



Fire & Life Safety and Fire & Smoke Ventilation Systems

Protecting people and properties

WHAT YOU NEED TO KNOW

Among all the responsibilities owners, operators, and managers of infrastructure must manage, keeping people safe from the dangers of fire and smoke is the greatest. Fire and smoke are undoubtedly major risks and hazards in infrastructure projects, especially in buildings and spaces with restricted access, such as tunnels and enclosed structures, and require extensive measures that integrate science, technology, management, and law.

HOW WE CAN HELP

At WSP, we are consultants, scientists and engineers with a deep understanding of all aspects of emergency planning, fire protection engineering and safety system design, as well as standards, codes, and regulations. From conceptual design, to construction, installation and commissioning of infrastructure projects, we provide a suite of services paramount to managing fire and safety risks. We can help you:



Manage and mitigate risks



Obtain advanced fire and emergency system designs



Achieve operational goals



Develop mitigation plans and mandatory reports

OUR SERVICES

FIRE AND SMOKE MANAGEMENT & VENTILATION SYSTEMS

Using advanced technologies such as Computational Fluid Dynamics (CFD) analyses and software, one-dimensional aerodynamic analyses software (such as SES), and fire dynamic simulations and techniques, we provide comprehensive fire and smoke management systems and designs.

CODE COMPLIANCE REVIEW AND REPORT

We provide designs, reports, and traceability matrices that meet applicable codes, standards, and contractual safety requirements.

FIRE DETECTION & SUPPRESSION SYSTEM ANALYSES AND DESIGN

Our Fire & Life Safety (FLS) and hydraulic experts provide a full range of design and construction support for conceptual and detailed designs, including hydraulic calculations based on National Fire Protection Association (NFPA) requirements and local governing codes.

EMERGENCY PROCEDURES, PLANS & EVACUATION ANALYSES

We provide a comprehensive review of the emergency requirements and egress protocols, and in coordination with Authorities Having Jurisdiction (AHJs), owners and operators, we develop comprehensive emergency procedures that are in full compliance with local code and requirements.

FIRE AND LIFE SAFETY RISK ASSESSMENT AND MITIGATION

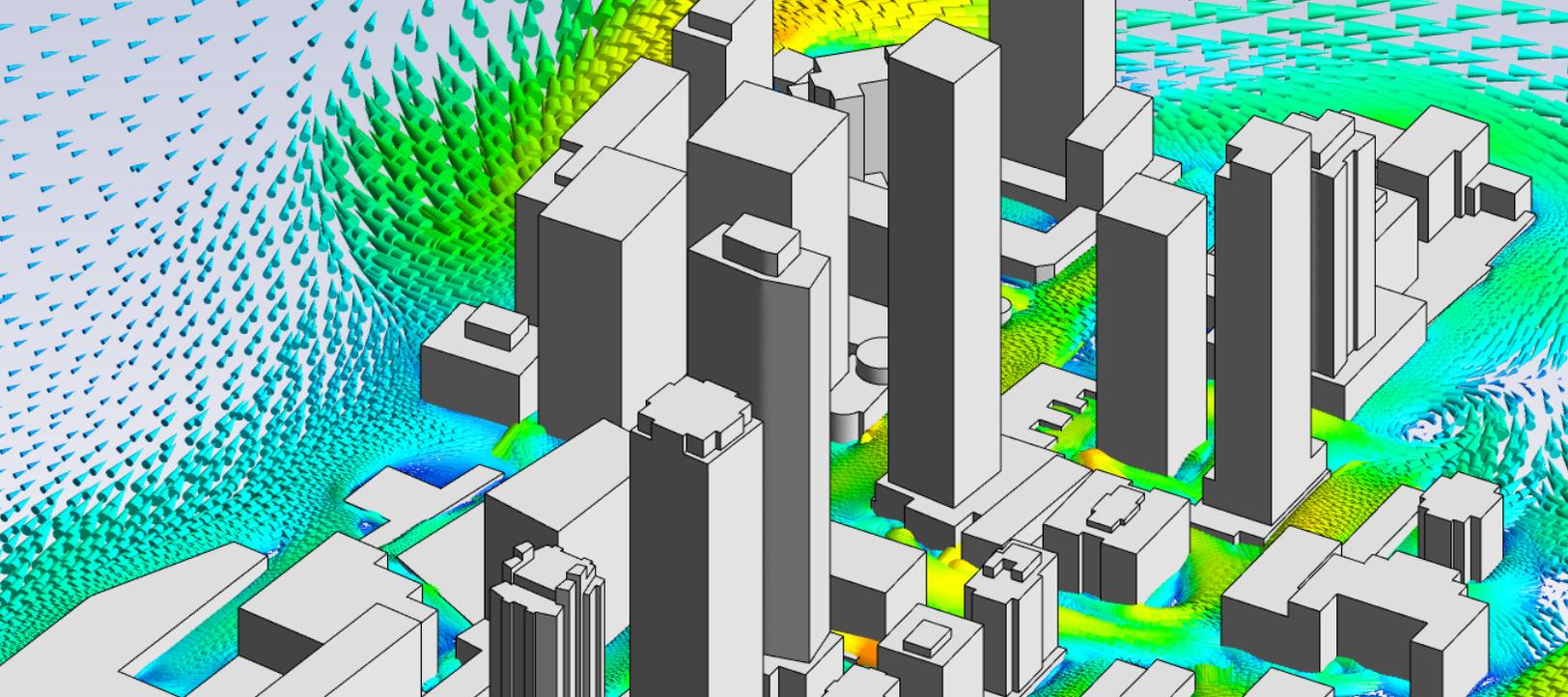
We perform comprehensive fire risks assessments and provide mitigation measures and plans.

SYSTEM INTEGRATION

Our FLS and Ventilation Systems (VS) team and System Integration Specialists can deliver a comprehensive System Integration Management Plan to ensure all systems perform as intended during normal and emergency situations. Through this process we also develop and execute System Integration Plans, System Integration Tests (SIT), and System Acceptance Test (SAT).

EQUIPMENT SELECTION & PROCUREMENT SERVICES

We provide a full suite of services for specification development, equipment selection, preparation of bid documentation and procurement services.



WHO WE ARE

As one of the world's leading professional services firms, WSP provides engineering and design services to clients in the Transportation & Infrastructure, Property & Buildings, Environment, Power & Energy, Resources and Industry sectors, as well as offering strategic advisory services. WSP's global experts include engineers, advisors, technicians, scientists, architects, planners, environmental specialists and surveyors, in addition to other design, program and construction management professionals. Our talented people are well positioned to deliver successful and sustainable projects, wherever clients need us.

THE VALUE TO YOU

By combining theoretical knowledge and practical application using advanced computer modelling of fire, smoke, evacuation and structural response, and developing robust fire and smoke system designs and plans, you can ensure the safety and security of people and assets.

At WSP, we deliver innovative, cost-effective solutions, cutting-edge technologies, and mitigation plans, system designs and reports. We have extensive experiencing working with infrastructure owners and operators; and can provide the technical knowledge and refined expertise to help you manage highly specialized FLS-related equipment and systems and acquire high-performing FLS and VS systems. Further, we can help you:



ENSURE SAFETY & SECURITY

Keep people, properties and assets safe and secure from fire and smoke hazards.



MAINTAIN COMPLIANCE

Develop safe and secure systems compliant with local, national and international codes, standards, and guidelines.



MITIGATE RISK

Reduce the risks of fire in buildings and infrastructure and mitigate risks to people and infrastructure such as tunnels, stations, and building ventilation systems.

CONTACT US

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