EDUCATION
CAPABILITY STATEMENT
OUR MISSION
Engineering Exceptional Environmental Solutions for Buildings.

OUR VISION
To be, and be recognised as, the leading engineering consultancy – consistently delivering exceptional solutions with passion, team work & integrity.

OUR VALUES

INTEGRITY
Integrity underpins everything that we do.

RELATIONSHIPS
Building long-term relationships with clients is our key focus.

INNOVATION
Our people strive to deliver innovative solutions.

COLLABORATION
Collaboration is fundamental to our success.

PASSION
A Passion For Excellence is the driving force behind every project we work on.
INTRODUCTION TO MECSERVE

Mecserve has more than 45 years' experience in providing the highest standard of engineering design consultancy for the built environment.

APPROACH

The Mecserve team prides itself on its ability to work with a range of project stakeholders, to design to programme and cost and to implement creative and innovative solutions applying appropriate technologies to solve complex problems.

Above all, we strive to meet with our clients' objectives every step of the way.

Mecserve staff bring practical knowledge and experience from a diverse range of industry sectors and across disciplines, enhancing our ability to provide the most effective solutions.

EXPERIENCE

Mecserve has played a key role on many varied projects, managing building services, engineering and design. We have worked for our clients over a number of years on frameworks, to deliver projects across the UK. We are responsive to today's changing environment and continually advise our clients on new products, services and innovations.

We've worked on a multitude of award winning projects. Not only that, the three times we've entered The Building Awards, we're proud to say that we've been finalists for the Construction Consultant of the Year award each and every time.

PHILOSOPHY

Our philosophy is to design reliable engineering services for buildings which ensure the comfort, health and well-being of their occupants. We aim to produce buildings that function well, in addition to achieving energy efficiency with minimal environmental impact.

From single dwelling projects, all the way up to £125m construction projects - every development has the same care and attention it deserves, no matter the size.
RELATIONSHIPS AND COMMUNICATION

We take the time to understand our client's specific business requirements in order to develop the services design brief that most suits their needs. We meet our clients and other key stakeholders at the start of the project and then on as many other occasions as is required throughout the project's duration in order to ensure that our client's vision is on-track.

We listen to our clients, are responsive to changes, and deliver on our promises, with an emphasis on time-management, cost and quality.

Mecserve understands that clients frequently require buildings to be delivered 'fast-track', which often requires complex sequencing and out-of-hours working in occupied buildings – and our team possess the coordination and communication skills to deliver these challenging projects.

Building constructive relationships with contractors and sub-contractors is critical to the success of what we do, and we always work closely with contractors to ensure a high-quality product. For example, by encouraging them to erect an early sample of work which sets a benchmark quality standard we have found that we are able to avoid delays as a consequence of abortive work.

It is important to us that we deliver the design intent that we have promised our client and recognise the importance of commissioning and the validation process to ensure that the completed installation meets requirements.

We believe that those who work with us find us to be engaged, open and approachable, to the benefit of everyone involved in the projects we deliver.
CAPABILITY & EXPERIENCE

We can offer you industry-leading expertise in providing facilities for educational institutions, be they primary, secondary, tertiary or further education, and for clients in both the state and private sectors.

In addition to classroom and general teaching facilities, we have the skills to deliver buildings for specialist purposes such as IT centres, science laboratories and performing arts facilities.

The following list shows some of our projects and illustrates the range of our experience:

- **West Downs One, University of Winchester** - lecture theatre, public library, teaching/study spaces, social learning space, gallery and café
- **Cranleigh School** - new science block
- **Royal Russell School** - performing arts centre, kitchen and dining facility
- **Reigate Grammar School** - sports pavilion extension, and music practice facility
- **Reigate St Mary’s Preparatory and Choir School** - sports hall and classrooms
- **St Paul’s School** - music recital space, classrooms and music practice
- **Preston Park School** - classroom block & IT centre
- **Chigwell School** - classroom block
- **Royal Ballet School** - monitoring of works
- **Bishop Wordsworth School** - 6th form classroom block
- **Charterhouse School** - energy monitoring and renewable energy feasibility study
- **National Opera Studio, Wandsworth** - offices, studios and rehearsal hall

Our experience providing student accommodation has honed our skills in providing the best possible multi-residential accommodation for students within the keenest of budgets. We are confident we can deliver hard-working, economical buildings. We have considerable experience of providing solutions to make buildings accessible and friendly to all:

- **Mayflower Halls, University of Southampton**
- **Therese House, Glasshouse Yard**
- **2-4 Lancaster Place, Covent Garden**
- **Portswood Road, Southampton**
- **Chamberlain Halls, University of Southampton**
- **The Garden Halls, Cartwright Gardens, University of London**
SERVICES OVERVIEW

BUILDING SERVICES
Design of mechanical, electrical, public health and lift services from conceptual design through to project completion including aftercare. Offering a tailored service to suit the procurement strategy.

