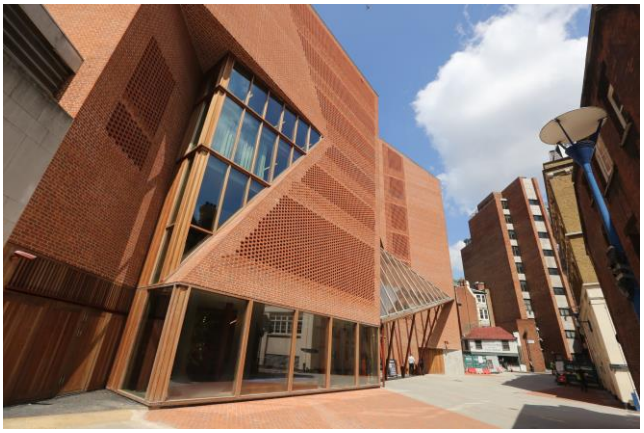
Open House London

Archifacts sheet

Saw Swee Hock Student Centre (SAW)

London School of Economics and Political Science



Pedestrianised entrance to SAW

History of the site

The site was previously home to the St Philips building, built in 1903. It opened as the Strand Union Workhouse Infirmary, housing the sick and injured from the local workhouse until WW1, during which it was used as an observation hospital for war refugees. After the war in 1919, it was sold to the Metropolitan Asylums Board for £20,000. Fifty two beds were created in the north block of the then Sheffield Street Hospital, specialising in the treatment of venereal diseases in women. Subsequently purchased by the NHS in 1952 and renamed as St Philips, kidney, urology and nephrology patients were treated from 1969 until closure in the mid 1980s. It finally became part of the LSE campus when the School took over the running of the building in the early 1990s.

Project Timeline

LSE aspired to have the "best Students' Building in the UK". It was seeking a sustainable and exemplar world class building at the heart of its central London campus. The intention was to create a unique and beautiful contemporary building that sat comfortably within its context. It needed to be innovative and inspirational to users and the passing public and be a civic piece of architecture at the forefront of 'Contemporary Westminster'.

A total of 133 architects from all over the world applied to take part in the competition to design the new Students' Centre, and judging of the final six competitors took place in June 2009. Dublin based practice O'Donnell & Tuomey's competition-winning proposal was striking not only for its angled form, but its unusual perforated brick facing. The practice proposed the perforated brick treatment to allow daylight and cross-ventilation while maintaining the integrity of the building's sculpted form.

December 2009 - following intensive consultation with the Students' Union, Chaplaincy, Residences, Careers Services and the Estates Division, the project team successfully completed RIBA Stage C (outline design), then began Stage D (scheme design).

February 2010 - the planning application was made, and the application received approval on 30 September 2010. November 2010 - Geoffrey Osborne Ltd. were appointed as Stage 1 Contractor.

May 2011 - Osborne took possession of the site. Demolition of the old St Philips Buildings and construction work followed.

April 2013 - The completion of the structure was marked by a topping out ceremony.

December 2013 - official hand over to the School

January 2014 – occupants move in, with student facilities up and running in time for the beginning of the Lent term.

Professor Saw Swee Hock

Building naming

The building was named in honour of a landmark gift from Professor Saw Swee Hock, who celebrated the 50th anniversary of his graduation from LSE in 2013

For further information visit: lse.ac.uk/intranet/students/campusLondonLife/sweeHockStudentCentre/Home.aspx

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Environment and sustainability

From the out-set, expectations were very high in terms of sustainability performance and resilience to climate change, with a requirement to achieve BREEAM "Excellent", and an aspiration to reach "Outstanding", supported with additional investment, underlining the School's commitment and values. The design achieved BREEAM Outstanding.

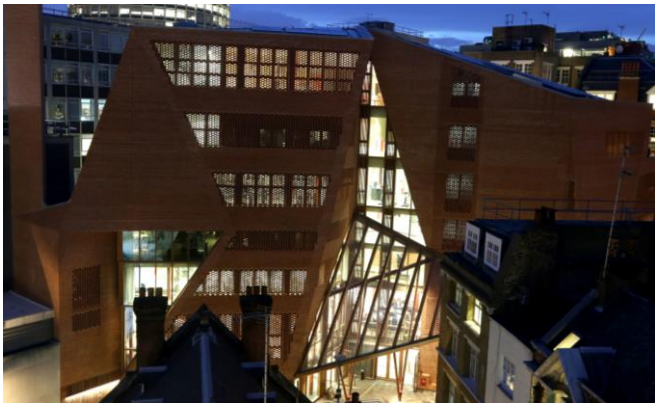
The consideration of day-lighting was key to the building's form, which is carefully tailored to reduce the impact of its volume on the lighting levels in the surrounding buildings - becoming narrower as it rises. It is pinched in the middle to form the ground floor entrance areas and provide shading from plane-to-plane, giving space back to the streetscape, and taking a counter-position to what might have been an introverted "atrium building". This reduction in plan depth, and increase in perimeter area provided by the pinched bite, allow for natural cross-ventilation and natural light, reducing lighting and cooling loads. To reduce the summer heat-gain from the site's south-facing aspect, an open-weave of bricks forms a shading screen across windows, whilst allowing light through in the winter. The building's in-situ concrete floor plates, using recycled GGBS as a replacement for cement, are exposed throughout to increase thermal mass – absorbing heat during the day, before being naturally purged at night. Natural untreated materials – timber joinery, hand-made bricks, zinc roofs, selected with reference to the Green Guide, with their proximity to site being part of the criteria, reducing embodied energy demand in production and transport.

Fitted with state-of-the-art "low-zero carbon technologies" – photo-voltaic cells at roof level, and combined heat and power units in the basement, for on-site power generation - combined with long-life, low-energy lighting, controlled via presence detection to reduce heat gains and energy usage, all operated by a Building Management System. Air handling units are split into pairs – one on duty; the other on standby – to reduce energy usage. Water usage is reduced via flow rate controls, dual flushing arrangements, leak detection, and rain water harvesting from the roof and terraces. Green roofs and planting aid rain water attenuation and increased biodiversity with a selection of indigenous species included.

Key architectural aspects

Designed to embody the dynamic character of a contemporary Student Centre, the complex geometries of the site provided a starting point for a lively arrangement of irregular floor plates, each particular to its function. Space flows freely in plan and section, with stairs turning to create meeting places at every level.

London is a city of bricks. The building is clad with bricks, each being offset from the next in an open work pattern, creating dappled daylight inside and glowing like a lattice lantern at night.



SAW at night

The building has the robust adaptability of a lived-in warehouse, with solid wooden floors underfoot. The structure is a combination of reinforced concrete and steelwork. Steel trusses or ribbed concrete slabs span the big spaces. Circular steel columns prop office floors between the large span volumes and punctuate the open floor plan of the café. Concrete ceilings contribute thermal mass with acoustic clouds suspended to soften the sound. There are no closed-in corridors. Every hallway has daylight and views in at least one direction. Every office workspace has views to the outside world. The basement Venue is day-lit from clerestory windows.

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