

IKEA Greenwich



SuDS used

- 4,000m² of green roof, blue roof and roof garden including 7 green roof bike shelters, rainwater harvesting system, ground-level wildlife gardens and habitat creation.

Benefits

- Water storage
- Minimal water run-off
- Rainwater harvesting
- Habitat and green space creation
- Wellbeing and recreation
- Rooftop farming
- Building insulation
- Carbon reduction and sequestration
- Tourism

1. Location

55-57 Bugsby's Way, Greenwich Peninsula, London SE10 0QJ

2. Description

The green roofs, blue roof and roof garden consist of biodiverse and sedum covered areas; wildflower meadows; raised urban farming beds for school, community, and co-worker use; planters; paving; and areas for community activities. All areas surround a purpose-built rooftop pavilion, which is accessible all-year-round during store opening hours.

The roof is London's largest accessible rooftop for people and nature. It is unusual for the public to be able to access a roof garden in London at any time, for free, especially one that offers so many secure areas for local birds, bees and insects. The roof is used weekly for community and co-worker yoga classes, and IKEA have organised workshops and learning sessions on growing food for local schools, supported by Bridgman & Bridgman and Green Infrastructure Consultancy.

The project also features 7 beautiful green roof shelters for public bike parking around the perimeter of the store. The shelters add additional water storage solutions, provide visible green roof habitat, and bring nature close to the public in an everyday structure. Each has integrated nesting for invertebrates (solitary bees) and nesting birds. Wildflower species provide pollen and nectar for pollinators.

3. Main SuDS components used

Rainwater harvesting system, green roofs, blue roof, roof garden and wildlife gardens.

4. How it works

Extensive, semi-intensive and intensive green roofing systems used to retain water and slow run-off. Water harvested and re-used on the rooftop gardens.

5. Specific project details

IKEA Greenwich is the 22nd full-sized IKEA store to open in the UK. In addition to the rooftop garden and pavilion, the store features a new Learning Lab – a dedicated space for customers, co-workers and the local community to explore prolonging the life of products, upcycling and reducing waste.

Hege Sæbjørnsen, country sustainability manager at IKEA UK & Ireland adds: "Sustainability is at the heart of everything we do and through our combined efforts across the business and in partnership with others, we have been able to achieve an 'Outstanding' BREEAM UK New Construction rating".

"This is a prolific milestone in our journey to becoming a more sustainable and circular business, and also how we hope to inspire change beyond our own business. The many new sustainable technologies and initiatives allow us to meet the needs of our customers, whilst staying within the limits of one planet."

Shamir Ghumra, director of BREEAM at BRE said: "We are delighted that IKEA Greenwich has achieved the highest BREEAM UK New Construction Outstanding rating by a retail unit to date. BREEAM is the world's leading building design certification and our aim is to drive excellence in sustainable building practices."

6. Maintenance & operation

Living roof specialists Bridgman & Bridgman and Green Roof Shelters continue to ensure the green roofs, roof gardens, bike shelters and ground-level wildlife gardens flourish and function in the way they were designed, including water storage and retention. Regular communication with IKEA and work parties take place to support community engagement and social activities.

7. Monitoring and evaluation

A partnership with University of East London to monitor the green roof cycle shelters as part of the EU ERDF-funded project [ARENA](#). ARENA is a business support project that is working with companies involved in resource efficiency, green infrastructure and nature-based solutions. The IKEA green roofs are also visited fortnightly by Green Infrastructure Consultancy to monitor plant species and wildlife activity.

8. Benefits and achievements

IKEA Greenwich has achieved an 'Outstanding' BREEAM UK New Construction certification, a sustainability rating and accolade held by just 320 buildings around the world. The sustainable store is the first in the UK and only the second retail unit in the world to receive the sustainability rating with over 90%. IKEA Greenwich was designed and built to reach the highest BREEAM rating possible and by reaching 'Outstanding', it has achieved the highest rating of any IKEA store in the world.

IKEA Greenwich incorporates a range of sustainable technologies such as solar power, LED lighting, rainwater harvesting and renewable construction materials while maximising the use of renewable electricity with a super-efficient solar array and a geothermal system supporting the heating and cooling. The green roofs, blue roofs, rainwater harvesting system, green roof cycle shelters and quantity of habitat for wildlife has contributed significantly towards this 'Outstanding' status.

9. Lessons learnt

Engage with the end users as soon as possible to ensure that the Suds and green infrastructure features are used and appreciated for what they are.

10. Interaction with local authority

To support IKEA and the local community to fully utilise the green space and infrastructure features, Bridgman & Bridgman engaged with local groups, including environmentalists from Buglife, to encourage new insects and invertebrates to the roof, such as a local beetle native to the Greenwich area. Bridgman & Bridgman formed working partnerships with Dusty Gedge and ecologist Gary Grant to introduce the Viper's Bugloss flower, to encourage rare bees to the newly constructed roof. The team went above and beyond contract requirements by growing the fruit and vegetables from seed, ready to use and plant with the local school and community groups after the main store opening. Relationships were then formed between Bridgman & Bridgman and the store co-workers, to encourage them to grow and harvest produce on the roof and get the buy-in from the end users.

11. Project details

Construction completed: *Subcontract (Greening) completed Feb 2019*

Cost: *SuDS element £490,000*

Extent: *SuDS 4000m²*

12. Project team

Funders	<ul style="list-style-type: none"> IKEA UK 	
Clients	<ul style="list-style-type: none"> McLaughlin & Harvey 	
Designers	<ul style="list-style-type: none"> SRA Architects 	
Contractors	<ul style="list-style-type: none"> Bridgman & Bridgman LLP Green Roof Shelters 	 
Other	<ul style="list-style-type: none"> Green Infrastructure Consultancy University of East London 	 



Rooftop Farming – raised beds of salad plants are irrigated with water from rainwater harvesting tanks.



Protected wildflower area for wildlife at roof level, segregated from the public and co-workers



Sedum vegetated areas with crushed brick and ceramic waste hibernacula mounds for invertebrates.



Wildflower areas in bloom (year 1) Species include Wild carrot, Scabious, Wild Pansy, Wild Marjoram, Cowslip & Bladder Campion



SuDS under construction.



Drone images by Ian Hunter



Green Roof Shelters



Green Roof Shelters