

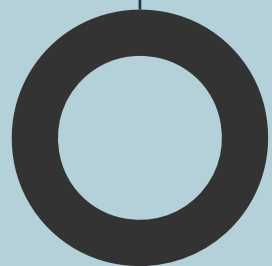
# Independent MEP technical expertise. Simplifying the complex.

HOARE LEA EXPERT WITNESS



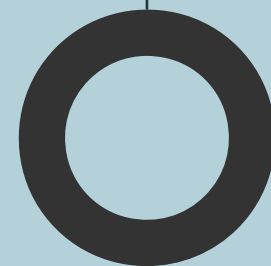
EXPLORE





**“We provide accurate and impartial advice. Simplifying the complex, to help you solve MEP engineering problems and disputes efficiently and economically.”**

**KENELM HOARE**  
TECHNICAL DIRECTOR



**“With a breadth of experience across the UK & Middle East we use our expert knowledge, skills, and experience to advise on engineering problems and disputes.”**

**MATT BOSLEY**  
TECHNICAL DIRECTOR

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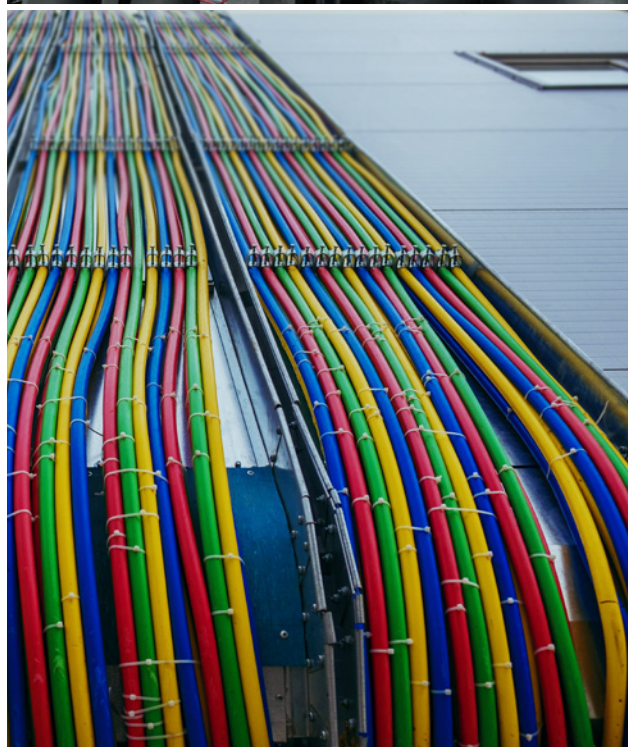
# Hoare Lea Expert Witness group.

The Expert Witness group assist both the legal profession and those directly involved in the construction industry to assist in the resolution of issues at the earliest stage possible. We have acted in the resolution of issues on live projects, in an advisory role as well as in more traditional expert roles involving mediation, adjudication, international arbitration and the High Court. Our experts are based in the UK and the UAE and are widely recognised for consistent quality of service. The team comprises specialists in all building services disciplines, mechanical, electrical, public health, and fire protection.

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## Relevant expertise.

Our team are part of Hoare Lea, an award winning engineering consultancy. With over 160 years of experience to draw upon, the firm today employs over 1000 people working on current built environment projects. This proximity to real world engineering puts our experts at the heart of industry, we understand the latest regulations, industry trends and innovations, ensuring our advice is based on the latest knowledge and best practice. Our expertise is current and relevant.



# Geographic spread.

## UK team



**Kenelm Hoare**  
TECHNICAL DIRECTOR



**Paul McDonough**  
TECHNICAL DIRECTOR



**Martina Sonogova**  
TECHNICAL DIRECTOR



**Tony Sullivan**  
ASSOCIATE DIRECTOR



**David Sworder**  
CONSULTANT



**Don Court**  
CONSULTANT



**Matt Bosley**  
TECHNICAL DIRECTOR



**Dina Alustath**  
SENIOR ASSOCIATE



**Stephen Kelly**  
ASSOCIATE DIRECTOR



**John Wood**  
ASSOCIATE DIRECTOR



**Mar Malana**  
DOCUMENT CONTROLLER


















**Niyant Patel**  
BIM MANAGER













# Where we have expertise.

We provide independent advice based upon well informed sound professional judgement, an accurate appreciation of technical issues, and a first-hand up-to-date understanding of the construction industry gained through our direct connection to live projects and current industry practices.








