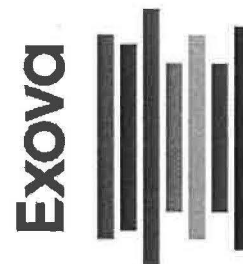


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Cate Cooney

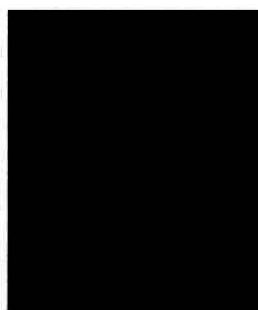
Curriculum Vitae

Exova Warringtonfire Consulting

Holmesfield Road – Warrington - Cheshire WA1 2DS

t: [REDACTED] – f: [REDACTED] – e: cate.cooney@exova.com – w: www.exova.com

Personal Details:



Position:

Principal Consultant

Qualifications:

BA (Hons), BSc (Hons), MSc. MRICS
FRACS

Date of Birth:



Nationality:



Career Summary:

Cate joined Exova Warringtonfire in 2011 working as a Senior Consultant Fire Engineer. She has gained experience in many aspects of fire safety engineering with particular emphasis on assessing and developing fire engineered strategies and solutions for a large range of building projects. Cate specialises in Building Regulations and fire safety legislation. Cate is a Chartered Building Control Surveyor and holds a Master's degree in Fire and Explosion Engineering.

Prior to joining Exova Warringtonfire Cate worked as a Building Surveyor and Regulator for a number of Local Authorities. From her background in Private Practice and Building Control for thirteen years, Cate firstly became a Building Surveyor and then a Chartered Building Control Surveyor specialising in legislation and the assessment of construction and alternative solutions for regulatory compliance with a particular bias towards fire safety and fire engineering.

As a regulator in a major conurbation Cate has been involved with many major complex projects. Her experience as a regulator and has given her a unique ability to assist clients with the fire safety approvals process and to negotiate and gain approval for complicated bespoke solutions.

Qualifications:

BA (Hons) - French (University of Wales, Aberystwyth)

BSc (Hons) - Building Surveying (First Class) (University of Salford)

MSc - Fire and Explosion Engineering (University of Leeds)

MRICS - The Royal Institution of Chartered Surveyors

Employment History:

2001 – 2003	ACS Chartered Surveyors – Assistant Building Surveyor
2003 – 2005	Lancaster City Council – Trainee Building Control Officer
2005 – 2011	Manchester City Council – District Building Control Officer
2011 – 2016	Exova Warringtonfire – Senior Consultant
2016 – Present	Exova Warringtonfire – Principal Consultant

Professional Experience:

At Exova Warringtonfire Cate provides fire safety and fire engineered solutions for many types of building projects.

The fire safety and engineered strategies which she produces for our clients ensure that the architectural concepts of the design are maintained whilst ensuring the fire safety requirements are compliant and will gain approval. This is done whilst aware of the cost of fire safety provisions and ensuring that these are not disproportionate to the cost of project. This is achieved by using her excellent knowledge of the construction, Regulations and codes and by applying the principles of fire engineering to ensure that the effects of fire will not cause the conditions in the building to less than compliant with the functional requirements of the applicable regulations.

Fire engineered principles often used include, smoke control and time to fill calculations, CFD modelling and analysis of smoke and heat, means of escape modelling and radiation analysis.

Third Party Accreditations:

Certificated member of the Warrington Certification Ltd Fire Risk Assessors Certification Scheme (FRACS) operated in partnership with the Royal Institution of Chartered Surveyors. This is the only United Kingdom Accreditation Service (UKAS) approved third party certification for fire risk assessors.

Recent Projects Include:

- New build Academies, primary schools and alterations to existing educational buildings
- Waste to Energy Plants and process buildings
- Large Storage Warehouses, cold stores, distribution centres
- Supermarkets and shopping complexes
- Office Accommodation,
- Residential buildings,
- Extracare and residential care buildings
- Department of Education Buildings
- Hotel developments
- Car parks
- Hospital Buildings
- Alterations and new build structures to major UK international airports
- MOJ Custody premises
- Museum, art gallery and exhibition halls and other large volume public assembly and event spaces
- Retail structures
- CFD Analysis of various building types
- Change of use and material alteration works to listed properties
- Fire Risk Assessment of many and various building types including hospitals, health care premises, offices, large process buildings, residential high rise buildings, construction sites, temporary events buildings etc.

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James Lee Curriculum Vitae

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Personal Details:

	Position:	Senior Consultant
	Qualifications:	MEng AIFireE
	Date of Birth:	[REDACTED]
	Nationality:	[REDACTED]

Career Summary:

James joined as a Senior Consultant with Exova Warringtonfire in 2011. He has gained experienced in all aspects of fire safety engineering with particular emphasis on fire strategies in complex buildings.

