



PERFORMANCE SPECIFICATION

10 Gun Street READING

Proposed café and live venue.

Air Conditioning & Ventilation

General

The proposed café and live venue is located at 10 Gun street, Reading. The venue will be spread over 4 floors including the Basement. There is a mix of preparation and public area's with toilets for staff and public spread of all floors from the basement to the green room toilets on the first floor. It is perceived that air conditioning will control the temperature of the public area's using Heat pump systems to also provide heating and cooling to the spaces. There are 2 No. cellars in the basement which will require refrigeration systems to control the temperatures suitable for the storage of beer and wine. The live venue and café area's will also benefit from heat recovery ventilation systems to provide tempered fresh air utilising the heat recovered from the extracted stale air complying with building energy performance part L directives

Basement

To provide 2 No cellars with J & E Hall cellar refrigeration systems each with an evaporator located in the cellar and associated condensing unit located in the dedicated plant area on the first floor. The condensing units are to be stacked vertically to allow for the installation of other plant to the area.

To provide a heat recovery ventilation system to the male and female toilets via low profile ducting due to restricted ceiling heights. The ventilation unit will be in the locality with ducting running up a riser to the plant area externally.

Ground floor

To provide heating and cooling via local fan coils located in the café and entrance seating area. Indoor fan coils connected to a dedicated VRF heat pump system to serve the café and seating areas on the ground and first floor. In general exposed industrial looking ducting with terminal units.

Outdoor plant to be located in the dedicated plant area on the first floor

To provide a heat recovery ventilation system to serve the ground floor café and seating area including toilet extract from the wheel chair friendly toilet on the ground floor

To provide heating, cooling and heat recovery ventilation to the live public space and stage area via local fan coils in the area connected to a condensing unit located in the dedicated plant area on the first floor. The expected capacity of the area is 300 people with an heating cooling capacity of approx 80 Kw and a ventilation rate of 3000 litres per second or 10800 m³/hr

First floor

To provide heating and cooling from the VRF system serving the ground floor café heat pump system with condensing unit in the first floor plant area.

Heat recovery ventilation to this area ducted to the external plant area.

The roof terrace has no mechanical services anticipated.

There is a stand alone heat pump to serve the green room area with ventilation provided by a small heat recovery system inc toilet extract ducted to the rear elevation of the property, there is a second lower rear roof area which it is anticipated for some more local plant for the rear section of the building.

Second floor

There is a kitchen prep area to the front of the property served by a small air conditioning system and kitchen extraction via a canopy ducted to the plant area air space

Plant area

We anticipate that this area will require acoustic panelling to the exterior which will reduce the breakout noise from the plant