

## **Main Details**

**Name:** .....

**Job title:** Senior Mechanical Engineer

**Department/Discipline:** Building Services (MEP)

**Place of work:** 5 The Triangle, Wildwood Drive, Worcester WR5 2QX

**Line Manager:** MEP Technical Director

## **Principle Role**

To ensure the mechanical team provides design proposals, professional expertise and support, working in direct collaboration with the project design teams in competently implementing the requirements of individual project briefs.

To perform the role of Design Team Leader (DTL), where so named in the company project quality plans (PQP).

To contribute to the success of the company.

## **Project Responsibilities**

To lead a project from inception through to the construction and handover phase, including preparing drawings, BIM models, specifications, tender and construction information, monitoring works in production and dealing with clients, contractors, sub-contractors and suppliers.

Work as an integral collaborative member of a project team faithfully carrying out the activities that would be expected of a competent qualified design professional. Such duties include, but will not be limited to:

- Defining, recording and maintaining by appropriate means project brief information from the client and/or other relevant parties to determine design input information.
- Preparing feasibility studies, building services strategy documents, fee proposals, and briefing documents, as necessary.
- The preparation of tender information to include services layouts, schematics and accompanying documents i.e., specifications; generally using BIM models where practical.
- Preparing detailed designs and/or construction details for whole (traditional) projects, buildings, elements or components, including associated specifications, schedules, calculations and the like; generally using BIM models where practical.

- Clearly communicating by appropriate means proposed solutions to all design team members and client team.
- Attending meetings, taking, preparing, checking, and issuing minutes where required.
- Acting as the point of contact for own discipline with other Lead Designers and the like.
- Preparing and coordinating discipline work stage programs for the design process.
- Coordinating the design of constructional elements including work by other disciplines and consultants, specialists, or suppliers.
- Coordinating and managing a team to undertake stage 5 sub-contractor MEP BIM Deliverables packages.
- Ensuring the form and content of design outputs, their interfaces and verification procedures are in accordance with the requirements of the PQP.
- Contribute to the Consultant Appointment process to identify necessary fees.
- Ensure the allocated project resources for which you are responsible return a profit, but without risk to Clients, or the Company. Wherever it would be reasonably apparent that profitability of resources allocated cannot be assured the circumstances are to be reported to the relevant Director/Associate Director.
- From information provided by the Design Team Leader (DTL) calculate, adjust, and agree requirements and costs for the involvement of own discipline project resources.
- Monitor and report on progress of own discipline to the DTL ensuring that resource utilization for own discipline remains within the budget agreed; and
- Report to the DTL any disruptions to the resource utilisation caused by reasons beyond own control and otherwise explain any discrepancies in anticipated profitability as soon as such discrepancies become apparent.

### **Management Responsibilities**

Contribute to MEP team planning and deployment.

Mentor junior members of the team.

Provide support and advice to enable the professional development of colleagues within the building services team and the company.

Where required manage and oversee project resources, including MEP contract resource (if necessary, for delivery of projects).

Actively ensure the fee forecasts for all elements of the projects identified above are maintained in an accurate and up to date manner.

Ensure ONE maintains a positive profile and is proactive and consistent in its dealings with clients and contacts.

Work with the design teams on individual projects ensuring that solutions are identified which meet and where appropriate surpass the client brief/expectations.

Contribute to the preparation of Company income and expenditure forecasts on a monthly basis.

Ensure that all projects within the Building Services team are profitable, without affecting the achievement of Client objectives. Where profitability is in doubt, this should be discussed with the Technical Director in a timely manner.

### **Business Development**

Assist to identify and procure new business for the Building Services team.

Actively promote the Company to external parties, particularly those organisations and people who represent key areas of interest to the Company as identified in its Business Plans.

Work with new and existing clients to develop a firm foundation for long term partnerships and to ensure that ONE is their first point of call for all their design, building services solutions.

Take responsibility for developing strong two-way business relationships with 'key account' clients were nominated as main contact.

Work with the design team on individual projects in a variety of sectors ensuring that solutions are identified which meet and surpass the client brief.

Encourage and support members of staff who have been nominated as 'key account' contacts.

Assist in the production of bid documentation.

### **Core Activities**

Ensure the culture of the team is one of learning and creativity with people being willing and able to offer highly creative and innovative solutions.

Create an environment within the team where people enjoy the work they do and are able to create and exploit opportunities for self-development for their own and ONE's benefit.

Monitor team members' timesheet records to ensure the proper and accurate recording of time spent on projects and elsewhere.

Fully implement and/or cooperate in the implementation of the Company's Health and Safety policies & Quality Management Systems provided upon employment and as updated thereafter.

Contribute to the wellbeing of the Company by being always proactive in its development and improvement.

Carry out any other duty reasonably requested by the Directors.

### **Key Activities and Responsibilities**

Refer to the Person Specification for detailed technical skills and experience required for this position.



