

# The Charterhouse.

Complete kitchen vent system with fire rating

## CASE STUDY

Client:



Situation:

The Charterhouse in London, needed to update its main cooking facility and engaged with specialist catering designer/distributor df20 to find an all-encompassing solution. In turn, df20 approached Kitchen Vent Technical to design a full kitchen ventilation system which needed to be sympathetic to the Grade 1 Listing of the building. The vent design also had to protect against the fire risk attributable to such a building, incorporating three-hour fire-rated & insulated ductwork, automatic fire suppression and an integrated control system. Visual aspects of the building (dating back to the 14<sup>th</sup> century), required discretely positioned intake and discharge terminals.



### The KVT Solution:

KVT took the design brief, surveyed the site, mapped a suitable route through three levels of the building, to safely discharge the large quantity of extracted air to atmosphere and developed a suitable method of bringing a similar quantity of return supply-air, back into the space. Both vent systems incorporated high-power, low-noise, centrifugal fans, frequency inverters and a fully automatic control panel to integrate fan controls, heating interface, gas interlock and safety systems in one, neat & tidy, compact cabinet. The return supply air also incorporated a large electric heater battery element for air tempering in cooler weather. Additional noise attenuation was also successfully incorporated.



### Why KVT:

- ✓ KVT were able to coordinate with other trades and operate on site, with additional awkward conditions under the Covid 19 lockdown restrictions but still complete the works on time – even whilst filming of a prominent TV series took place.
- ✓ The comprehensive controls package integrates several processes into an automatic operation and takes away the hassle from the kitchen staff.
- ✓ The KVT systems were complete with main island canopy and services distribution unit, all of the very best quality and fully compliant with the latest standards including DW172, DW144 & TR19.
- ✓ KVT ticked all these boxes and still maintained a very tight budget.



### Customer Feedback:

*"KVT offered a comprehensive package incorporating all the elements required for this magnificent yet sensitive building. Fire suppression, noise reduction and challenging client working hours were all successfully adhered to in a timely and professional manner. The entire team from KVT adapted to site and its conditions, to complete a fantastic project on time and budget. Looking forward to future opportunities between DF20Ltd, KVT and their team".*

Chris Fleming (Managing Director) – df20.

