Eckersley O`Callaghan

Job Description

Job Title: Environmental Designer
Reports to: Group Director
Job Purpose: We require an Environmental Designer in our London office to work within the facade engineering team in developing and applying tools for analysing the environmental performance of facades.

Eckersley O'Callaghan is seeking creative thinkers to join its growing team in London. EOC is one of the world's leading structural and facade engineering consultancies, with an international reputation cultivated through a commitment to research and innovation. Our principal office is in London, with offices in New York, San Francisco, Los Angeles, Paris, Hong Kong, Manchester, Delhi, Shanghai, and Sydney.

Our facade team in London is expanding to service our growing list of projects across the world. We have a strong focus on sustainability from both building performance and materiality perspectives. We are currently working with some of the world's leading architects on projects including cultural venues, high-rise towers, community spaces, sports arenas and commercial offices. Our dynamic office provides a stimulating and collaborative work environment, international experience, and great opportunities for personal development.

We are looking for an individual with the following:

SKILLS

- A strong motivation for sustainable design
- A master's degree in Engineering, Architecture or Building Technology
- Proficiency in Rhino and Grasshopper, Ladybug and Honeybee, Radiance, EnergyPlus or equivalent
- Strong fundamental knowledge of building science: heat transfer, moisture control, ventilation, thermal and visual comfort
- Proven industry experience in analysing building performance using parametric simulation software
- Knowledge of HVAC modelling, whole-building energy simulation
- Proficiency in IT including MS Office, Adobe Creative Suite

RESPONSIBILITIES

- Carrying out early-stage assessment of building form, orientation and local climate to inform conceptual facade designs and strategies
- Preparing parametric shoebox models to test the performance of facade options for solar gain, daylight, glare, ventilation and comfort
- Researching systems, materials, methodologies appropriate for particular project challenges
- Carrying out simulations of reflected glare, external and internal microclimate to inform facade solutions
- Preparing graphical output to communicate design concepts and performance data
- Communicating with external collaborators to assist integration of simulations into other studies
- Further developing EOC's in-house tools and scripts to enhance our service offer and bring efficiencies in delivering analytical output
- Working with EOC's sustainability team on gathering benchmark data on building performance, sharing best practice across EOC offices

PREFERRED ATTRIBUTES

- Skills in graphical representation of conceptual designs
- Experience in programming in Python, Visual Basic, C++, Java
- Experience in modelling to demonstrate compliance with certification schemes including LEED, BREEAM, WELL
- Working knowledge of facade technologies
- Experience in whole-building energy modelling and assessing embodied carbon / whole-life carbon and interfacing with MEP designers

- Knowledge of UK and international norms and codes of practice, including SAP, Part L, ASHRAE 90.1
- Experience in use of CFD software
- Experience in programming using APIs for interoperability between software packages
- Ability to use Revit
- Good working knowledge of BS/EN standards
- A keen interest in architecture

WE OFFER

- A stimulating work environment with a smart, diverse and motivated set of colleagues
- A competitive salary and benefits package with profit share
- 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 EOC offices around the world
- World-class projects with leading architects and collaborators