

Case Reference HGY/2022/2659

Haringey Sixth Form Centre, White Hart Lane, London, N17 8HR

This note has been produced to satisfy the pre-construction overheating requirements for Planning Condition 5 which states:

- 5** Prior to above ground construction, a statement shall be submitted to and approved by the Local Planning Authority to demonstrate how the overheating risk has been minimised and mitigated on site in line with the London Plan Cooling Hierarchy. Details and specification of the mitigation measures shall be provided in support of this statement.

Reason: In the interest of reducing the impacts of climate change and mitigation of overheating risk, in accordance with London Plan (2021) Policy SI4, and Local Plan (2017) Policies SP4 and DM21.

OVERHEATING

The London Plan March 2021 requires the following:

Policy SI 4 Managing heat risk

- A** Development proposals should minimise adverse impacts on the urban heat island through design, layout, orientation, materials and the incorporation of green infrastructure.
- B** Major development proposals should demonstrate through an energy strategy how they will reduce the potential for internal overheating and reliance on air conditioning systems in accordance with the following cooling hierarchy:
 - 1) reduce the amount of heat entering a building through orientation, shading, high albedo materials, fenestration, insulation and the provision of green infrastructure
 - 2) minimise internal heat generation through energy efficient design
 - 3) manage the heat within the building through exposed internal thermal mass and high ceilings
 - 4) provide passive ventilation
 - 5) provide mechanical ventilation
 - 6) provide active cooling systems.

This relates to limiting the effects of heat gains in summer and is implemented for new buildings

This development should have no issues with overheating due to all stages of the cooling hierarchy being followed, with the lack of communal heat distribution, provision of MVHR and openable windows (with blinds) being major factors in mitigating any potential

Cooling Hierarchy

Cooling Hierarchy	Measures Undertaken
1. Minimising internal heat generation through energy efficient design	As the building will be heated by ASHPs, there will be no communal heat infrastructure in the building requiring mitigation.
2. Reducing the amount of heat entering the building in summer	- Carefully designed shading measures have been considered, including: i. specification of Internal Blinds ii. designing in the stack-effect
3. Use of thermal mass and high ceilings to manage the heat within the building	- Level of exposed thermal mass has been maximised where possible, but it must be noted that in high buildings the internal partitions are built to minimize its weight so increasing thermal mass of internal partitions is not feasible for this scheme - The Floor to Ceiling Height complies with statutory requirements.
4. Passive Ventilation	Openable Windows
5. Mechanical ventilation	MVHR will be installed. Mechanical Ventilation will make use of 'free cooling' (when the outside air temperature is below that in the building during summer months). This will be achieved via a by-pass mode on the heat recovery system for summer mode operation.