

OMA

BRIGHTON COLLEGE CREDITS OMA / ELLEN VAN LOON

Project: Brighton College Sports and Sciences Building
Status: Completed, open January 5, 2020
Client: Brighton College
Address: Eastern Rd, Brighton BN2 OAL, United Kingdom

Program: Educational (science class rooms, laboratories, sports facilities, swimming pool)
GFA: 7.425 sm
Timeline: Competition (2013, 2014), Commission (2014), Planning approval (2015), Construction (2017-2019), Completion (2020)
Budget: £36,700,000

TEAM

Partner: Ellen van Loon
Project Director: Carol Patterson

Competition

Team:

2013: Ellen van Loon, Rem Koolhaas, Carol Patterson, Gabriela Bandeira, Jan Barta, Marlies Boterman, Matthew Davis, Emile Estourgie, Alain Fouraux, Mindaugas Glodenis, Airat Khusnutdinov, Can Liu, Hans Larsson, Nikki Mulder, Edward Nicholson, Betty Ng, Francesca Pagliaro, Tom Shadbolt, Liheng Zhang, Hongchuan Zhao

2014: Ellen van Loon, Carol Patterson, Kees van Casteren, Alain Fouraux, Daniel Gonzales, Leonardos Katsaros, Hans Larsson, Ellen van Loon, Francesco Moncada, Martin Murrenhoff, Betty Ng, Vitor Oliveira, Pawel Panfiluk, Jad Semaan, Timur Shabaev, Jonathan Telkamp

Schematic Design

Team: Carol Patterson, Marina Cogliani, Cristina Marin de Juan, Dinka Beglerbegovic,

Design Development

Team: Carol Patterson, Marina Cogliani, Michalis Hadjistryllis, Mario Rodriguez

Construction:

Team: Carol Patterson, Isabel da Silva, Marina Cogliani, Tom Pailing, Magdalena Stanescu

COLLABORATORS

Services Engineering: Skelley and Couch
Structural Engineering: Fluid Engineering
Landscape: Bradley-Hole Schoenaich
Acoustics: Ramboll
Fire Engineering: The Fire Surgery
Sustainability: Eight Associates
Contractor: McLaren
Employers Representative: Gardiner & Theobald

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FACTS

MEASUREMENTS

Total length of the building: 120m
Main building footprint: 120m x 23m
Running track (indoors): 30m
Running track (outdoors): 50m +18.5m run off space
Swimming pool: 5 lane, 25m x 10.5m
Sports Hall: 35.2m x 22.9m x 7.9m (height)
Typical Lab: 12m x 7.5m x 2.96m (height)
Cinema: 10.5m x 9m x 2.95m
Greenhouse: 7.4m x 7.4m

CONTRACTORS

Reinforced concrete frame (Basement, Ground Floor, Lift Core): Galldris
Steel frame (above ground superstructure): Conder Allslade
Precast concrete bridge beam (ground level floor to gyms): Shay Murtagh
Composite metal decking (typical above ground floors): Prodeck Fixing / Conder Allslade
External material elements: Alumet

SUSTAINABILITY

U-Value targets (W/M2k): Wall 0.2, Reglit Glazing 1.2, Standard glazing 1.2, Roof 0.14, Floor 0.2
Renewable energy: Ground source heat pump. CHP (combined heat and power).
Ventilation strategy: Passive, naturally ventilated. Mechanical heating/cooling only where required (sports) via ground source heat pump. High ceiling heights promote natural ventilation.
Lightning: Natural light, excellent daylighting to reduce daytime artificial light. Deep reveal for solar shading in summer. Rooflights.
Artificial lighting (lux): Gym/changing room 200, Sports Hall 300/500/750, typical classroom 300
Biodiversity: Sedum roof enhances and reduces water run-off

MATERIALS – EXTERNAL

Skeleton rainscreen cladding: Fibre C GFRC Cladding, liquid black (Supplied by Pura Facades)
Aluminium curtain wall glazing: Natural anodized finish (Supplied by Schuco)
External doors: Natural anodized finish (Supplied by Schuco)
U Channel glass cladding: Toughened, heat soaked tested and low iron, natural anodized frame, security film applied, insulation infill (Supplied by Linit)
Precast concrete cladding (+ wedge steps): Natural anodized finish (Supplied by Creagh Concrete)
Aluminium rainscreen cladding: Supplied by Taylor Maxwell

MATERIALS – ROOF

Sedum: Extensive, used on non accessible areas (Contractor: Briggs Amasco)
Synthetic grass: Tigerturf finesse, used on accessible areas (Contractor: Fieldform)
Composite decking: Anthracite/ebony color (Supplied by Timco Wood)
Metal grating balustrade: Stainless steel, square aperture (Supplied by Elefant Gratings)
Glass Balustrade: Glazing channel - Stemcor Architectural EaziFit 1.5kN (Contractor: Bailey fabrications)
Running track: Polytan Rekordan (Contractor: Fieldform)

MATERIALS – INTERNAL

Typical floor: Concrete screed + resilient layer (+UFH locally)
Floor finish sports hall/gym: Timber Oak (Supplied by Dynamic)
Floor finish typical lab + circulation: Linoleum (Supplied by Forbo)
Floor finish swimming pool: Glass Mosaic ceramic tiles (Supplied by Designworks Tiles)
Floor finish changing areas: Mosaic ceramic tiles (Supplied by Togoma)
Floor finish entrance matting: Supplied by Coba Flooring
Typical wall: Gypframe metal stud (Supplied by British Gypsum)

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Typical wall glazed/double glazed partition: Fire rated, non fire rated, heat strengthened (Supplid by Planet Partitioning)

Wall finish sports hall: Oak/MDF panel (Supplied by Dynamic)

Wall finish gym box: Silver Mirror (Supplied by Sec Carpentry)

Wall finish campus circulation: Polyrey, grey, brosse finish (Supplied by Polyrey)

Wall finish lab/storage: Duropal laminate (Supplied by Duropal)

Ceiling: Hunter Douglas cell 40 metal ceiling (Supplied by Hunter Douglas)

Ceiling sports: Metal Mesh Hunter Douglas (Supplied by Hunter Douglas)

Doors, solid: GE Door

Doors, glazed: Planet Partitioning

Doors, feature pivot: Sec Carpentry + Bailey Fabrications

Stairs: Precast Concrete (Supplied by Creagh Concrete)