



Fire Safety Engineering & Compliance

We're proud to have over 110 years' combined fire safety experience in delivering innovative, bespoke support across all sectors.



Fire safety. Transformed.

Our core objective is to provide holistic fire safety advice and develop fire safety strategies that satisfy the functional requirements of the Building Safety Act and Building Regulations. We provide solutions that represent a mix of best-practice, expert judgement and innovative fire engineering technologies.

We are safety enhancers.
We are jargon simplifiers.
We are difference makers.

From bigger-picture infrastructure advice and building safety auditing to the design and implementation of tailored protection systems, our fire safety engineering and compliance consultants can support with prevention, detection and evacuation solutions across any building or multi-site estate, including Higher Risk Buildings (HRBs) and historic sites.

→ Fire engineering



Planning and design

- Smoke management and control
- Fire-fighting access and facilities
- Computational Fluid Dynamics (CFD) analysis
- Fire dynamics
- Suppression (in tandem with Sweco MEP)
- Cross-Laminated Timber (CLT)
- Occupant behaviour
- People movement
- Active fire-fighting systems
- Regulatory compliance
- Higher-Risk Buildings and the Building Safety Act 2022 (and associated secondary legislation)
- Fire safety management and obligations under the Regulatory Reform (Fire Safety) Order 2005 and/or Fire Safety (England) Regulations 2022
- Fire risk assessments
- Base-build and fit-out development

Strategy development

- Risk analysis
- Effective fire protection
- Means of warning and escape
- Access and facilities for firefighting
- Structural fire protection
- Special risk protection
- Internal and external fire spread
- Smoke management and control
- First aid firefighting
- Active fire-fighting systems
- CFD and people movement modelling
- Future proofing
- Fire strategy drawings
- Fire safety management

Implementation & management

- Fire safety management
- Fire safety manuals
- System design
- Fire prevention

Evaluation & audits

- Performance analysis
- Inspection and commissioning
- Peer reviews
- Testing and site surveys
- Thermal radiation analysis



Feasibility

We can provide initial support for concept ideas, providing high-level advice on key fire safety items and requirements that may impact or influence the development of the concept design. Involvement at this stage can provide significant benefit through the de-risking of design and avoiding abortive work.

Planning Support

We can provide early support for planning applications to meet the requirements of Planning Gateway One (PGO) and other local government planning requirements. Our advice provides confidence to clients and developers by working with them to provide a compliant, functional design that can allow for engagement with the Building Safety Regulator (BSR) at PGO and help reduce the approvals risk through successive Planning Gateways. For projects in London, we can also provide this service in the provision of a Fire Statement as required under Policy D12 of the London Plan.

Engineering for Excellence

Engineered strategies will often incorporate the use of state-of-the-art computational techniques. These can model the interaction of smoke and building geometry, the movement of occupants exposed to fire and the structural response of building elements. Throughout the development of an engineered solution we maintain a close dialogue with the client, professional team and approving authorities.

Risk Management

We are highly experienced in the development of fire safety management strategies. We work closely with building owners and occupants to produce a regime that successfully balances the risk to occupants, the impact of active or passive fire-fighting systems and the capabilities of the building management team to provide a reliable, understandable strategy.

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Sweco's fire engineering team is highly regarded for our agility and proactive stakeholder engagement, ensuring successful project outcomes. Our extensive, varied experience – and international network of experts – enables us to deliver trusted consultancy and robust fire engineering designs that ultimately help our clients save lives.

