

Accessible Environments



Who We Are

Arup is the creative force at the heart of many of the world's most prominent projects in the built environment and across industry. We offer a broad range of professional services that combine to make a real difference to our clients and the communities in which we work.

We are truly global. From 90 offices in 35 countries, our 10,000 planners, designers, engineers and consultants deliver innovative projects across the world with creativity and passion.

Founded in 1946 with an enduring set of values, our unique trust ownership fosters a distinctive culture and an intellectual independence that encourages collaborative working. This is reflected in everything we do, allowing us to develop meaningful ideas, help shape agendas and deliver results that frequently surpass the expectations of our clients.

The people at Arup are driven to find a better way and to deliver better solutions for our clients.

Accessible Environments

Designing inclusively ensures that buildings and landscapes are accessible for all users and maximises independence for disabled people. Our Accessible Environments team works with clients to incorporate inclusive design into their schemes by providing best practice guidance and practical solutions.

We go beyond quoting regulation preferring to help resolve complex accessibility design issues. Our holistic approach considers the spatial and social implications of design which allows us to promote inclusive access without compromising clients' architectural aspirations. This is complemented by the team's background in design and the arts, and in working with disabled people (including Independent Living and social integration programmes).

Our Accessible Environment consultants are registered members of the National Register of Access Consultants and Access Association members. The team also contains Civic Trust Awards Assessors, which gives us the insight to be able to advise our clients on exemplary practice and award-winning features. We have also worked on projects across the globe which has given us experience of international and regional regulations.

Our services include:

- Access Philosophies / Principles of Inclusive Design
- Access Statements for Planning
- Existing Building Audits
- Local Authority Discourse
- Part M Compliance Reports
- Design Reviews / Appraisals (including Lifetime Homes and Wheelchair Housing, Sport England and Green Guide, Department for Transport)
- Formulation of codes, standards, policies and procedures
- Seminars and CPDs, for general training as well as project-specific briefings



25 Churchill Place, Canary Wharf, London

Arup's accessibility services for the Canary Wharf Estate consists of office buildings as well as the new Crossrail Station and shopping mall. For each of the projects we worked closely with the architect, local authority and other design specialists such as fire engineers and transport planners to guarantee that an inclusive environment was achieved.

Our assessment throughout the design process ensures that all visitors and staff can access each building, and that communal areas can be enjoyed by all. In addition to the shell and core, our work involved advising on the internal fit out, including consideration of furniture layouts, colour contrast, slip resistance of floor finishes and corporate signage for the tenants.

Masterplanning

To assist the detailed design process the overall strategy for inclusive design should be underpinned at masterplanning stage. We have experience of producing inclusive masterplan philosophies as well as reviewing masterplans to make sure they incorporate accessibility.

We are an integral part of the Planning Application process, producing Access Statements for the submission and engaging with the local authority Access Officers on behalf of our clients.

Existing Buildings

In the case of existing buildings, built before the introduction of disability discrimination laws or accessibility guidance documents, access may be restricted. Our audits identify where the building falls short of the aim for independent access and the reasons why. We then assist in the decision making regarding whether to remove obstructions, alter them, or provide reasonable alternative provisions.

Residential

Good quality accessible housing is becoming a prerequisite in new residential developments. In London, for example, all new housing has to be Lifetime Homes compliant and 10% wheelchair accessible.

Our team has advised on a large number of developments, reviewing layouts to ensure they offer accessible and adaptable design. These reviews provide our clients with confidence in their proposals at planning submission, with the knowledge that the layouts are compliant and that the proposed numbers and mix within the development will not require revision post-planning.

Commercial

Our commercial property experience ranges from large skyscrapers and shopping centres to smaller boutique builds. We give advice and produce vital supporting documents for new developments and improvement works to existing buildings. This includes the production of Part M Compliance Reports at practical completion, which documents the access features and strategy for the building. It also provides guidance for the property's management team, as well as acting as a marketing tool for the development's owners.

