



WHERE SAFETY MATTERS



We are
Committed to
Excellence

silfire.com

About us

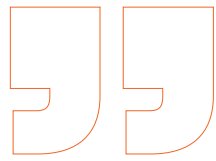
We strongly believe in our commitment to safety and quality and that is why our tag line is "Where safety matters, Perfection isn't impossible"

Having had handled iconic projects across the globe in their previous employments, SILFire's Consultants and Engineers have steadily grown to be one of the best in business with an impressive client list across the Middle East.

Now with a centrally located office in Dubai, UAE and having the most experienced engineers, We can provide unbiased expert analysis, advice and solutions on a wide range of fire safety issues to promoters, owners, developers, architects and consultants, right from our office in Dubai. Even though SILFire is a newly formed consultancy in the Middle East, the combined experience of our Consultants and Engineers is over 40 years in fire & life safety and fire engineering. With this much exposure, our engineers have worked on some of the world's most iconic projects, be it residential buildings, hotels, offices, malls or sports complex/stadiums.

From high-end fire safety strategies, fire-engineered solutions and fire safety auditing of existing buildings, we will be able to assist our clients with any fire safety requirements.





We provide
design-focused solutions
that respond to the architecture.

We did not employ people in our company, rather we built our company around people. Our consultants are the very best in fire engineering and we just provide the facilities for them to work efficiently. From day one we start to work in a truly unique way which can be disruptive to the industry as it exists in its present state. At SILFire, we encourage innovative thinking on both individual and group levels to achieve new heights.

Striving for the personal best means, we choose people who consistently deliver better results on every project. This means only one thing for our clients-impeccable success. There is absolutely no secret in the way we operate. With complete transparency, we aim to achieve complete accountability and thereby exponential growth for everyone.

Our engineers, having worked in millions of square feet of buildings, can proudly claim to have protected thousands of lives thus far, successfully. Our Specialty is Fire Safety Engineering (code consulting, performance-based fire engineering and fire risk assessment) - it's what we do and not just something we do. We provide design-focused solutions that respond to the architecture.



Our Services

We are a specialist provider of a complete range of fire and life safety consulting services to the construction industry, which includes:

- > Fire safety strategy for a building
- > Fire safety strategy for a master plan development
- > Fire safety strategy for a infrastructure development
- > Performance-based fire engineering
- > Fire and smoke modelling
- > Evacuation modelling
- > Third-party peer review of systems and strategy

We provide both a prescriptive-based solution as well as a performance-based engineering solution to our clients depending on the project needs and the design.

A prescriptive-based design is a method which follows the local AHJ requirements and international codes such as UAE Fire Code, NFPA, BS and IBC to design the building's fire safety, whereas a performance-based design is a method which allows innovative alternative solutions to be used for the design.



The benefits of performance-based design methods are

- › Reduce capital cost for the development
- › Reduce construction time
- › Enhance sustainability
- › Permits innovative design
- › Potential to reduce operational costs
- › Maximize the building's usable area
- › Reduce maintenance costs
- › Effective use of the building elements for fire safety

By employing SILFire as part of the design team, the following benefits will be provided to the design team:

- › Design risk will be minimized and the remaining risks will be discussed with stakeholders for an achievable solution.
- › As the risks are eliminated in the early stages, the approval process will be smoother and quicker.
- › Well-defined design review process provides early identification of non-compliances and rectification.
- › Huge savings in costs because of savings in time and effort involved.



Our Differentiators

Our engineers have worked with most architects from the Middle East and all types of projects, both big and small, and are of very high reputation within the industry. We can assure you that our services will be the very best in the industry and your satisfaction, in terms of timely project delivery and efficient communication, is guaranteed.

Our differentiators are;

- > Our engineers are very experienced and well-versed in practical solutions and local regulatory requirements
- > We are independent of manufacturers, contractors and MEP consultants.
- > Saves clients valuable time and money with our goal-driven project delivery approach.
- > We provide design-focused solutions that respond to the architectural design.
- > We are not multi-disciplined; we are dedicated professionals in fire safety.

Our engineers specialize in the following;

- > Fire and life safety code compliance
- > Performance-based fire engineering
- > Fire system review
- > Fire risk assessment
- > Emergency response procedures



Code Compliance Consulting

Fire safety design, and development of appropriate fire and life safety report, depends on understanding the basics of prescriptive design codes and being able to demonstrate compliance with local regulations. Our team fully understands the rationale behind the requirements of the code and effectively suggests the design team comply with the prescriptive code with minimal change to the design. We rely on our mastery of prescriptive codes to support the client throughout the design process to make the building fire-safe and in compliance with the local civil defence requirement. The fire and life safety code compliance review starts with our experienced engineer reviewing the architectural drawings based on the prescriptive code requirement.

As a result of the review, we issue the commented drawings and non-compliance list to the client for further coordination meetings with the relevant design team. During the meeting, the non-compliance item and potential solutions will be explained to the design team for consideration and to resolve the non-compliance in their updated revision of the drawings. Our engineers review the updated drawings, communicate with the client for the update and proceed to the design stage deliverable based on the client's decision. As a result, our team issues the FLS report and drawings markup as design stage deliverables. If the design stage is a final/detailed design, the design team will issue the local authority-compliant FLS drawings that are to be submitted to the Authority.