Chris Gray
Operations Director



→ Fire compliance

Building safety inspection & monitoring

As a surveyor-led unit, we can offer consultancy, site monitoring (inspection) and fire safety expertise through RIBA Stages 1-7, including:

- Building Safety Act 2022 Gateway 1-3 Consultancy Services
- Building Safety Case consultancy
- PAS 9980 assessment. Specialist cladding compliance review/monitoring (in conjunction with Sweco Façades)
- London Plan Section (D12A) Fire Safety Reports
- Fire safety compliance reports (RIBA Stages 1-7)
- Retrospective fire strategy reports for existing buildings
- Building Regulation/BSA/Golden Thread Compliance monitoring
- Pre-tender Building Regulation compliance assessments
- Building Regulations compliance appraisals (Part B)
- RIBA stage 5 site inspection monitoring
- Fire risk assessments
- Support development of modern methods of construction (CLT, Modular etc.)
- Training & CPD provision

Part B (Fire) Compliance reports

We will assess the submitted design plans in order to determine compliance with Part B of the building regulations and suitable design guides, such as Approved Document B, BS 9999, and BS 9991, and will provide our fire safety reports to the design team. Throughout RIBA stages 1-5 we will liaise with the client/design team/principal designer/principal contractor to review the design.

Our approach is to be an active and valued member of the design process to ensure a successful delivery of each RIBA Stage.

We will provide regular reporting to our client throughout each design stage along with end of stage compliance reports/strategy.

Existing Buildings – Part B (Fire) Assessments

We will undertake site assessment to attain compliance with the Part B of Building Regulations and any other relevant fire standards.

We will produce a written and photographic site report outlining the salient outcomes of the site inspection. Furthermore, if required we will provide a retrospective fire safety compliance report which can be held by the building occupiers/responsible person.

PAS 9980 Fire Appraisal of the External Wall

To allow us to establish the overall fire performance of an external wall we can undertake Basic Level external wall fire appraisal as per clause 8 in PAS 9980.

Prior to the fire appraisal we will agree the location of intrusive surveys and undertake inspection of the exposed external wall build up (exposing works to be undertaken by others).

Once the build-up of the external wall is known, we will produce the fire risk assessment in accordance with the guidance in PAS 9980.

Fire Risk Assessments

As part of a property owners legal responsibilities under Regulatory Reform (Fire Safety) Order 2005 a fire risk assessment should take place. We will undertake a fire risk assessment of the designated property and issue a fire risk assessment document in line with PAS 79 guidance.

London Plans Section (D12A) Fire Reports

We will undertake an assessment of the pre-planning design information and provide comment to ensure that the design is adequate for submission to the Local Planning Authority, in terms of building regulation compliance.

We will issue the London Plans Section (D12A) Fire Statement to the design team which will form part of the planning submission as required under the London Plan Guidance. If any comments are received from the Local Planning Authorities, we will draft a response and update the report if necessary. If required, we will attend the planning committee/enquiry.

→ Projects highlights

- Barts Square
- Bloomberg London
- 21 Bloomsbury St
- British Antarctic Survey Research Station
- Canary Wharf's New District
- Centre Point
- Chapter London Bridge
- Colechurch House
- Commercial Bank of Qatar
- Creechurch Place
- Harrington Place
- HMP Norwich
- King's Cross Central
- 70 Mark Lane
- More London
- Mountbatten House
- New Victoria
- One Mayfair
- One Nine Elms
- Oxford Brookes University
- Sixty London
- South Bank Tower
- Spinningfields
- Telehouse Admiralty Arch
- The Bower
- The St Botolph Building
- The Tower, One St George Wharf
- The Walbrook Building
- The Willis Building
- The Zig Zag Building and Kings Gate
- Vantage Point
- Vauxhall Square