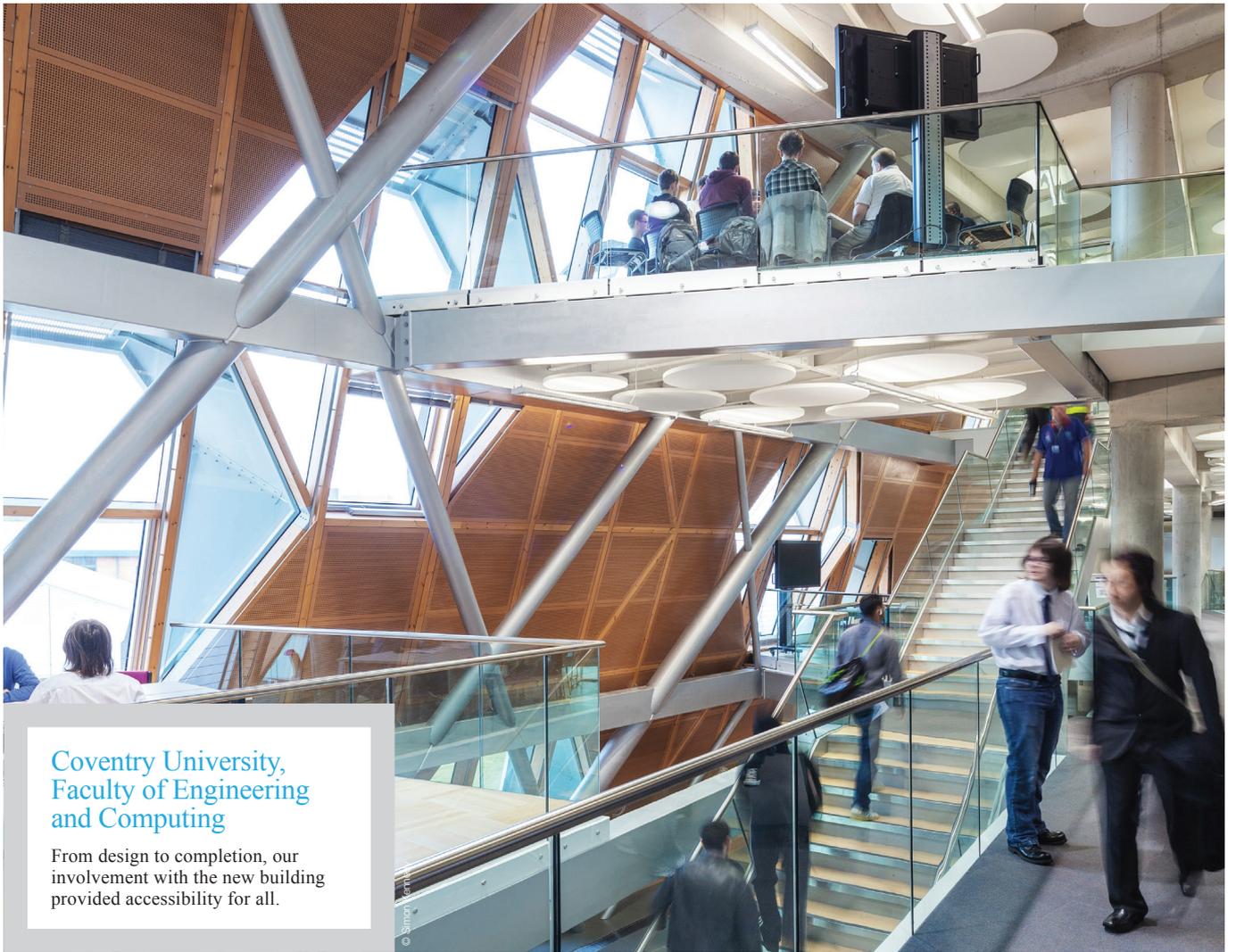
Our advice ensures that all commercial buildings are accessible to staff and visitors, in line with the duties placed on service providers and employers under disability discrimination and employment laws.

Sport

Our Accessible Environments team has worked globally on sporting venues varying in scale and use from world-class facilities for Olympic and Paralympic Games, top-class football and rugby teams, to smaller local community sports and leisure facilities. We help to achieve accessibility for spectators and athletes during events and in legacy use, working with Sport England guidance, the Green Guide and other country specific documents.