Qualifications:

MEng in Structural and Fire Safety Engineering – 2007 – University of Edinburgh
Associate membership of Institution of Fire Engineers
Member of the Engineering Council Division

Employment History:

2011 – Present	Exova Warringtonfire
2009 – 2011	Lawrence Webster Forrest
2007 – 2009	Arup Fire

Professional Experience:

James joined Exova Warringtonfire in 2011 and provides consultancy services on a variety of projects covering aspects of fire engineering. As a Senior Consultant, James has been involved with the development of fire strategy and fire engineering analysis for various projects. James technical experience and skills cover: areas including:

- Fire/ smoke/ evacuation modelling
- Means of escape assessment
- Fire risk assessment
- Analysis of structural fire protection requirements
- Compartmentation analyses
- Suppression
- Analysis of smoke flow and smoke control systems
- Code interpretation and negotiations with local authorities to gain approval for designs and strategies.

Recent Project Include:

James has experience in developing fire safety strategies for a wide range of building types in the UK and abroad. The following are a list of some of the projects.

- 100 Bishopsgate – The development comprises three buildings in central London. High rise office tower with 43 storeys. James addressed the fire strategy aspects for the development.
- Dubai Towers – James undertook a structural fire engineering assessment of the steel superstructure for two of the four towers to determine the extent of structural protection requirements based on a performance-based approach (time-equivalent analysis, thermo-mechanical analysis of structural elements etc.
- Bournemouth Pavilion and Gardens – The development provides three levels of underground car park and a cinema and spirals levels with covered retail outlets above ground floor. James was responsible for providing performance based fire engineering designs and negotiations with approving authorities to gain approval for designs and strategies.
- Olympic Energy Centres – The energy centres in Kings Yard and Stratford City, London will provide efficient power, heating and cooling system across Olympic Park site. James was the fire engineer for the project. He produced fire engineering assessments, highlighted the main fire safety issues and assisted the design team in the development of the energy centres design.
- National Theatre – Used the simulation model STEPS to model people flow in Cottesloe Theatre
- One Blackfriars Road –The 51 storey tower building of mixed occupancy including hotel, residential, health club, restaurant, spa and sky decks/observation levels. James acted as the fire engineer and developed the fire strategy report for the design team.
- O2 Centre Finchley Road – Refurbishment work was undertaken for the 3 storey shopping Centre. James was responsible for producing the fire strategy which included a detailed analysis of means of escape.
- Project Blue Chelsea Barracks – Project from 2007 to 2009 included large residential scheme situated on the former Chelsea Barracks site in London. The project includes a number of residential blocks along with a hotel community building and sports centre. A large car park links the buildings at the basement level. The fire engineering design allowed for each residential apartment to be served by a single common stair while still meeting travel distance limitations. James was the fire engineer and responsible for producing the fire strategy.

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Sean McEleney Curriculum Vitae

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w: www.exova.com

Personal Details:



Position:	Consultant
Qualifications:	MSc, BSc (Hons), Fire Engineering
Date of Birth:	[REDACTED]
Nationality:	[REDACTED]

Career Summary:

Sean joined the consultancy department in July 2011 as an Engineer. Sean gained promotion to Consultant level in January 2013. Previous to this Sean has been employed by DM Flaherty & Associates, Fire Engineering, Structural and Civil Engineering Consultants in the Republic of Ireland as a Fire Engineer for approximately two years.

Qualifications:

BSc (Hons) Fire Engineering – 2007 – Letterkenny Institute of Technology
MSc - Fire Engineering – 2010 – University of Ulster

Employment History:

2011 - Present	Exova Warringtonfire
2007 - 2009	DM Flaherty & Associates
2006	Morgan Quinn Architects

Professional Experience:

Sean joined Exova Warringtonfire in July 2011, providing engineering services on a variety of projects covering all aspects of fire engineering. He has technical expertise in all areas of fire safety engineering, including:

- Preparation of fire safety strategies and fire engineered analyses
- Means of escape analyses for complex buildings
- Analysis of structural fire protection requirements
- Thermal Radiation Analysis
- Zone model smoke calculations

Sean has experience in developing fire safety strategies for a wide range of building types in the UK, Middle East and Ireland. The range of building types includes as follows; Health Care facilities, Residential Buildings, Office type developments, Educational Buildings, High Rise Buildings, Custodial Premises, Mixed Use Developments etc.

Recent Jobs Include:

Sean has been gaining experience developing fire strategies and carrying out fire engineering analysis on a wide range of projects. The following are a list of some recent projects Sean has worked on;

Sports and Leisure Centres;

- Romford Leisure Centre, Romford – Fire Safety Strategy for a new sports and leisure complex.

