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28th May 2026

Ref: Eccleston Street, Commercial Kitchen Extraction Routes.

Recommendation and technical assessment regarding the proposed internal duct riser and the alternative external gable discharge.

Dear Ms Green

I provide this letter and technical note attached further to our ventilation strategy submitted on 25 July 2025. As explained in our previous revisions of that strategy, this project presents a number of design difficulties in achieving a compliant DW/172 kitchen extraction and supply system. The most significant of these are the location of the kitchen, the finished floor levels throughout, the absence of any viable route to the front or rear of the property, and, most importantly, the accommodation above being used as short-term let apartments. Our solution has therefore been to provide an alternative filtration method in place of our usual ESP arrangement, together with an extract run taken out through the side gable end and rising at high level to discharge above the ridge of the roof.

We understand the preference, on conservation and visual grounds, for the kitchen extract route to be concealed within the building rather than expressed externally on the side gable elevation. We have given this careful consideration alongside the architect's suggestion that the extract riser be taken internally through the floors occupied by the short-term let apartment-hotel units.

Having reviewed the constraints of the site and the applicable fire-safety standards and Building Regulations guidance, our recommendation is that a none-dedicated internal fire riser through the apart-hotel accommodation is not a route we are able to support. The combination of the prohibition on fire dampers in kitchen grease extract, the resulting need for a continuous fire-resisting duct through sleeping accommodation, and the impossibility of providing and maintaining the statutory cleaning access within let guest rooms means the internal option cannot reasonably be made compliant or safely maintained over its life.

We therefore recommend the external duct routed up the side gable end, rising at high level to discharge above the ridge of the roof clear of sensitive receptors, as the appropriate and compliant solution. There is no viable route to the front or rear of the building; the side gable is the only available path from the kitchen to atmosphere. The external duct can be



powder-coated to RAL of your choosing to match the existing building finishes, minimising visual impact.

The accompanying note sets out the regulatory basis for this recommendation in full. We would be glad to discuss it, and to attend a site meeting if that would assist.

Please note that the contents of this letter and the accompanying note represent Restaurant Projects Ltd's professional recommendations and assessment at pre-construction advisory stage. They are offered to inform the design discussion and remain subject to the approval of the Local Planning Authority, Building Control, the Environmental Health Officer, and the fire authority / appointed fire risk assessor, together with the building's appointed fire engineer where applicable.

Yours faithfully

Chris Hamblin

Restaurant Projects Ltd



Technical Assessment Note

Commercial Kitchen Extract Routing

Project: Eccleston Street, Prescott

Stage: Pre-construction advisory

Prepared by: Chris Hamblin, Restaurant Projects Ltd

Date: 26 May 2026

Reference: RP-ECC-VENT-01, Rev A

1. Purpose and Status

This note records Restaurant Projects Ltd's recommendation and supporting assessment on the routing of the commercial kitchen extract system at the above premises. It responds to the Conservation Officer's preference for an internal route and to the architect's proposal to carry the extract riser internally through the short-term let apartment-hotel units.

It is provided at pre-construction advisory stage and represents our professional opinion. All conclusions are subject to the approval of the Local Planning Authority, Building Control, the Environmental Health Officer, and the fire authority or appointed fire risk assessor. The final position on fire strategy should be confirmed by the project's fire consultant/engineer.

2. Site Constraints

The premises is a small commercial kitchen serving a limited number of covers, with cooking that includes grilling and frying and is therefore a meaningful source of grease-laden vapour. Owing to the floor-to-ceiling height available between the canopy and finished floor level, an in-ceiling electrostatic precipitator (ESP) arrangement cannot be accommodated, and an in-line filtration unit has been adopted instead.

There is no route for the extract to the front or to the rear of the building. The side gable elevation is the only available path from the kitchen to atmosphere. The two options under discussion are therefore: (a) an internal riser taken up through the floors of the apart-hotel accommodation; or (b) an external duct routed up the side gable end and discharged at high level above the ridge of the roof.



3. Regulatory Framework

The following standards and guidance are engaged by the routing decision and inform the assessment that follows.

Reference	Scope relevant to this assessment
Building Regulations 2010, Approved Document B (Fire Safety)	Internal fire spread, compartmentation, and the treatment of ducts passing through compartments and residential / sleeping accommodation.
BS 9999:2017	Fire safety in the design, management and use of buildings. Clause 32 covers commercial kitchen extract: separate independent systems, the prohibition of fire dampers in kitchen extract, and fire-resisting ductwork from canopy to discharge.
BESA DW/172 (2018, 2nd ed.)	Specification for kitchen ventilation systems, including fire resistance, capture and containment, and the prohibition of fire dampers in grease extract.
BESA DW/144	Specification for sheet metal ductwork (fabrication and installation).
BESA TR/19 and TR/19 Grease	Internal cleanliness of ductwork and fire risk management of grease accumulation: access provision, cleaning frequency, and competent BESA-registered cleaning.
BS 476-24 / BS EN 1366-1 / BS EN 1366-8	Fire resistance test standards for ductwork, including fire-from-inside (Type B) and fire-from-outside (Type A) performance.
Regulatory Reform (Fire Safety) Order 2005	Duties of the responsible person to assess and manage fire risk, particularly in premises providing sleeping accommodation.
EMAQ+ / DEFRA guidance	Control of odour and noise from commercial kitchen exhaust systems.
BS 6173	Installation of gas-fired catering appliances and associated ventilation interlock requirements.

4. Assessment of the Internal Riser Option

Our assessment is that the internal riser through the apart-hotel units is not a route that can reasonably be made compliant or safely maintained. The reasons are set out below and are, in our view, cumulative rather than individually decisive.



