Capabilities

FRA staff has extensive capabilities in telecom and data center fire protection and risk assessment including:

- Very Early Warning Smoke Detection System Analysis and Design
- Smoke Control System Design and Smoke Movement Modeling
- Fire Detection and Suppression Modeling
- Dry, Wet, and Pre-action System Design
- Hybrid Suppression Design
- Water Mist System Design
- Inert and Clean Agent Design
- Reduced Oxygen Environment Analysis and Design
- Emergency & Mass Notification System Design
- Room Integrity Analysis
- System Commissioning
- Integrated Fire & Security
- Data Center Power Gen Protection
- PCA and Code Compliance
- Construction Administration
- Emergency Response Planning

FIRE & RISK ALLIANCE

About Us

Fire & Risk Alliance is a leader in fire and risk engineering. Our staff is composed of highly trained and educated engineers and scientists that focus on developing optimized solutions for our clients throughout the world. Our hands on practical experience, active engagement in the industry, and our applied research ensure that we provide state of the art solutions to our clients.

Mission Critical Protection

FRA understands the need to appropriately protect mission critical facilities while ensuring that accidental damage is avoided. We have performed a variety of work on data centers in Silicon Valley, for credit card processing centers, massive-multi parallel computing facilities, and numerous other clients. Our analysis and design process integrates the latest in analytical capabilities along with state of the art fire detection and suppression. Whether it is a hybrid, pre-action, hypoxic, or other system we can provide the design and support analysis to ensure your facility is protected. Our designs meet NFPA 75 and 76, but more importantly we focus on ensuring that our clients understand what the fire protection systems will do and ensure that their objectives are met for SCIF, Level 1, 2, and 3 systems. We develop innovative solutions for the most complex problems that suit our clients needs and demands.

Project Experience

- Credit Card Processing Facility, VA
- Refinery Control Center and Operations Hub, KSA
- DOD Data Center, VA
- Utah Data Center, UT
- Warrenton Training Center, VA
- AWS Data Center, VA
- Metering Platform Control Center, KSA
- TELCO 3, NY
- Apparel Manufacturer, MD
- Oil & Gas Major, Data Center and Control Facility, KSA
- Twinsburg Data Center, OH

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Or visit us on the web to see our complete range of services

Smoke Control and Early Warning Notification Modeling

FRA staff are experts in the use of zone, CFD, and specialty models. These tools are used for the evaluation of smoke movement in high air flow areas, early warning notification systems, and the design of smoke control systems in order to ensure that the design of fire detection, suppression, and notification systems are appropriate. Smoke movement and control modeling ensures that ventilation conditions are well understood and that the detection scheme ensures rapid detection and protection of assets.

From simple models to complex dynamic models such as Pathfinder, FRA can leverage the tools to identify potential pinch points, effects of barriers, signage, and smoke to ensure that occupants in potentially unfamiliar surroundings can egress in a safe manner.

Applied R&D and Product Testing

The release of fire suppressants into an enclosure can often cause concern for the equipment. Accidental and even intentional discharge has the potential to damage equipment and cause extensive business continuity issues.

FRA can help evaluate existing and novel technologies to address detection and suppression needs for your specific facility. We have undertaken evaluations of acoustic, hybrid, water-mist, clean-agent, and other unique suppression systems. When paired with proper analysis and detection systems our clients are assured that they will be protected and that all available resources have been evaluated. Our objective is always to make sure that the fire protection "box" doesn't get in the way of our clients achieving their goals.