# Job Description for Senior Mechanical Engineer

## **Review of Job Description**

This job description outlines the current duties and responsibilities for this role; however, it is subject to review and amendment in the light of developing or changing services and as part of the annual Individual Performance Review.

**NOTE:** This description is not intended to establish a total definition of the job, but an outline of the duties.

## **Confirmation of Agreement**

It is agreed that the duties and responsibilities identified above accurately reflect those required of the postholder.

**Employee Signature:** .....

**Name of Director:** .....

**Signed:** .....

**Dated:** .....

## Person Specification

| Person Specification     | Essential   | Desirable  |
|--------------------------|---|--|
| Qualifications           | IEng, MCIBSE  | Low Carbon Consultant<br>MIET  |
| Knowledge and Experience | <p>Professional with more than 6 years' relevant post qualification experience, including individual responsibility for project delivery</p> <p>Experience of being involved through RIBA Stages 5 and 6, including site installation and commissioning processes.</p> <p>Hands on knowledge of passive design and associated building services to deliver sustainable buildings.</p> <p>Thorough first-hand knowledge of dynamic thermal modelling, and other leading analytical software.</p> <p>Demonstrable ability to work creatively both as lead designer and in collaboration with a multidisciplinary team.</p> <p>Thorough first-hand knowledge of modelling, specification and report writing for the discipline.</p> <p>Commercial awareness of working within client budgets and impact of design principles and selection of equipment on other disciplines.</p> <p>Experience in working in a Revit/BIM environment to deliver MEP design solutions.</p> | <p>Private sector experience in the design and realisation of sustainable building services systems, preferably in the healthcare sector, including BREEAM projects.</p> <p>Demonstrable experience of key account management and effective client relations.</p> <p>Experience of running multiple projects.</p> <p>Experience of negotiating fees. Experience should be hands on with accountability for actions and results.</p> <p>Experience of leading a Building Services team.</p> <p>Experience of modular MEP design and installation, for DfMA and off-site construction.</p> |

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| <p>Skills and Abilities</p> | <p>Well-developed understanding of regulations and the drivers for low carbon design in the built environment.</p> <p>Ability to design creative solutions balanced with a strong technical ability to deliver high performance systems.</p> <p>Knowledge and awareness of current BIM standards, terminology and BIM process.</p> <p>Experience of using Revit and working in a BIM workflow. Experience of using Navisworks, managing and undertaking a clash detection process.</p> <p>Able to develop and communicate sketch proposals, select appropriate systems, prepare design drawings and illustrations, prepare tender and construction details and documentation, monitor works in production and on site, deal with clients, contractors and suppliers.</p> <p>Commercially aware in both business management and delivering to cost plan.</p> <p>Comfortable and proficient in using ICT effectively including sketch design, engineering analysis tools, Microsoft Office tools, especially Word and Excel.</p> <p>Knowledge and experience of controlling of outputs from CAD design systems including 3D drawing programmes (such as Revit) and dynamic thermal modelling.</p> <p>Able to work autonomously and on own initiative.</p> <p>Excellent project management and communication skills with demonstrable evidence of working to</p> | <p>Experience of working within multi-disciplinary teams with a passion for integrated collaborative design and delivery.</p> <p>Experience of working effectively in a multi-stakeholder environment.</p> <p>Experience of using IES Dynamic Thermal Modelling Software.</p> <p>Experience of working within a collaborative BIM workflow across multiple disciplines.</p> <p>Competent use of CAD design systems, 3D drawing programmes (such as Revit) and dynamic thermal modelling.</p> |
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|                           | <p>timelines and within budget and able to manage a project team.</p> <p>Excellent liaison skills across the whole of the project team.<br/>Excellent attention to detail.</p> <p>Ability to make decisions in a timely manner based on information and facts.</p> <p>Demonstrable ability to work creatively both as lead designer and in collaboration with a multidisciplinary team.</p> <p>Good presentation skills, both verbally and visually.</p> |  |
| <p>Personal Qualities</p> | <p>Empathy, sympathy and a desire to understand and respond to client problems and issues.</p> <p>An outstanding communicator with a positive and cheerful disposition.</p> <p>Well organised and works both effectively and efficiently to tight deadlines.</p> <p>Self-motivated.</p> <p>Client facing.</p> <p>Confident.</p> <p>Team player.</p> <p>Experience of negotiating fees.</p>   |  |

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|                  | <p>Ability and drive to deliver in challenging circumstances including working occasional unsociable hours where applicable.</p> <p>Demonstrable leadership and development of others.</p>  |  |
| Other Attributes | <p>Expertise in the vanguard of low-carbon design coupled with a portfolio of successful project delivery.</p> <p>Ambition to succeed through excellence in delivery.</p> <p>Hold a full driving license and be prepared to travel within the UK and occasionally abroad.</p> <p>Keep up to date with innovative products and new legislation by attending regular CPD's.</p> | Potential for personal growth by developing technical, business and leadership skills. |