Landscaping

The external environment provides a backdrop to everyday living. Our expertise is used to resolve issues relating to access to landscaped areas or routes within it. We also advise on the use of street furniture, walking surfaces, plants and soft landscaping so everyone has the opportunity to use outside space for commuting and recreation.



Coventry University, Faculty of Engineering and Computing

From design to completion, our involvement with the new building provided accessibility for all.

© Simon Lemm



King Abdullah Sports City, Saudi Arabia

This was a large city project containing proposed international and national sports venues, suitable for events as well as training with associated residential, educational and cultural areas.

A principles document was produced to highlight barrier-free considerations, incorporating local laws and cultural considerations.

Reports were written for each of the venues setting out what the provisions were for barrier-free access.

The project was scaled down to include two large sports venues and a mosque, which we have continued to provide advice for, as well as updating the reports throughout construction.

© Aup Associates



London 2012 Olympic and Paralympics Games

We provided accessibility advice to the various design teams for a number of venues, landscaping and access points such as the ArcelorMittal Orbit, Greenway, Eton Manor, Lee Valley White Water Centre and the Copper Box. For the venues our services included design reviews, presenting to the Built Environment Access Panel and the Access and Inclusion Forum, compiling Inclusive Design Statements and Conformance Reports, as well as advice during construction and snagging.

The team worked alongside the ODA to review the provisions within the South Park. This included an assessment of the entry points (both existing and proposed) and the suggested street furniture and signage. The work included the production of conformance reports, detailing compliance with the ODA's Inclusive Design Standards, to assist with the ODA approval and sign-off procedure.



The Library Building, London

The award winning Library Building is an £80 million redevelopment scheme, consisting of high quality residential units, a library and primary care centre. The housing was designed in accordance with the London Plan and the Local Development Plan. Consequently 10% of units are designated wheelchair accessible, with the remainder compliant with Lifetime Homes standards.

Arup provided accessibility consultancy from post-planning through to completion including reviewing drawings, producing the Access Statement and site visits. As well as advising on the housing, Arup made sure the public facilities were accessible for all occupants, visitors and staff. The development has been recognised by numerous awards including the 2013 Civic Trust Awards and the International Property Awards, Best Mixed-Use Development 2011.

Healthcare

We ensure that people do not suffer discrimination through design by focusing on the end users, including patients, staff and visitors to the building. We work with private and government organisations to incorporate intuitive design to maximise efficient movement through buildings. This reduces congestion and confusion, and therefore improves the patient and visitor experience.

Art and Leisure

Arup has an excellent track record of making new and existing art and leisure venues accessible so these attractions can be shared and enjoyed by everyone.

Our involvement not only includes the design of the building and its approaches, but also the exhibits or attractions once the visitor has arrived. Our work has seen us liaising with curators and attraction operators to ensure that the experience is inclusive. This has included assessment of management procedures, to allow inclusivity in the running and operation of the building.

Education Facilities

Creating an inclusive environment requires careful design to make sure no one is excluded and to allow equal opportunities and participation for all students. This can be facilitated through the appropriate design of mainstream education buildings, the provision of special educational needs rooms or the construction of specialist schools. We have vast experience in the education field, advising on projects from early years through to higher education.

Hotels and Student Accommodation

To improve choice and flexibility for disabled guests, we work with the design and management teams throughout the design process to create rooms that are suitable for independent and assisted use. The management strategies for the operator need to align with these provisions, and should be considered alongside any additional specialist equipment and features.

