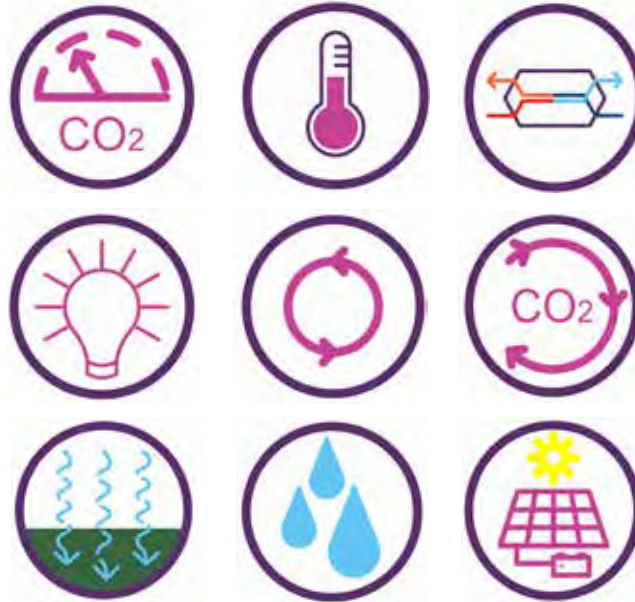




Creative  
environments  
in engineering



# Mechanical, Electrical & Public Health (MEP) Consultants & Designers

oneltd.com



# Welcome to ONE

Specialists in sustainable, efficient and digital MEP designs.

You can be confident that ONE's award-winning mechanical and electrical (MEP) engineering team will provide fully compliant solutions that will optimise your building's performance.

Full details of the specific services we offer are available in this brochure, however, our skilled team is vastly experienced in the following areas:

- All aspects of MEP Design
- Sustainability and Net Zero
- Renewable and Low/Zero Carbon Design
- SMART Buildings
- Digital Engineering
- ISO19650-2 BIM Certification
- Digital Estates
- Information Modelling and Government Soft Landings
- Tender Support for Main and Sub-Contractors Planning
- Planning and Utilities Guidance
- Planning Submission Details and Advice
- Commissioning Management
- Building Log Books, Operation and Maintenance Manuals
- Dilapidation Surveys
- Maintenance and Plant Replacement Strategies



Scan to view our  
Company video





## ONE's expertise

ONE's MEP engineers provide the best possible solutions using the latest industry knowledge.

Our design skills: reduce risk, provide sustainable solutions and lower both operational and capital costs ultimately saving our clients' money.

While we have earned a reputation as skilled problem solvers, our early involvement in a project will ensure that many problems will never come into existence – always the best solution.

We specialise in designing and optimising building services technology – delivering systems that are simple, efficient and effective. We ensure that functionality and usability are central to the solutions we provide which are cost-effective, easily maintained and promote comfort, health and productivity.

## Optimising Building Performance

ONE's MEP team offers an integrated approach to Mechanical & Electrical Services design engineering throughout all RIBA stages from concept through to fully detailed design using the latest technology and software.



### Services include:

- HVAC Mechanical Design
- Hot and Cold Water Systems
- Above Ground Soil and Waste Systems
- Rainwater Harvesting Systems
- Smoke Ventilation Systems
- Electrical design
- Electrical Distribution Systems
- Lighting Systems
- Security, Access and CCTV Systems
- ICT and Control Systems
- Automatic Fire Alarm and Detection Systems
- Renewable Energy Solutions
- Over heating analysis
- Daylight Modelling
- Solar Shading Studies.

### We work with you to ensure your MEP design will:

- Create a comfortable and safe environment
- Realise your vision for your asset
- Reduce operational energy bills
- Reduce your carbon emissions
- Fully optimised design
- Close the performance gap
- Minimise the need for retrofit
- Prepare your building for a net zero future.



# Services for Contractors and Main Contractors

At ONE we offer a professional tailored service for Mechanical & Electrical Contractors.

With experience in many sectors, acting as both consultants and D&B contractors, we are well placed to work with contractors to deliver efficient, affordable, and deliverable designs.

We have a reputation for combining our practical knowledge with intelligent design which reduces installation and lifetime system costs. By engaging ONE early in the design process, clients benefit from cost certainty and value engineering savings.