## Mechanical.

 Air / water cooled chillers	 Boilers	 Chilled water systems	 District heating / cooling	 DX & VRF cooling systems	 Energy centres
 Gas	 Heating, ventilation and air conditioning (HVAC)	 Heat interface units	 Heat recovery	 Low temperature hot water systems	 Natural ventilation
 Pumps	 Smoke control	 Stair pressurisation			

## Electrical.

 Earthing	 Electrical generation	 Emergency lighting	 Emergency power	 Fire detection and alarm	 High voltage distribution systems
 Life safety	 Lighting & lighting controls	 Lightning protection	 Low voltage distribution systems	 Photovoltaics	 Security systems









## Public health.

 Domestic water systems	 Foul water drainage	 Grey water systems	 Plumbing	 Pumping stations	 Rainwater/ stormwater drainage
 Treated Sewage Effluent (TSE)					

## Fire protection.

 Dry risers	 Fire suppression	 Gaseous suppression systems	 Hydrant systems	 Sprinkler systems	 Wet risers
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## Multidiscipline.

 Authority approvals	 Building Management Systems & controls	 Change control	 MEP coordination	 MEP design management	 MEP site supervision
 Site investigations	 Site utilities				

We support our expert services with intelligent use of the wider firm's resources, particularly the expertise of our industry leading specialist groups, including:

- Acoustics • Air Quality • Audiovisual • Digital Engineering • Fire Engineering  
Property Services • Security • Specialist Lighting • Sustainability • Vertical Transportation

# Case experience.

We've worked with solicitors and counsel providing direct expert engineering advice and as part of multi-disciplinary teams - comprising architectural & structural experts, quantum and delay experts, disruption analysts and testing laboratories.

Dispute resolution methods range from High Court to international arbitration tribunal, to adjudication and mediation for complex disputes in the UK and Middle East.

Our case experience includes assessments of:

Authority approvals	Condensation risk	Coordination of engineering systems
Design defects, design quality	Design effort	Electrical fires
Engineering systems failures	Inspection inadequacies	Installation and workmanship defects
Liability for energy usage and the ability to rebill	Overheating of residential developments	Power system failures
System performance	Technical advice supporting delay, disruption & quantum claims	Technical review of variations and change orders

We provide expert witness and advisory services on a wide range of project types including:

Arts, Culture & Heritage • Data Centre • Mission Critical • Healthcare • Higher Education  
Hospitality • Manufacturing & Process • Residential • Retail • Sports • Transport  
Workplace • Utilities and infrastructure




# Clients we've worked with.

The Hoare Lea Expert Witness Group has been instructed by:

Addleshaw Goddard	Ashfords	Ballymore Group	Beale & Company	Brodies	Browne Jacobson	Charles Russell Speechlys	Clyde & Co	CMS
Crowell & Moring	DAC Beachcroft	Dentons	DWF	Eversheds Sutherland	Fenwick Elliot	Fieldfisher	Forsters	Gowling Wig
HCR Hewitsons	Herbert Smith Freehills	Hogan Lovells	ISG	K&L Gates	Kennedys Law	Keoghs	King & Spalding	MacFarlanes
Mantle Law	Mayer Brown International	Michelmores	Norton Rose Fulbright	Pinsent Masons	Reynolds Porter Chamberlain	Seddon Law	Shepherd + Wedderburn	Shoosmiths
Sloan Plumb Wood	Squire Patton Boggs	Stephenson Harwood	Taylor Wessing	Trowers & Hamlins	Ward Hadaway	Wedlake Bell	Weightmans	White & Case

# Our team.

## UK



**Paul McDonough**  
MEP TECHNICAL EXPERT  
TECHNICAL DIRECTOR

BSc (Hons) Electrical and Electronics Engineering  
CEng  
MIET  
MCIBSE

35+ years experience

Expertise:

HV & LV systems	Lighting
Generation	FA systems
IT systems	Security
Control systems	Lightening protection

CONTACT



**Martina Sonogova**  
MEP TECHNICAL EXPERT  
TECHNICAL DIRECTOR

PhD Environmental Engineering  
CEng, MCIBSE  
Member of Society of Construction Law  
Cardiff University Bond Solon (CUBS) Expert  
Witness Civil Certificate

15+ years experience

Expertise:

Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Humidity control	Smoke vent

CONTACT



**Matthew Bosley**  
MEP TECHNICAL EXPERT  
TECHNICAL DIRECTOR

MEng Engineering Design  
CEng, MCIBSE, MASHRAE  
Máster en Climatización (HVAC)  
Member of Society of Construction Law (Gulf)  
Cardiff University Bond Solon (CUBS) Expert  
Witness Civil Certificate