Third-Party Fire Strategy Peer Review

Fire strategy peer review services are essential in the fire engineering industry. This could be for various reasons such as, for complex buildings with various performance-based designs, the developer needs expert support to review the strategy. The most common reason would be that when a local lead architect takes over the design responsibility from an international architect, the local architect needs a subject matter expert to review the adopted fire strategy. We have expertise and experience in all areas of fire safety to carry out third-party peer reviews.

Third-Party Fire System Review

In order to design a fire-safe building, the fire protection systems shall be designed to align with the fire strategy in addition to the local and international standards. Our team has extensive knowledge of fire protection systems design, which helps review the drawings quickly and efficiently.

The following systems are reviewed as part of the fire and life safety systems.

- > Fire sprinkler system
- > Deluge system
- > Fire hose reel & Standpipe
- > Fire hydrant system
- > Foam suppression system
- > Clean agent extinguishing system
- > Fire detection and Alarm system
- > Emergency and exit lighting system
- > Kitchen hood suppression system
- > Smoke control system

Fire and Smoke Modelling (CFD)

As the construction industry progresses and technology enables the industry to build more complex buildings, computer modelling of fire and smoke spread is an increasingly essential tool for designing fire-safe buildings using fire engineering analysis methods. The CFD fire modelling analysis leads to an innovative and more practical smoke control/smoke management system design which gives more confidence to the designer, approving authority on how smoke will be controlled in a real fire situation. We use the latest FDS software (widely used software for fire modelling purposes) for fire modelling to provide the very best service to our clients.

CFD is widely used for atrium smoke control analysis, car park ventilation analysis and other code deviations observed in the architectural design.

Evacuation Modelling

All the fire and life safety codes (local and international) provide the methodology to size the egress element for the building based on the data derived from research. This method of sizing the egress system is simple to use for buildings, but do not resemble the practical emergency evacuation. We undertake complex egress analysis to predict the crowd/ higher density areas during evacuation, to assess the best use of the egress components and to estimate the evacuation time to a place of safety. Our analysis can be used to substantiate whether the provided exit capacity is sufficient or extended travel distance or reduces the size of the egress components (e.g. staircase width).

Emergency Response Procedures

We don't believe in generic off the shelf emergency response procedures. We provide customized procedures based on your facility management structure and operational procedure. We assess your facility plans, standard operating procedures, installed fire system and its strategy along with your input to develop an emergency response procedure that meets your requirement and assures that you are well prepared. With our expert advice, you will be provided with the emergency response procedure report which includes:

- › List of Emergency contact and phone no from your organization
- › Roles and responsibilities of safety team members
- › Procedures for the emergency team in case of Real alarm or false alarm
- › Emergency procedures
- › Evacuation procedures for various emergencies
- › Appendix which includes various check lists, assembly points location, Emergency command center location and other important resources

Emergency Evacuation Plan

It is vital to standardize the representation of the egress routes within the building and to relay the information to the occupants with a diagrammatic representation (with minimal usage of words) to achieve understanding. Continued growth in international travel and mobility means, it is important to diagrammatically represent the evacuation route and safety equipment to the occupants of a facility. We understand the significance of this and follow international standards in consideration of the local requirement, to produce evacuation plans for facilities which reduce possible confusion in times of emergency.

Project Expertise



Technohub 4

Client: Dubai Integrated Economic Zone (DIEZ)

Location: Nadd Hessa, Dubai, UAE

Description : High end Office building . SILFire role on the project was to deliver the fire and life safety (FLS) strategy and Peer review of Fire protection and the smoke management system of the building



Dammam stadium

Client: Confidential

Location: Dammam Sports City, KSA

Description : Football Stadium Capable to accommodate 45,000 spectators. SILFire role on the project was to peer review the FLS strategy, Fire protection and the smoke management system

Project Expertise



Residential Building

Client: Fatmeen Project Management Consultants

Location: Dubai Islands, Dubai, UAE

Description : Luxury Residential Highrise building . SILFire role on the project was to validate the concept design and take over the design to schematic and Detail design by undertaking technical reviews on architectural drawings and documents, followed by numerous coordination workshops. Once the design direction was aligned, we supported the multi-disciplinary design team to acquire the necessary authority approval



Technohub 3

Client: Dubai Integrated Economic Zone (DIEZ)

Location: Nadd Hessa, Dubai, UAE

Description : High end Office building . SILFire role on the project was to deliver the fire and life safety (FLS) strategy and Peer review of Fire protection and the smoke management system of the building

Project Expertise



Residential Building

Client: Fatmeen Project Management Consultants

Location: Dubai Islands, Dubai, UAE

Description : SILFire's role in the luxury residential high-rise project involved validating the initial concept design and advancing it through the schematic and detailed design phases. This process included conducting technical reviews of architectural drawings and documents, followed by several coordination workshops to align the design direction. Once the design was confirmed, SILFire supported the multi-disciplinary design team in securing the necessary authority approvals.



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