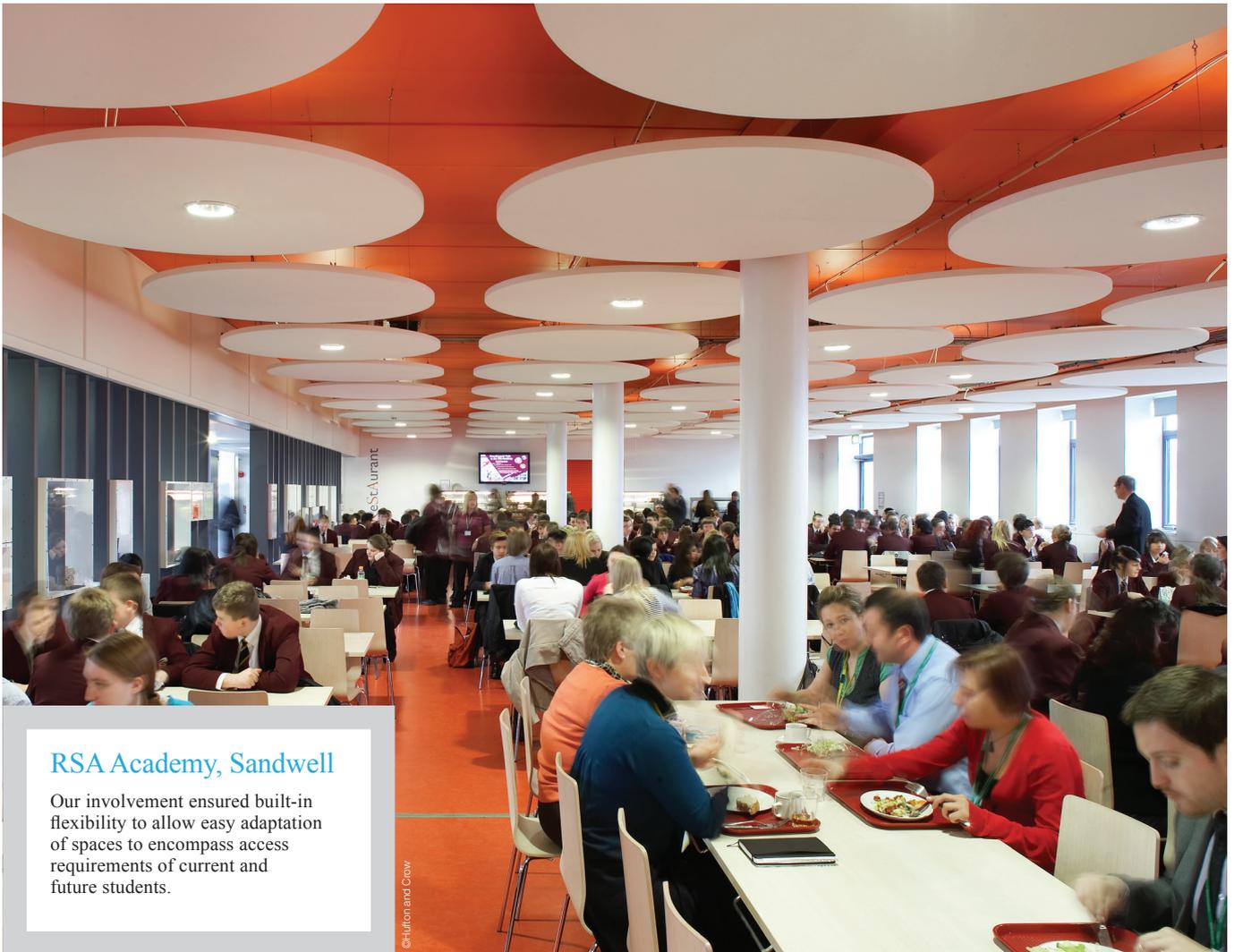
Transport

We have extensive experience of creating inclusive environments across the full spectrum of transport projects from bus shelters to airport terminals including existing and new structures. Our work considers not only the structure in question, but also the travel disruptions and alternative provisions the project may require in the interim.

ISEMOA Audits

ISEMOA, short for improving seamless energy-efficient mobility chains for all, is an auditing system designed to support local authorities and organisations to improve the accessibility of public spaces and public transport (existing and proposed) for people with reduced mobility. The aim of the audit is to identify weaknesses in order to produce an agreed action plan to improve accessibility.