## ONE's Services for Contractors:

- Tender review and VE options/ideas
- Dynamic thermal modelling
- Construction status designs and drawings (2D or 3D)
- Fully coordinated designs clash detected
- BIM deliverables
- Material take off's from detail design drawings
- Lead designer services
- BREEAM evidence
- As-built SBEM and SAP calculations
- EPC's and DEC's.



## ONE's Services for Main Contractors:

- |  |  |
|--|--|
| • Tender review and risk analysis                                | • Fully coordinated designs clash detected |
| • VE options/ideas   | • BIM deliverables                         |
| • Bid support  | • Commissioning Manager services           |
| • Outline cost advice  | • Forensic investigations                  |
| • Sub-contractor tender return reviews                           | • As-built SBEM and SAP calculations       |
| • Site inspection services to review sub-contractor installation | • EPC's and DEC's.                         |



# Working independently and as part of a multi-disciplinary team

ONE is a multi-disciplinary design business, that was established 45+ years ago, with a dynamic team comprising of Building Services (MEP), Masterplanning, Architecture, Interior Design, Landscape Architecture, Civil & Structural engineering and Digital working together at the forefront of Building Information Modelling (BIM) – the future of intelligent design.

At ONE we don't just share our workplace – we share expertise, creating high quality, efficient, sustainable and inspiring environments across all sectors ultimately saving clients' time, resource and money.

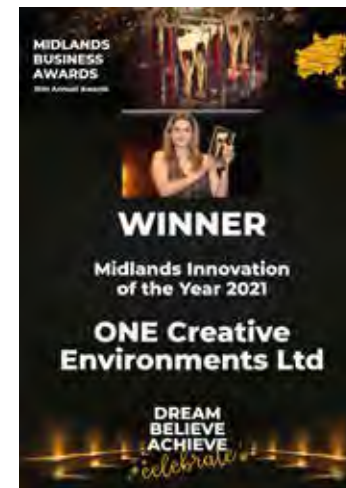
Our approach is flexible and ONE's engineers are highly skilled in delivering projects as part of ONE's multi-disciplinary team as well as working independently with other design teams.

We are an award-winning team, with all of the appropriate professional accreditations, and our Integrated Management System (IMS), which incorporates ISO9001, ISO14001 and ISO19650, ensures absolute quality for our clients.





# Award Winning



It is a delight to see a building not only purpose built for the patients care but also designed to be sustainable. It was also fantastic to see that the LED lighting was designed not only for energy reduction but also had a patient care purpose.

JUDGES' COMMENT  
HEALTHCARE ESTATES SUSTAINABLE ACHIEVEMENT OF THE YEAR 2019



Structural Awards 2021

# Achieving Net Zero

Sustainability is central to ONE's vision: "Creating a better world through design, sustainability and innovation". The company is Planet Mark Certified, takes a proactive approach for Social Value and ESG and is committed to achieving Net Zero during 2026.

MEP engineers have a key role to play in reducing carbon in our built environment and helping clients to achieve their sustainability goals – something our team has received recognition for in many prestigious industry awards. With a fabric first design, energy analysis and ventilation strategy, we design energy efficient and sustainable solutions using the latest industry software that yield low-carbon buildings using renewable technology.

A whole system approach that is site specific and takes into account the long-term goals of the client is always the best way to ensure success. You can count on ONE's integrated team for the latest information and impartial advice as well as adhering to compliance tools such as BREEAM and Passive House.



At ONE we maintain a holistic approach to sustainability, relying on the skills and expertise of our engineers to deliver solutions to help limit the impact of climate change:

- Energy Performance Certification
- Low Carbon and Renewable Energy Advice
- Energy Strategies
- Energy Evaluation/Conservation Reports
- Energy Modelling
- Dynamic Thermal Modelling
- Daylight Modelling
- Solar Shading Studies.



ONE's engineering team delivered our vision for a long-term energy efficient building, as well as providing expert leading advice relating to the requirements of the dementia care sector, which ensured our building will be an exemplar.

ANTONIOS MARINOU,  
SOLIHULL METROPOLITAN BOROUGH COUNCIL



## ONE's Sustainable MEP Approach

**Good first principle design:** This is always our preferred starting point, working with architects and other colleagues to investigate the building's orientation relative to factors such as sun position and prevailing winds. We also model the effects of the building's size and shape as well as its internal configuration.