4.1 Fire dampers are not permitted in kitchen grease extract

BS 9999 and DW/172 are clear that fire dampers must not be installed in commercial kitchen grease extract ductwork. Grease accumulation can render a damper inoperable, and the heat carried in the extract can prematurely trigger fusible links, while a damper closing across a running extract is itself hazardous. As a consequence, compartmentation cannot be restored at each floor or apartment line by the usual means of a damper. The only way to maintain compartmentation through the building is to make the entire duct fire-resisting.

4.2 A fire-resisting internal duct still carries a fire load through sleeping accommodation

Where a kitchen extract does not discharge directly to outside from the kitchen compartment, the ductwork must be made fire-resisting for integrity and insulation, rated for at least as long as each compartment it passes through, and tested both for fire from inside the duct (Type B) and fire from outside (Type A). This is constructible; for example by a two-hour fire-rated wrap system, but it contains the hazard rather than removing it. Grease extract ductwork is consistently identified in fire investigations as a principal cause of fire spread. Taking that fire load vertically through transient sleeping accommodation places it through the highest-risk occupancy in the building, where occupants may be asleep and unfamiliar with the layout. The guidance in Approved Document B treats residential and sleeping risk with the most stringent provisions for precisely this reason.

4.3 The proposed riser is not a contained, dedicated fire riser

The route suggested by the architect is not a contained, dedicated fire riser formed as a protected shaft and accessed independently from the common circulation areas. As proposed, the duct would pass through the apartments themselves. Good practice and code guidance require a grease duct to be enclosed from its first point of penetration to the discharge terminal within an enclosure that serves that single grease duct alone and contains no other ducts, pipework or services. A duct routed through occupied let units, rather than within a purpose-formed protected shaft, does not meet this principle and creates a compartmentation junction within each dwelling it passes through.

4.4 Cleaning and inspection access could only be taken from within each apartment

The system must remain cleanable and inspectable throughout its life. Standard practice requires cleaning access at no greater than three-metre intervals and at every change of direction, and on vertical runs at every floor level, with cleaning carried out by a competent BESA-registered contractor at intervals not exceeding twelve months and more frequently where grease loading is higher. Because the proposed route is not a contained, dedicated fire riser accessed from the common areas, the only means of reaching those access points for routine cleaning, for inspection, and for any future repair would be from within each individual apartment. That is not achievable in short-term let accommodation: it would require repeated entry into occupied guest rooms on a fixed maintenance cycle, which cannot be guaranteed or controlled. The result is a grease duct that cannot be reliably



cleaned or inspected, which is itself the fire hazard the regulations seek to control, and which would typically invalidate the building's property insurance.

4.5 Duties under the Regulatory Reform (Fire Safety) Order 2005

The operator of the apart-hotel is the responsible person under the Fire Safety Order and must assess and manage fire risk for sleeping guests, including ensuring that kitchen extract ventilation is tested and maintained. An inaccessible commercial grease duct threaded through the guest accommodation is incompatible with the discharge of that duty.

4.6 Noise, vibration and odour into habitable rooms

Even with attenuation and anti-vibration provisions, a working extract riser passing through bedrooms risks break-out noise and structure-borne vibration, and in any leakage condition would carry odour into habitable rooms. Both outcomes conflict with the amenity of the residential units and with the noise objectives of the EMAQ+ / DEFRA guidance.

5. Assessment of the External Gable Discharge (Recommended)

The external route discharges the extract to atmosphere by the most direct available path and keeps the grease-laden fire load entirely outside the occupied and sleeping compartments. Because the extract leaves the building envelope directly, the most onerous internal fire-resisting requirements are reduced, as the guidance specifically relieves the full canopy-to-atmosphere fire-resisting requirement where the extract discharges directly to the outside of the building.

The external duct provides unobstructed cleaning and inspection access along its length for the life of the system, allowing the TR/19 regime to be carried out without entering the apartments. The discharge is taken at high level above the ridge of the roof to promote dispersion clear of sensitive receptors, consistent with the EMAQ+ / DEFRA approach. Anti-vibration fixings to the gable wall limit transmission of vibration into the structure.

On these grounds, the external gable discharge is the only option of the two that simultaneously satisfies the prohibition on fire dampers, the compartmentation requirements, the statutory cleaning-access requirements, and the responsible person's fire-safety duties toward sleeping occupants. It is therefore our recommended solution.

6. Conservation and Visual Considerations

We recognise the conservation interest in limiting the visual impact of external plant on the gable elevation. To address this, the external ductwork can be powder coated to a RAL of your choosing to match the existing building finishes, with the run set out to follow the building lines and the terminal kept as discreet as the dispersion requirements allow. We would welcome the chance to agree the colour, fixing detail and routing with the Conservation Officer so that the compliant solution is also a visually acceptable one.



7. Conclusion

An internal extract riser through the short-term let apart-hotel units cannot, in our assessment, be made compliant or safely maintained, principally because the prohibition on fire dampers forces a continuous fire-resisting duct through sleeping accommodation that cannot be cleaned or inspected in service. We recommend the external duct routed up the side gable end and discharged at high level above the ridge of the roof, finished in a RAL of your choosing to minimise visual impact, as the appropriate and compliant route.

8. Status and Approvals

This note sets out Restaurant Projects Ltd's recommendations and assessment at pre-construction advisory stage. It does not constitute a fire strategy or a regulatory approval. All matters addressed here remain subject to the approval of the Local Planning Authority, Building Control, the Environmental Health Officer and the fire authority / appointed fire risk assessor, and the fire strategy should be confirmed by the project's fire engineer prior to installation.