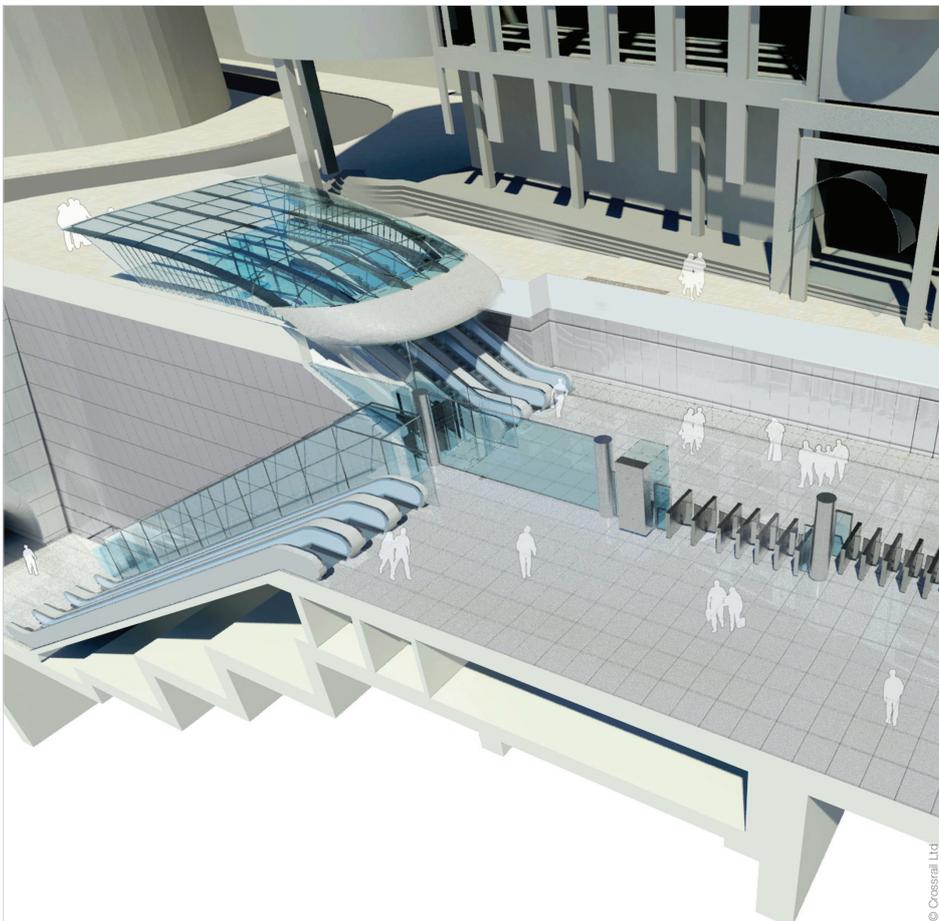
For proposed developments, Arup's accredited ISEMOA auditors review the scheme to see where accessibility can be optimised. They also look beyond the site's boundaries to ensure the project complements the surrounding environment and the local authority's plans for the area.



RSA Academy, Sandwell

Our involvement ensured built-in flexibility to allow easy adaptation of spaces to encompass access requirements of current and future students.

© Hutton and Crow



Crossrail, London

We have been providing access services for the integration of Crossrail with the existing transport provisions at Paddington, Tottenham Court Road, Bond Street, Canary Wharf and Custom House Stations, as well as for the deep level tunnels, portals, shafts and common design elements. This included ensuring the most practical and effective form of step free access was achieved and regulations and recommendations (using London Underground and Crossrail standards and other best practice documents) were followed. We also undertook independent audits of the design of the central stations against the European TSI PRM and DfT documentation on accessibility.

We were also asked to carry out a Stage D validation exercise on the design of one of the stations. This involved looking at a cross section of drawings, reports and associated documents, commenting on their appropriateness for the particular stage of design. A validation report was compiled detailing shortfalls regarding inclusive design elements or additional information required to complete the design stage.

© Crossrail Ltd

Turner Contemporary Art Gallery, Margate

Our Accessible Environments team worked with David Chipperfield Architects to carry out access consultancy services for the gallery from concept through to detailed design. This included the production of documents to demonstrate compliance with Approved Document M, as well as best practice guidance.

The team was also involved in the consultation process with the Access Forum, which was created to ensure the views of the local disability groups were considered. Meetings were held on a regular basis to discuss the proposed designs for the external and internal facilities and finishes. This was to ensure that any design decisions would have a positive effect on the accessibility of the building and the surrounding area.

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