

Capabilities

FRA staff has extensive capabilities in hospitality and entertainment fire protection and risk assessment including:

- ✦ Fire Protection System Design
- ✦ Smoke Control System Design and Smoke Movement Modeling
- ✦ Atrium and Smoke Control Rational Analysis and Design
- ✦ Fire Detection and Suppression Modeling
- ✦ Performance-Based Design
- ✦ Special Hazards Protection
- ✦ Fire and Egress Modeling
- ✦ Emergency & Mass Notification System Design
- ✦ Property Conditions Assessments
- ✦ Building Cladding Assessments
- ✦ Third Party Plan Review
- ✦ Fire Protection System Testing and Commissioning
- ✦ Engineering Judgements and Equivalencies
- ✦ Construction Administration
- ✦ Code Issue Resolution/Support
- ✦ Development of Emergency Preparedness Plans



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.



Hospitality and entertainment facilities are among the most complex and challenging in the built environment. Hotels and lodging facilities have evolved to include expansive mixed-use campuses with themed entertainment features and lodging co-mingled into a single guest experience. FRA is a valuable resource and team member that is able to navigate the many fire and life safety challenges inherent in hospitality and entertainment facilities.

Property Condition Assessments

FRA has provided extensive hospitality and entertainment property condition assessments of all types of facilities across eighteen different brands. FRA staff are experts at evaluating these complex buildings and campuses and are able to identify gaps in protection or latent risks such as flammable cladding in order to support any fire protection & life safety services the buildings may require.

Hospitality and Entertainment



Project Experience

- Integrated Hotel, Ride, and Gaming Area Smoke Control and Egress Modeling, FL
- Theater Smoke Control and Egress Modeling, FL
- Hotel and Conference Center PCA, HA
- Hotel Lobby and Atrium Smoke Control Modeling, KSA
- Cantilever Building Compliance Fire Modeling, NY
- Hotel Fire Detection and Suppression Design, VA
- Hotel and Condominium Fire Detection Design, VA
- Performance-Based Design, CA
- Hotel and Casino Third Party Review, MA

Contact

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

Fire Protection Engineering Design & Consulting

FRA works diligently with clients to ensure that their vision is able to come to fruition while ensuring fire and life safety objectives are met. We integrate traditional prescriptive fire protection design approaches with performance-based design options for unique structures. We provide comprehensive design services from detailed shop drawings and hydraulic analysis, to detection and mass notification systems.

Fire, Smoke Control, and Egress Modeling

FRA has extensive knowledge of various CFD and zone fire models including the most widely used complex fire model, the NIST developed Fire Dynamics Simulator. These tools are invaluable in demonstrating compliance to AHJ's and in support of performance based design projects.

We have additional expertise with specialty egress/people movement models. These tools are used for the evaluation of design fires, smoke movement, design of smoke control systems, and egress analysis in order to ensure that the design of fire detection, suppression, notification, and egress systems are appropriate. Smoke movement and control modeling ensures that corridor and atrium ventilation conditions are well understood and that fans and vents are located and sized correctly.

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.