**Maximising natural light:** We work with architectural colleagues to maximise the use of natural daylight which has health and wellbeing benefits as well as being a cost-effective and sustainable alternative to artificial lighting.

**Avoiding mechanical intervention:** Where possible we avoid the need for powered extraction by installing precisely sized apertures. This technique creates a natural, draught-free ventilation path, allowing fresh air to flow in at low level through manually opening windows and exit via high level clerestory windows. Atrium air stacks are another effective way to extract warm air.

**Green energy production:** The team can also advise you on the best way to 'make your own' energy and the relative costs and payback benefits in doing so. The choices are many and technologies are developing rapidly, however, you can rely on the team for the best advice on the appropriate solutions for your particular project.





# Digital Estates

The Digital Twin platform from ONE combines two technologies: Building Information Modelling (BIM) and the Internet of Things (IoT), with fully configurable tools that visually display data to support Facilities Management. This results in data that is instantly understandable and actionable and with intervention from ONE's MEP engineers can drive: decarbonisation, enhanced well-being, compliance, reduced risk and cost.

Wireless sensors (e.g. air quality, occupancy, energy consumption, etc.) are combined with BIM providing access to real-time integrated data and visual intelligence within the 3D model environment, enabling the efficient management of modern built environments. This is achieved through methods such as heat mapping and allowing objects to become 'interactive' as they light-up when a status changes (e.g., if an asset or space is utilising more energy than benchmarked, it flashes red). Our advanced algorithms and energy dashboards read raw energy data and convert it into meaningful information. For example for electricity sensors: consumption in kWh, £/p and tCO<sub>2</sub>e.

The easy-to-use visual solution drives real-time insight into a facility's operation and performance so that meaningful interventions can be made and MEP engineers can design solutions to tackle issues and optimise performance. Our platform is fully scalable, meaning clients can start at small scale (e.g. with one sensor) and then upscale as required.





# BIM

As a business we pride ourselves on being early adopters of technology and have fully embraced digital information delivery utilising Building Information Modelling (BIM).

BIM provides a digital means of creating and managing virtually every aspect of a building's design and engineering (hosted within a three-dimensional model with attributed data) which can be shared and accessed by multiple authorised users. BIM offers huge benefits to clients, design teams, contractors and their supply chains and building operators.

