

# Code Consulting



**Building/Fire Code Consulting** – Analyzing building, life safety and fire protection codes and standards to provide input for the fire protection master planning process. The code expertise of RJA consultants enables architects, engineers and building owners/managers to maximize their designs while meeting the intent of all applicable codes and standards.

**Code Equivalency Development** – Combining the world's largest life safety code database, experienced engineers and leading-edge computer modeling technology to evaluate current code compliance of facilities – particularly those in the healthcare field – and develop alternative fire protection strategies.

- **FSES Studies** – Application of the Fire Safety Evaluation System (FSES) approach to determining code equivalency
- **Statement of Conditions** – Assistance in preparing Statement of Conditions including facilities evaluation, deficiency documentation and corrective action plans

**Performance-based Code Compliance** – Applying the principles of performance-based design to determine alternative methods for satisfying the fire protection and life safety intent of the applicable codes and standards. This process involves the use of scientific modeling tools and methods for determining fire growth, exit times, system activation times, smoke movement and other variables.

- **Timed Egress Analysis** – Identification of safe existing designs through analysis of computer models
- **Fire Modeling** – Evaluation of design fire hazards over a broad spectrum of fuel types and building geometries using fluid dynamics models
- **Smoke Control** – Development of computer model designs and test methods to predict smoke production and movement within a building
- **Fire Alarm/Sprinkler Response** – Prediction of time required for systems to operate under variable conditions as determined by computer modeling
- **Calculated Fire Resistance** – Use of fire growth and heat transfer models to predict fire resistance of building materials and structural components

**Audits and Surveys** – Evaluating the fire protection – alarm, smoke control and sprinkler systems – and handicapped access/egress elements of a building or facility. An accurate assessment of these vital building functions is used to provide guidance in retrofit projects as well as to assess properties for acquisition.

**Fire Protection Master Planning** – Developing a fire protection master plan to address the short- and long- term life safety objectives of the building or facility. The master plan addresses applicable building and fire safety codes, requirements of the project and alternative approaches.

**Negotiation** – Communicating on behalf of the architect/engineer and the building owner/developer with fire, code and insurance officials regarding the project's fire protection approach. The intent is to explain, clarify and interpret the relationship of the fire protection master plan as it applies to local code requirements. By overcoming concerns on the part of the AHJ, the project can proceed in a timely and cost-effective manner.

