



Ref: ATQ/TS/Yngs~01

28th May 2025.

Heating / Cooling Hierarchy Statement.

Client:

Young & Co.'s Brewery PLC.
Copper House,
5 Garratt Lane,
Wandsworth,
London,
SW18 4AQ.

Project / Site Location:

The Stag.
67 Fleet Road,
Belsize Park,
London, NW3 2QU.

Heating / Cooling Hierarchy. (Design Principle)

- No dynamic thermal modelling has been produced due to the building being existing and the project of a refurbishment / remodelling scope.
- The design layouts shall promote natural ventilation with high floor to ceiling heights and openable windows / doors. Design shall manage heat within the building utilising exposed thermal mass and high ceilings to regulate temperature.
- The design shall reduce the amount of heat entering or leaving the building in all seasons via entrance lobbies complimented with over-door air curtains. When required promote passive ventilation and airflow through openable windows
- The design shall include adequate insulation, insulation properties of new services, existing services and building fabric shall be compliant with current building regulations.
- The proposed lighting scheme will promote reduced internal heat gains with the selection of LED lighting and energy efficient services.

Equipment Selection.

- The client has an active de-carbonisation scheme.
- Based upon the aforementioned design principles and site specific conditions a reverse cycle heat pump scheme has been selected. The reverse cycle heat pump(s) predominantly provide the **heating requirements** replacing the existing LTHW (NG fired system).
- The equipment proposed has an SCOP / SEER (BS EN14825) of 4.2 / 6.7 and ERP ENERGY EFFICIENCY CLASS Heating/Cooling of A+ / A++

Conclusion.

- The Heating / Cooling Hierarchy has been fully considered and all appropriate passive measures have been implemented to reduce the design and seasonal demand before consideration has been given to energy efficient air conditioning.
- In order to maintain adequate comfort levels, acoustics and indoor air quality, all front of house trade spaces within the building are intended to be comfort heated / cooled to offset remaining heat gains or losses using a highly efficient system.
- Air source heat pumps are a more sustainable choice as they don't burn fossil fuels, reducing greenhouse gas emissions and carbon dioxide levels.

Mechanical Design: Alphateq Services Ltd.

Engineer: Andrew Norling

Signature: *A Norling*

Date: 27.05.2025

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