Design of efficient solutions for vertical transportation systems, including passenger and vehicle lifts and platform lifts.

SPECIALIST PROJECTS
We provide fast turnkey design solutions to meet clients’ expectations at any stage throughout the life cycle of a building or development. Undertaking building services and lifts surveys associated with pre-acquisition, due diligence, dilapidations and asset management. We also carry out design oversight duties on behalf of clients and undertake technical design audits, assessments of delivery proposals and technical submissions made by contractors.

ENERGY & SUSTAINABILITY
Producing building models using the latest software we can estimate likely energy use to demonstrate compliance with Building Regulations as well as undertaking daylight and summertime overheating analysis.

Liaising with local planning authorities to understand their policies to deliver pre-planning energy and sustainability reports that address the relevant planning considerations. Additionally, providing environmental certification including BREEAM and the WELL Building Standards.

FACILITIES MANAGEMENT
Delivering advice including soft landings and planned maintenance programmes.

COORDINATION OF SUB-CONSULTANTS
We have successfully employed sub-consultants under our appointment for acoustic, fire engineering, catering and laundry services. When required we can manage and coordinate their scope of services and deliverables to provide the client with a single point of contact.

BIM CAPABILITY
Our CAD team are trained in the use of Autodesk Revit to produce M&E BIM information. We have regularly used 3D drafting for more than five years and we are working to BIM Level 2 on a number of projects, including those for The Crown Estate.

INFRASTRUCTURE
Producing load assessments for gas, water and electricity together with utilities record information allows us to obtain quotations early on. This enables us to engage with the utility providers regarding upgrading or diverting of services.

DESIGN DELIVERY
Service delivery options include:
- Full design;
- Performance specifications with employer’s requirements for design and build procurement;
- Design on behalf of contractors when either novated or directly employed.
West Downs One is a "gateway" building that is being constructed by the University of Winchester as the principle point of accessing their West Downs Campus.

This £40m development comprises a lecture theatre, public library, teaching/study spaces, social learning space, gallery and café. The project is of particular importance to the university as many areas will be available for public use helping to further integrate this educational establishment into the community.

Mecserve has been appointed by the Design Build contractor, Osborne Construction, to undertake a full design working in close union with the university and their appointed architects, Design Engine. We are currently at RIBA Stage 4, with works on-site scheduled to commence in late 2017.

**Contract Value:** £40m

**Client:** University of Winchester

**Architect:** Design Engine Architects

**Quantity Surveyor:** Jackson Coles

**Structural Engineer:** Heyne Tillett Steel

**Landscape Consultant:** LUC
Mecserve assisted Cranleigh School with the Building Services works and Sustainability planning for their new science block.

The block in question comprised approximately 48,400 ft² nett internal area, with biology, chemistry and physics laboratories and associated preparation rooms, language classrooms, toilets, general office space and a lecture theatre. The classrooms and laboratories were accessed via an impressive atrium.

The science block incorporated passive ventilation to classrooms, under-floor heating and mechanical extract to some fume cupboards. The lecture theatre was mechanically ventilated.

Two 15kW wind turbines were built into the scheme and were metered with data being used as part of the teaching within the school. A 50,000-litre rainwater harvesting tank was also incorporated for watering the school’s playing fields.

Mecserve provided fully co-ordinated design drawings for all mechanical and electrical work.

**Client:** Cranleigh School

**Architect:** Pringle Richards Sharratt

**Quantity Surveyor:** CM Parker Browne

**Structural Engineer:** Thomasons LLP

**Main Contractor:** R. Durtnell & Sons Limited
Mecserve assisted with the design of Reigate Grammar’s new music school (consisting of a recital hall, classrooms and practice rooms).

The recital hall allowed for a 100-seated audience (for any given performance) and was also used for orchestra/choir rehearsals.

The hall was entirely naturally ventilated with automatic opening vents plus external sunshades to reduce heat gain. The lighting to the hall could be controlled to give a variety of effects, with uplighters and spotlights on tracks, depending on the concert.

A separate percussion room was built adjacent to the hall and was mechanically ventilated to minimise the noise breakout.

The school used the facility for all its major concerts and as a recording studio for its pupils. Finally, the control room for recording equipment and the music technology room were comfort cooled.

**Contract Value:** Approx. £1.6m  
**Client:** Reigate Grammar School  
**Architect:** Barnsley Hewett & Mallinson  
**Quantity Surveyor:** C M Parker Browne  
**Structural Engineer:** Thomason Partnership
Mecserve was appointed to provide a fully coordinated design for the Building Services to the apartments and common parts in all buildings.

The music school features a 320-seat recital hall with practice rooms, classrooms, individual teaching rooms for specialist instruments, library and offices.

The foyer was designed to double as both a rehearsal space and area for small performances whilst the recital hall could also be used as a recording studio.

The recital hall was designed for a noise background level of NR20 and many other rooms were designed for NR30.