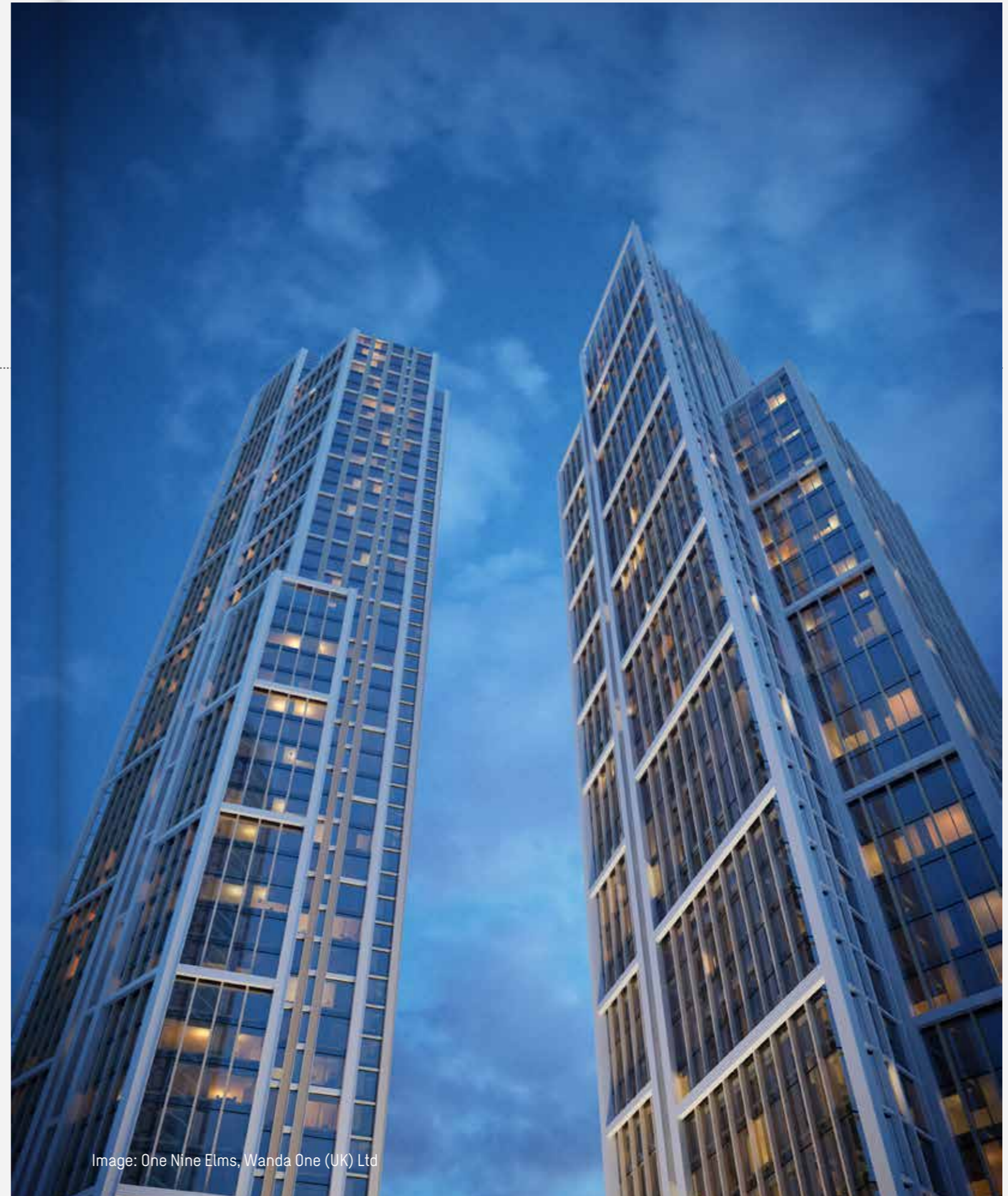


Image: One Nine Elms, Wanda One (UK) Ltd

→ Let's transform society together

Safety in numbers

Working closely with our wider multi-disciplinary teams (including structural engineers, façade specialists) and teams across Europe allows us to develop flexible proposals that satisfy every individual client requirement. We maximise the value of a scheme whilst maintaining robust levels of fire safety based on a sound understanding of all the competing issues involved. This includes access to expertise in mechanical and electrical engineering as well as specialists in energy modelling and vertical transportation.



Find out more at

sweco.co.uk/fire →

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Transforming
society
together