

# FORCON INTERNATIONAL

**BRIAN P. CARNAZZA, P.E., LEED AP**

## **SUMMARY**

Mr. Carnazza is an established engineer in the field of fire protection engineering. His specialties include but are not limited to fire protection systems failure analysis, interpretation and enforcement of fire codes, life safety/building code surveys, design, inspection and analysis of fire protection systems, fire hazard analysis.

Mr. Carnazza has extensive experience utilizing the National Fire Protection Association codes, standards, and recommended practices, as well as the model building and fire prevention codes, Factory Mutual and Industrial Risk Insurers guidelines and Underwriter's Laboratory listings. In addition, Mr. Carnazza's fire protection expertise includes flammable and combustible liquids, warehouse fire protection, DoD/Military facilities, fire resistant rated building construction assemblies, and firestopping.

## **EDUCATION**

Master of Science in Fire Protection Engineering – Worcester Polytechnic Institute; 2005

Bachelor of Science in Mechanical Engineering – Worcester Polytechnic Institute; 2003

## **REGISTRATIONS & CERTIFICATIONS**

Registered Professional Engineer in the following States:

- Massachusetts (#47370-EN-FP)
- Virginia (#051489)

Certified Firestop Inspector, International Firestop Council.

LEED Accredited Professional (LEED AP)

## **PROFESSIONAL ASSOCIATIONS**

National Fire Protection Association (NFPA)

Society of Fire Protection Engineers (SFPE)

## **CAREER HISTORY**

### **FORCON International – Fire Protection Engineer**

Providing forensic investigation analysis and expert witness services as it relates to his fields of expertise.

### **Fisher Engineering, Inc. – Senior Fire Protection Engineer**

Perform design and construction related services for all types of fire suppression and alarm systems. Perform code analysis and evaluation of facilities, including offices, industrial buildings, warehouses, aircraft hangars and hazardous materials storage buildings. Third party special inspector for smoke control and firestop systems. Commission fire protection and life safety systems.

### **Fire Risk Management, Inc. – Principal Fire Protection Engineer**

Principal Engineer, responsible for the Mid-Atlantic region, providing regional oversight and management of Engineering and Systems Support services provided by FRM. Technical/Engineering responsibilities include providing fire protection engineering and analysis, research, and systems design support to both Government and Commercial clientele. FRM was purchased by Fisher Engineering in November 2018.

### **BPC Fire & Life Safety, Inc. – President, Principal Fire Protection Engineer**

President and Principal Engineer, responsible for the technical oversight and management of all Engineering and Systems Support services provided by BPC. Certified firestop inspector through Intertek's Qualified Personnel

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(IQP) Program and the International Firestop Council (IFC), trained to perform inspections on firestops per the ASTM E2174 and E2393 standards. Provided fire protection engineering designer of record (FPE-DOR) and fire protection quality control (FPQC) services at multiple DOD installations. Performed survey of existing buildings and prepared NFPA 101 Life Safety Evaluation reports on the existing conditions and the planned renovation projects. Performed third party smoke control stair pressurization special inspections.

## **U.S. Navy, NAVFAC MID-ATLANTIC – Senior Fire Protection Engineer**

Performed installation surveys to identify and evaluate existing life safety, sprinkler, fire alarm, and DOD UFC code deficiencies. Evaluated complex engineering designs and construction issues while communicating with customers and team members to keep projects on schedule. Developed workable solutions during design and construction that meet DoD criteria while being mindful of the costs. In-house design service included preparing sprinkler system hydraulic calculations, life safety and building code basis of design, fire pump calculations, specifications, fire alarm and mass notifications system drawings. Consistently enforced the applicable codes and Navy specific criteria throughout design and during construction quality control visits. Performed testing and inspection of complex and special fire protection systems including, fire pumps, fire water tanks, clean agents (Halon alternative), smoke control, smoke pressurization, flame detectors, and low expansion AFFF grate nozzle (hangars) systems. Participated in numerous Concept Design Workshops, Post Award Kickoff meetings, and prepared fire protection designs for in-house MILCON Design Build projects.

## **Rolf Jensen & Associates – Code Consultant/Fire Protection Engineer**

Managed multiple fire protection projects simultaneously, including sprinkler design, fire alarm design, building code consulting, life safety evaluations, construction quality control, commissioning of fire protection systems, and hazardous materials analysis. Developed, implemented, and managed the first firestop inspection program in company history.

## **3M Company – Fire Protection Product Engineer**

Prepared engineering judgments and performed fire testing at 3M's fire test laboratory on the latest advances in ablative, endothermic, intumescent, and insulative fire technology. Provided technical support in maintaining a fire resistive wrap that averages 30 million dollars in sales annually. Lead technical fire engineer on a team of chemical Engineers, sales and marketing personnel, and manufacturing engineers in the development of a new fire resistive duct wrap product. Also provided technical support and testing on 3M's Clean Agent Halon replacement program with NOVEC 1230. Performed both small and large-scale fire testing and prepared test reports. Performed major data acquisition on large-scale fire testing consisting of custom designed experiments.

## **PUBLICATIONS**

- *Greening Fire Suppression Systems*. Carnazza, B.P.; Orazine, E; ICC Building Safety Journal, June 2008.
- *Will Fire Resistive Gypsum Shafts Continue to be the Best Available Option?* Carnazza, B.P.; International Fire Protection Magazine Issue 28, November 2006.
- *FK-5-1-12 Performance Characteristics: Recent Developments*. Carnazza, B. P.; Owens, J. G.; Rivers, P. E.; Schmeer, J. S.; HOTWC 2004.

## **TECHNICAL COMMITTEES & SPECIAL PROJECTS**

### **National Fire Protection Association (NFPA)**

- (Past) Alternate, Technical Correlating Committee on NFPA 13 Standard for the Installation of Sprinkler Systems
- Alternate, Operations Committee on NFPA 30 Flammable and Combustible Liquids Code