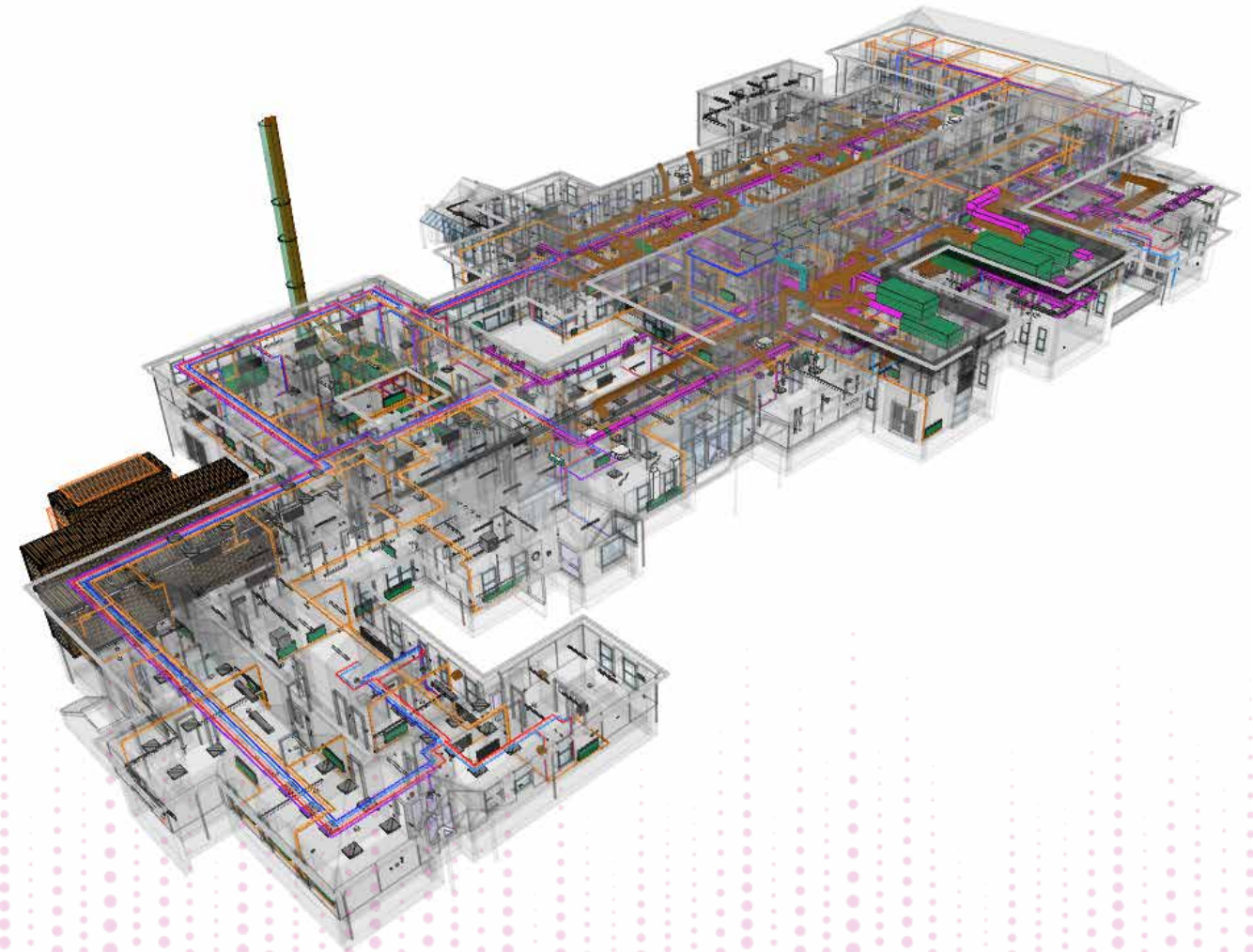
We provide clients with all the expert support they need to realise the benefits of BIM. Client and user teams can become more involved in a project, make better-informed decisions during development and construction and access the longer-term facilities management and lifecycle benefits associated with better digital information management principles.

As a company we continually invest in the latest technology to enable us to work collaboratively within a virtual environment which benefits our projects. Using BIM, ONE is able to offer more efficient and accurate designs when delivering project information:

- **Clash Detection and Resolution**
- **Project Information Modelling within a 3D environment**
- **Asset Information Management (e.g. COBie)**
- **Fully Integrated BIM Solution for coordinated MEP Designs**
- **BIM collaboration and data tracking.**

ONE is certified by BSI under BS EN ISO 19650-2 International BIM Standards and formerly BRE certified to BIM Level 2 under PAS1192-2.

Fully modelled Healthcare project





# All Sectors

ONE provides tailored solutions across a wide range of market sectors for both public and private sector clients. The team tackles all manner of challenges for all building types while delivering outstanding results for clients and communities.

The team is experienced across sectors including:

- Leisure & Hotels
- Healthcare
- Residential
- Car Parks
- Education
- Industrial
- Commercial
- International





# A Selection of Our Clients

We are really fortunate to work with great organisations on some really exciting projects. Our portfolio spans a range of sectors with schemes in the UK and overseas.



Bromford.



TopHat

Seddon

Gtech



Cox  
AUTOMOTIVE™

Sanctuary



Speller  
Metcalfe



Lidars



Charlie  
Bigham's



MULTIPLEX  
Built to outperform.



Balfour Beatty



mace



# Accreditations

CIBSE Directory of Practices  
RIBA Chartered Practice  
Landscape Institute Chartered Practice  
Association for Consultancy and Engineering  
ISO9001:2015 Quality Management System  
ISO14001:2015 Environmental Management System  
ISO19650-2 BIM Certification  
Constructionline Gold Member  
CHAS Accredited  
Investors in People  
Planet Mark  
Passive House Consultants

## Architecture | Landscape Architecture Engineering | Digital & BIM

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ONE is committed to sustainability. This brochure was printed using a 100% waterless process on FSC stock, in a factory powered by 100% renewable energies, that produces zero waste to landfill, and is beyond Carbon Neutral in its impact on the environment.

All information correct at time of going to print.