15+ years experience

Expertise:

Ventilation	Air conditioning
Humidity control	Thermal comfort
Water	Smoke
Project delivery	Coordination

CONTACT



**Stephen Kelly**  
MEP TECHNICAL EXPERT  
ASSOCIATE DIRECTOR

BEng (Hons) Building Services Engineering  
MCIPHE  
CIBSE UAE Technical Committee  
Member of Society of Construction Law (Gulf)  
Cardiff University Bond Solon (CUBS) Expert  
Witness Civil Certificate

20+ years experience

Expertise:

Drainage	Water
Fire protection	Gas
Treated Sewage Effluent (TSE)	Grey water

CONTACT



**Kenelm Hoare**  
MEP TECHNICAL EXPERT  
TECHNICAL DIRECTOR

MSc Building Services Engineering  
CEng, MIET, MCIBSE  
Society of Construction Law member  
Cardiff University Bond Solon (CUBS) Expert  
Witness Civil Certificate

20+ years experience

Expertise:

LV systems	Life safety
Lighting & controls	Generation
Emergency lighting	Fire alarms
Lighting protection	Security

CONTACT



**Tony Sullivan**  
MEP TECHNICAL EXPERT  
ASSOCIATE DIRECTOR

B.Eng(Hons) Building Services & Environmental Engineering  
CEng, FCIBSE. IntPE(UK), CPEng(NZ), CMEngNZ

33+ years experience

Expertise:

Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Smoke vent	Road tunnel systems
Operations & maintenance	

CONTACT



**John Wood**  
MEP TECHNICAL EXPERT  
ASSOCIATE DIRECTOR


MEng (Hons) Architectural Engineering.  
CEng MCIBSE  
Member ASHRAE  
Member of Society of Construction Law (Gulf)  
Cardiff University Bond Solon (CUBS) Expert  
Witness Certificate

10+ years experience

Expertise:

Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Humidity control	Smoke

CONTACT



**Dina Alustath**  
MEP TECHNICAL EXPERT  
SENIOR ASSOCIATE

BSc Electrical & Electronics Engineering  
MSc Energy (HV Power Transmission)  
Member of The IET (MIET)  
Member of Society of Construction Law (Gulf)  
Member of Society of Engineers – UAE  
Cardiff University Bond Solon (CUBS) Expert  
Witness Civil Certificate

15+ years experience

Expertise:

Small power	Lighting
Emergency lighting	Earthing
Fire & life safety	Lighting protection
Medium voltage SS	

CONTACT



**David Sworder**  
MEP TECHNICAL EXPERT  
CONSULTANT


BSc Mechanical Engineering Science  
CEng  
MCIBSE  
AMIMechE

40+ years experience

Expertise:

Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Humidity control	Smoke

CONTACT



**Don Court**  
MEP TECHNICAL EXPERT  
CONSULTANT

BSc (Hons) Electrical and Electronic Engineering  
CEng  
MIET

45+ years experience

Expertise:

HV & LV systems	Lighting
Generation	FA systems
Earthing	IT systems
Power system studies	Security
Control systems	Lighting protection

CONTACT



**Niyant Patel**  
BIM MANAGER

Diploma in Mechanical Engineering

15+ years experience

Expertise:

MEP BIM modelling	MEP BIM management
BIM coordination	Clash detection
Families	BIM productivity tools

CONTACT

## Middle East experience.

We have a dedicated team based in the Middle East with region-specific project experience. We understand the complexities of large projects, as well as the local procedures and regulations. We have provided independent expert advice on disputes in the UAE, Oman, Qatar and KSA.

Our expert advice draws from our local design and site supervision experience, which includes some of the region's most important projects, including:

- **Doha Metro Green Line**
- **Dubai Expo 2020 – Thematic Districts and Al Wasl Plaza**
- **Ahmad bin Ali Stadium (Al Rayyan Stadium)**





## Engineers of human experiences.

Hoare Lea is an award-winning engineering consultancy with a creative team of engineers, designers, and technical specialists. We provide innovative solutions to complex engineering and design challenges for buildings.

Irrespective of the scale or complexity of a project, we provide a full range of MEP, environmental, and sustainability services, bringing buildings to life and ensuring that they perform in operation as well as they look.

HOARELEA.COM / SPECIALISM / EXPERT-WITNESS

