LSE Global Centre for Social Sciences

Cutaway cross section through new building looking north.
Passive Cooling Strategies Assessment

In order to meet the high standards of environmental sustainability expected for the LSE Global Centre for Social Sciences, the building is designed to maximize the potential of effective passive cooling strategies associated with the optional building form and materials. Various thermal studies have demonstrated the potential for reducing energy consumption and carbon emissions, resulting in a significant improvement in the building's overall performance. The building's design includes features such as green roofs, shading devices, and the use of high-performance materials to minimize the impact on the surrounding environment.

The building's orientation also plays a crucial role in reducing energy consumption. The north-south orientation ensures that the building is always facing the sun, allowing for passive heating during the winter months and shading during the summer months. This orientation also reduces the exposure to direct sunlight, which can lead to overheating.

The use of natural ventilation and the incorporation of green spaces also contribute to the building's energy efficiency. The green roofs and walls help to reduce the heat island effect, which can significantly reduce the energy required for cooling.

The building's design also includes the use of high-performance windows and insulation to reduce heat loss during the winter months and heat gain during the summer months. This results in a reduction in the building's carbon footprint and a decrease in energy consumption.

In summary, the LSE Global Centre for Social Sciences is designed to be a sustainable building that meets the high standards of environmental sustainability expected for a building of its kind. The building's design incorporates various passive cooling strategies that reduce energy consumption and carbon emissions, making it an energy-efficient building that is also a model for sustainable architecture.
LSE Global Centre for Social Sciences

Floor plans with designated activities (Option 1)

Diagram of internal occupancy

The forms of building is designed to the high density urban context of the LSE Campus.
LSE Global Centre for Social Sciences

The project establishes a coherent and generous public route for the campus.

300 seat amphitheatre with balconies of 100 and 200 seats.

The new 250 x 30m ‘landscape’ public plaza and connecting mezzanines.

View towards Library and the new GCBH along Houghton Street.