high velocity (15m/s) jet cowl