The recital hall was air-conditioned by a displacement ventilation system and the foyer was mechanically ventilated. Heat recovery was incorporated where economically viable and classrooms incorporated passive ventilation.

Client: The Mercers’ Company

Architect: Barnsley Hewett & Mallinson

Structural Engineer: Harris and Southerland

Project Imagery: © Barnsley Hewett & Mallinson
Preston Park School is a large, three-to-four form entry community school - providing education to some 815 pupils.

The project comprised a new building comprising three classrooms, an ICT centre and a library. Additionally, work was carried out on the existing school including the refurbishment of a multipurpose hall; toilets and offices.

Mecserve was responsible for the design of the Building Services for both the new and refurbishment work. As part of the design the main school boiler plant was replaced, with repairs, modifications and improvements carried out on the existing heating pipe-work systems, drainage, fire alarms and electrical services within the existing school.

Importantly, all work was carried out during term time but did not impact any of the time-tabled schooling.

Client: London Borough of Brent

Architect: cube_design

Quantity Surveyor: Gleeds

Landscape Architect: Macgregor Smith
Mecserve was appointed to assist with the redevelopment and refurbishment for the National Opera Studio in Wandsworth, providing multiple services.

Formerly a church, Mecserve assisted and executed the refurbishment to create the National Opera Studio - the UK’s leading opera training facility.

A variety of considerations were taken on-board so as to provide an acoustically sound environment for offices, studios and the rehearsal hall. Special attention was paid to the studios and rehearsal hall due to the stringent acoustic requirements and how any type of Building Services might impact or influence the sound-stage.

Client: National Opera Studio
Project Manager: Day Management Partnership
Quantity Surveyor: Pierce Hill
Structural Engineer: WS Atkins
Mecserve was appointed to provide full Energy and Sustainability strategy support for this 1,200-bedroom student accommodation project in Bloomsbury. The scheme delivers an improved central student campus across more than 350,000 ft² for University of London.

We have worked closely with the appointed development team to develop a cost effective and robust strategy.

Most of the existing buildings were demolished and a new structure was formed from an in situ concrete frame with brick-faced concrete cladding panels on all external elevations, two new internal courtyards feature a render finish. The private gardens were also redeveloped, and four new tennis courts were installed.

The Hughes Parry Tower was refurbished, which included replacing all internal and external finishes, as well as the upper two floors.

Mecserve has acted as Energy and Sustainability Consultants and BREEAM assessors. The Building is designed to be very energy efficient and includes a central heating system with CHP and efficient boilers and it also has PV panels on the roof together with green roof.

- BREEAM ‘Excellent’ Rating achieved

**Contract Value:** £70.35m  
**Client:** University Partnerships Programme/University of London  
**Architect:** TP Bennett Architects  
(Principle Façades: Maccreanor Lavington Architects)  
**Quantity Surveyor:** McBains Cooper  
**Structural Engineer:** Cundall  
**Services provided by Mecserve:** Energy and Sustainability consultancy
Mecserve was appointed to assist with the design and development of an extremely attractive, high quality scheme at the University of Southampton.

Mayflower Plaza was designed to accommodate over 1100 student bedrooms as well having a retail space, café, gym and learning centre at ground level across 270,000 ft².

With the project consisting of three main towers built on a vacant site, Mecserve was the client’s Building Services consultant and assisted with the design development of the firefighting cores and fire strategy, the location of the principle plant rooms and major services distribution concept prior to the appointment of the main contractor (Osborne Construction) who then completed the full design.

Mecserve carried out full energy and sustainability analysis and looked to surpass the tender’s original target of a ‘Very Good’ BREEAM rating with an ‘Excellent’ classification.

- A BREEAM ‘Excellent’ rating was achieved for this project
- EPC Rating B

Contract Value: £35m
Client: Osborne/Terrace Hill
Architect: Architecture PLB
Structural Engineer: Waterman
Main Contractor: Osborne Construction
Building Services Contractor: Working Environment
Services provided by Mecserve: Mechanical, Electrical, Public Health, BREEAM & Sustainability
Mecserve was appointed to provide a fully coordinated design for the Building Services of the residential accommodation at Glasshouse Yard in the heart of London.

Therese House was a new student residential accommodation with over ten levels of habitable floors with plantrooms at both basement and roof level. Therese House was popular with UK and international students for its central location within close proximity to the Barbican theatre.

Therese House offered a range of private and shared accommodation, with the development consisting of 168 self-contained studio bedrooms and 78 study bedrooms arranged in clusters around communal kitchen areas. The building had a management suite and control room to monitor the building service systems and the firefighting equipment.

**Contract Value:** £27m

**Client:** HDG Mansur

**Architect:** TP Bennett

**Project Manager/Quantity Surveyor:** Arcadis

**Structural Engineer:** Campbell Reith Hill
EDUCATION CAPABILITY STATEMENT

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