

Turtle bay at 10 Jamestown Road Camden is a Southeast facing unit within an existing, shared building. Due to the shared nature of the multistorey building, passive cooling techniques like wind tunnels, ventilated roof areas, or ground source heat exchangers are not proposed. These approaches are not feasible since they would require making significant changes to the fabric of the building or surrounding area /neighbourhood which may not be within our demise. Since the back of the restaurant space ends at an interior corridor, out of our demise, passive cooling through cross ventilation is not conceivable.

The higher-than-average temperature experienced in Central London, intensified by the 'heat island effect', means that the potential for overheating within the building is substantial. Airconditioning would be necessary to reduce this potential of overheating. The existing roadside trees provide some shading in the summer to lessen the cooling demand, but this is highly unlikely to be sufficient alone.

There are design elements that will lower the necessary cooling/heating load. Existing concrete walls within the space are left exposed where appropriate, their thermal mass can regulate the temperature within the space. As you enter the interior space from outside the ceiling is higher, aiding in natural ventilation. The large Southeast facing windows maximise solar gain in the winter. Throughout the scheme carbon capture is promoted using timber and reclaimed timber, this can go towards offsetting the carbon dioxide emissions produced by active cooling and heating of the space. Energy efficient LED Spotlighting and LED linear lighting is used throughout the scheme and mirror is used which can reduce the need for extra lighting.

Mark Christy
For and on behalf of Fusion DNA Limited

