

BATTLE McCARTHY®

Consulting Engineers & Landscape Architects



PROJECT:
IRANIAN EMBASSY, LONDON

CLIENT:
Undisclosed

ARCHITECTS:
Daneshgar Architects

BM SERVICES:
Sustainability and Environmental Design, Structural
Design Services, MEP Design Services

VALUE:
Undisclosed

DATE OF COMPLETION:
Ongoing

DESIGN BRIEF

Battle McCarthy has supported Daneshgar Architects in providing a sustainable solution for the Iranian Embassy in London. Even though the development was not under the direct influence of the UK planning system, the design team believed that a more sustainable approach tied in with UK best practice would present a more holistic design solution for such a landmark building.

Using National, Regional and Local sustainability policy and guidelines as a benchmark, Battle McCarthy tailored a solution for the proposed scheme's sustainability and environmental performance for this development.

London UK Office
T: +44 (0)20 7440 8282
F: +44 (0)20 7440 8292
E: admin@battlemccarthy.com
www.battlemccarthy.com

Battle McCarthy also provided specialist consultancy advice on the engineering building services namely the MEP concept design and preliminary structural analysis.



DESIGN INITIATIVES/ACTIONS UNDERTAKEN

Battle McCarthy assisted the team in developing an Environmental, MEP and Structural Design strategy that is a high performance, low energy design that meets its objectives through the economic and appropriate application of building services and structure.

KEY DESIGN FEATURES

The headline features of the design are as follows:

- An environmental façade that deliberately varies to reflect the changes in daylight availability,
- Solar exposure, heat loss and internal layout, minimising energy consumption, providing high levels of internal comfort and ensuring the right level of specification (and therefore cost) is applied in the right areas.
- A centralised energy system that provides heat and power (and possibly cooling) to the whole development enabling significant savings in cost, energy and carbon emissions, while ensuring the design is not only fit for purpose today but also upgradable in the future.
- Low water appliances combined with the recycling of rainwater to achieve a commercial consumption of 1m³/FTE/yr - 10% of a typical commercial building.
- A unified system that captures the inherent benefits (lower energy costs, lower capital cost, more efficient plant selection) achieved by sourcing all of the various elements of the building – residential, offices, public spaces etc in an holistic manner.
- Reduced running cost and low energy operations through the specification of energy efficient equipment i.e. the use of intelligent controls that allow the building to respond to climatic conditions
- An educational and controllable environment with facilities to allow occupants to understand and change their activities. Each group of occupants will have the ability to read and monitor their energy and water consumption over the year and has enough individual control (thermostats, dimmer switches, openable façades) to enable change.
- A future proof solution that has considered climate change and its predicted effects and has been designed to protect against these where practicable. For more extreme effects, the design has provision to allow for upgrade
- An efficient structure that creates an adaptable framework to meet a variety of uses while minimising the use of materials.
- A holistic solution that combines structure and services together for mutual enhancement.
- A durable long life solution that considers the impact on the planet but also on the occupants.

