



Arch & Fire Professional (International) Limited (AFP)

is a high technological engineering consultant firm founded in 2006. Equipped with the frontier computer aided design and innovative technology, our services are widely ranging from architectural design, E&M design, fire engineering study, building performance study, on-site testing and other related engineering disciplines. Our team operates as a multi-discipline amalgamation of resources and the professional expertise as a whole and is capable to work on any project irrespective to its location. Nowadays, AFP gains a reputation for quality, innovation and professionalism in all aspects of its work.

Our team comprises of an experienced group of high academic professionals with advanced technical skills. Most of the team members are holders of Doctor or Master Degree in relevant majors. To provide cost-effective proactive strategies and tackle various special engineering problems, we always explore innovation-driven and knowledge-based solutions from the professional perspective. Through our accumulated experience and technical strength, we continuously provide support to our clients with quality professional consultancy services in Hong Kong, Mainland China and overseas.

Mission Statement

As a multi-discipline consultant firm, our mission is to equip ourselves with the most frontier technologies and to provide specialists and expertise to wherever, at whenever and for whatever they are needed.





Architectural Science Engineering

With our specialists and expertise in architectural science engineering and state-of-the-art analytic tools, we can provide our clients with the services exactly they needed including

- Architectural Design and AP Services
- Daylighting and Shading Analysis
- Natural Ventilation Study Using CFD Modelling
- Passive Architectural Design on Building Energy Efficiency

Builder Services Engineering

With in-depth knowledge, experience and expertise, we are working in traditional building services engineering with the following aspects:

- Electrical, Lighting and Power Distribution
- Fire Services Installation
- HVAC System
- Intelligent Building Applications
- Plumbing and Drainage Systems

Beyond that, we also adopt computation fluid dynamic (CFD) approach in the projects, which enable us to provide scientific and solid interpretation of the optimal design solutions at the earliest stage including.

- Heat Dissipation of Outdoor Condensers
- Thermal Performance Analysis on A/C System in Data Center
- Thermal Performance Analysis on Building Facade





Fire Engineering Design

Comparing the prescriptive requirements in relevant codes of practise, fire engineering design offers more flexibility for building designs and operation to achieve safe and effective solutions, especially for large or complex buildings. AFP has participated in fire engineering design at the very beginning when the company was founded. Our team has accumulated rich experiences for various local and overseas projects involving the following aspects:

- Cold/Hot Smoke Test
- Dynamic/Static Smoke Extraction System Design
- Evacuation Modelling and Simulation Analysis
- Fire Safety Management Proposal
- Performance-based Fire Safety Design
- Quantitative Fire Risk Analysis

Energy Audit and Energy Saving Study

To meet the needs of energy saving and improve the building energy efficiency, our team is capable to conduct a comprehensive review of the energy management system and find out the energy management opportunities from cost-benefit perspective. Our services include:

- Building Energy Simulation
- Chiller Plant System Optimization
- Performance-based Energy Efficiency Design
- Registered Energy Assessor (REA) Services under BEEO (Cap. 610)





Risk Analysis

There is a Chinese proverb: prevention is better than cure. The best way to prevent loss (life or property or both) is to dig out, reduce and eliminate/minimize risk. With rich knowledge and experiences, our team of specialists is capable in identifying and evaluating the risk of various disciplines. Our clients highly recommend our effective services which include the following aspects:

- Fire Risk Audit
- Quantitative Risk Assessment
- Risk Control and Management
- System Reliability Assessment

Pedestrians/Evacuees Movement Analysis

AFP has the global leading technique in pedestrian flow analysis and individuals' movement modelling, which can be applied to complex buildings, large public stadium, public transportation interchange (PTI), airport, train station and so on. Our innovative methods provide specific solutions to crowd control and accidents management. We offer

- Automatic Pedestrian Counting System Design
- Development of Intelligent Pedestrian Recognition System
- Pedestrian Flow Modelling and Simulation

















































Governmental/NGO/Public



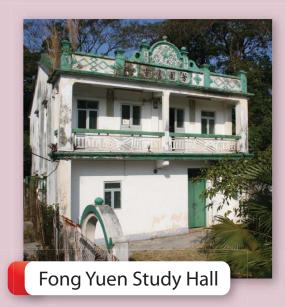


Governmental/NGO/Public





Victoria Park Swimming Pool Complex









RESIDENTIAL PROJECTS











