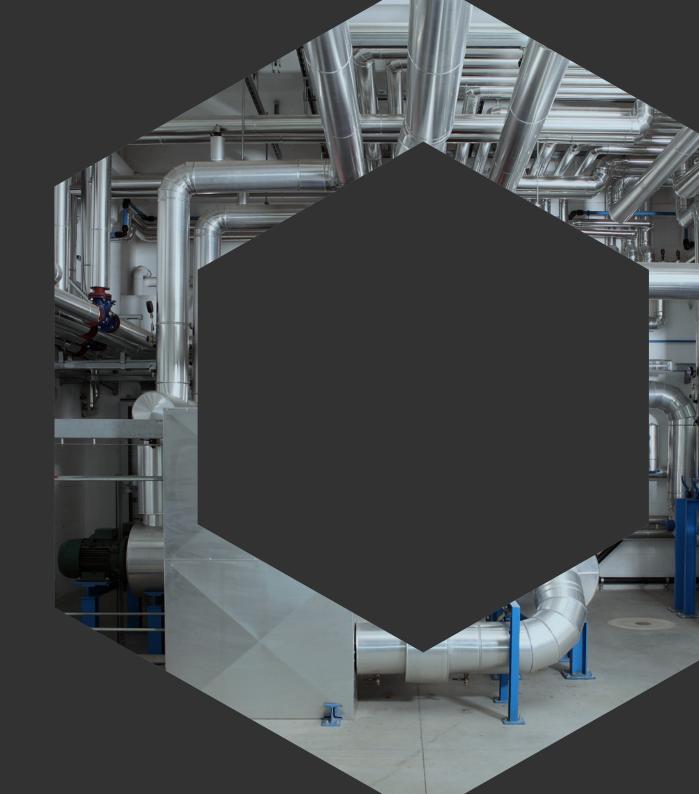


# Independent MEP technical expertise. Simplifying the complex.

HOARE LEA EXPERT WITNESS









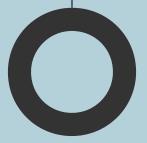


"We provide accurate and impartial advice. Simplifying the complex, to help you solve MEP engineering problems and disputes efficiently and economically."

KENELM HOARE
TECHNICAL DIRECTOR

#### **Contents**

- About us & why our expertise is relevant
- Geographic spread
- Where we have expertise
- Case experience
- Clients we've worked with
- Our team
- Middle East experience



"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







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.

# 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.



# UAE team



TECHNICAL DIRECTOR



Matt Bosley
TECHNICAL DIRECTOR







ASSOCIATE DIRECTOR









UK team

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





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

Multidiscipline.



Authority approvals

Site investigations



**Building Management** Systems & controls



Change control



MEP coordination



MEP design management



MEP site supervision

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

Site utilities

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.

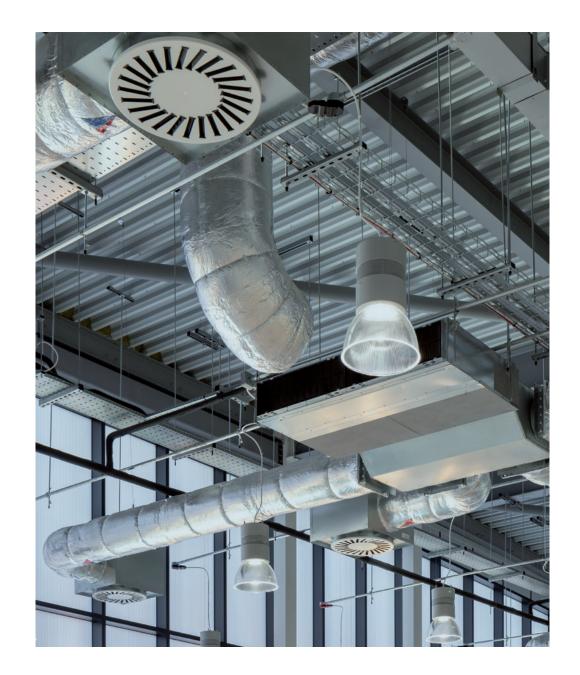
Dispute resolution methods range from High Court to international arbitration tribunal, to adjudication and mediation for complex disputes in the UK and Middle East.

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	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	Seddons 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 **UAE**



**David Sworder** MEP TECHNICAL EXPERT **GROUP DIRECTOR** 

BSc Mechanical Engineering Science CEng **MCIBSE AMIMechE** 

40+ years experience

#### **Expertise:**

Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Humidity control	Smoke





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:**

<u> </u>	
LV systems	Life safety
Lighting & controls	Generation
Emergency lighting	Fire alarms
Lighting protection	Security



**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



Stephen Kelly MEP TECHNICAL EXPERT SENIOR ASSOCIATE

BEng (Hons) Building Services Engineering MCIPHE CIBSE UAE Technical Committee Member of Society of Construction Law (Gulf)

20+ years experience

#### **Expertise:**

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



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



**Natalie Ford** MEP TECHNICAL EXPERT ASSOCIATE DIRECTOR

MEng Product Design Engineering MEB Masters in European Business CEng, MCIBSE **AMIMechE** Cardiff University Bond Solon (CUBS) Expert Witness Civil Certificate

19+ years experience

## Expertise:

Expertise.	
Gas	Water
Heating	Ventilation
Cooling	Air conditioning
Fire protection	



John Wood MEP TECHNICAL EXPERT SENIOR ASSOCIATE

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



Dina Alustath MEP TECHNICAL EXPERT **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

15+ years experience

## Expertise:

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



Martina Sonogova MEP TECHNICAL EXPERT ASSOCIATE 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



**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



**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





# 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

