

**Job Title:** Graduate Sustainability Engineer – Facades  
**Reports to:** Group Director  
**Job Purpose:** We require a graduate sustainability engineer in our London office supporting the facade team

### DESCRIPTION

**Eckersley O'Callaghan** is seeking creative thinkers to join its growing team in London. EOC is one of the most innovative engineering design firms in the world, with an international reputation cultivated through a commitment to research and innovation.

We are committed to a low-carbon future and are investing heavily in design tools and techniques to improve the sustainability of our projects and our operations. Our committed team of intelligent and hard-working engineers is engaged with industry bodies and academia to stay at the forefront of design thinking, and we maintain our reputation for innovation by investing in R&D and participating in industry conferences for facade and glass engineering, circularity and computational design. Our principal office is in London, with other offices in Manchester, New York, San Francisco, Los Angeles, Paris, Milan, Hong Kong, Shanghai, Delhi and Sydney.

Our facade team in London is expanding to service our growing list of projects across the world. We are currently working with some of the world's leading architects on projects across all market sectors, including cultural venues, high-rise towers, education buildings, transport hubs and commercial offices. Our dynamic office of enthusiastic, intelligent, hard-working engineers provides a stimulating work environment and great opportunities for personal development.

### DESCRIPTION

We are looking for people with the following:

- A degree in building engineering, architecture or materials science, and preferably a relevant postgraduate degree
- Awareness of engineering principles and design methods for facades, e.g. thermal and structural, daylight and solar, embodied carbon
- Experience in the use of computational design methods: Rhino and Grasshopper, possibly Python, C#, VB
- Excellent verbal and visual communication skills
- Good organisational skills and the ability to multitask
- Ability to work to deadlines

### RESPONSIBILITIES

- Support project teams in carrying out environmental design modelling of facade systems such as energy, solar shading, daylight and glare analysis
- Develop digital tools for facade design under the guidance of the Digital Design group
- Prepare graphical outputs to communicate outcome of the analysis efficiently and clearly
- Maintain up to date knowledge on environmental requirements from relevant certification schemes (e.g., LEED, BREEAM, WELL) and input into internal knowledge base and intranet
- Maintain material embodied carbon database
- Gather benchmark data on embodied carbon and EUI / operational energy for internal database
- Maintain internal sustainability knowledge base and intranet with respect to novel materials, best practice, state of the art
- Develop and disseminate calculation tools according to project needs, including as relates to LCA, thermal analysis, thermal bridging, resilience assessments
- Prepare written guidance on calculation methods (guided by senior team)
- Prepare graphics on sustainability aspects for reports
- Prepare reference case studies to support project teams and marketing department
- Support internal R&D topics and collaboration with external parties
- Assist in preparing circularity and material reuse audits on existing buildings

- Carry out whole-life carbon assessments on projects and client portfolios
- Carry out climate resilience assessments using Facade Resilience Evaluation Framework

#### **PREFERRED ATTRIBUTES**

- A strong motivation for sustainable design; experience in developing low-carbon designs (e.g. whole-life carbon assessments, solar and daylight assessments)
- A motivation for learning new programming languages
- Desire to develop professionally, take on responsibility and contribute to the growth of the practice
- A keen interest in architecture

#### **WE OFFER**

- A stimulating work environment with a smart, diverse and motivated set of colleagues
- A competitive benefits package
- Volunteer and outreach opportunities
- Flexible working around core hours
- Opportunities for continuing professional development including mentoring to chartership
- An internal training programme for employees at all levels
- Opportunities for career growth
- Opportunities to take part in internal R&D activities
- Collaboration opportunities with our international offices
- World-class projects with leading architects and collaborators