Custodial Premises;

- HMP Low Newton, Durham – Fire Safety Review of HMP Low Newton.
- HMP Frankland, Durham – Fire Safety Review of HMP Frankland.

Airports;

- Terminal 1 Heathrow Airport Baggage Area – Fire Safety Strategy.
- Terminal 2B Heathrow Airport – Fire Safety Strategy.
- Terminal 2A Heathrow Airport – Retail Fire Safety Strategy.
- Terminal 2AA Heathrow Airport – Fire Safety Strategy.
- Terminal 3 Heathrow Airport Integrated Baggage Systems – Fire Safety Strategy.
- Terminal 4 Heathrow Airport International Departures Lounge and NE Gate Refurbishment – Fire Safety Strategy.
- Heathrow Airport Retail Fire Safety Strategy.
- Stansted Airport – VCC Project – Fire Safety Strategy.

Training Centre;

- Knauf Drywall Training Centre, Kent – Fire Safety Strategy for a new Training Centre.

Residential Developments;

- Ocean Estates Residential, East London – Fire Safety Strategy for a new residential development.

Office Developments;

- Sanctuary Building, London – Fire Safety Strategy for an existing office development.

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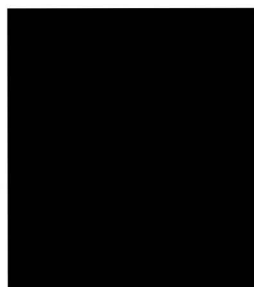


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Terry Ashton Curriculum Vitae

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Personal Details:



Position: Associate

Qualifications: PEng

Date of Birth: [REDACTED]

Nationality: [REDACTED]

Career Summary:

53 years experience of fire safety design of buildings and associated legislation.

Qualifications:

Member of the Society of Professional Engineers.

Committee Work:

Formerly involved in the work of the British Standards Institution. Was a member of FSH/14 the committee responsible for producing Codes of Practice for Fire Precautions in buildings and Chairman of FSH/14/1, the sub-committee responsible for providing draft codes for ratification by FSH/14.

Employment History:

1989 - Present	Exova Warringtonfire - Associate
1986 - 1989	City of London Corporation - District Surveyors Office
1963 - 1986	Building Regulation Division of the London County Council/Greater London Council Architects Department

Professional Experience:

Worked within the section of the Building Regulation Division of the Architects Department of the London County Council dealing with public safety in places of public entertainment.

Worked within a section of the Building Regulation Division of the Architects Department of the London County Council dealing with the fire certification of premises under the Offices Shops and Railway Premises Act 1963.

Worked within the Building Regulations Division of the Architects Department of the Greater London Council reaching the position of Group Leader responsible for the management of a group of 36 professional and technical staff dealing with the council's building authority, fire authority and entertainments licensing authority functions within the London Boroughs of Kensington, Chelsea, Wandsworth and Lambeth.

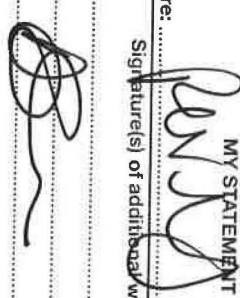
Employed as Assistant District Surveyor in the District Surveyors Division of the City of London Corporation with overall management of and responsibility for the fire safety aspects of the Building Regulations 1985 and the London Building Acts 1930 - 1978.

Has been directly responsible for a wide range of fire safety consultancy projects including major office buildings, shopping complexes, leisure complexes, hospitals, university buildings, railway stations and other multi-use complexes.

Recent Projects Include:

- Tanaka Business School, Imperial College, London
- Faraday Tower, University of Southampton
- Nido, Spitalfields, London
- St Bartholomews Hospital London
- Royal London Hospital
- John Radcliffe Hospital, Oxford
- University College London Hospital
- Royal Institution of Great Britain, London
- Refurbishment of HM Treasury and the MOD buildings in Whitehall, London
- New HQ for the Home Office, London
- High Wycombe Town Centre Extension
- One Hyde Park, London
- Francis Crick Institute, London
- Audley Square House, London
- St John's Wood Square, London

Metropolitan Police Station

Exhibit No. PCV/1	Cust No.	Serial No. MPSZ13134195
Ex. Book No. 119/3	OCU:	Lab Ref. No.
Description of exhibit: CUS OF ASHTON COOPER, LEE and McLENNAN comprising 4 pages		
From place/person: Robert Vetter		
Taken by: ACCORDANCE Date: 21/01/17 Time: 0905		
Sealed by: ACCORDANCE Date: 21/01/17 Time: 0905		
I IDENTIFY THIS EXHIBIT AS THAT REFERRED TO IN MY STATEMENT		
Signature: 		
Signature(s) of additional witness(es):		
MP 1404/04 MPSZ13134195 Form 420B		