

# Fire Protection Engineering

Fire protection systems are often a forgotten part of a building, yet the NFPA reports that every 23 seconds in the United States, a fire department responds to a fire somewhere in the nation.<sup>1</sup> And, fires at industrial and manufacturing properties account for US \$1.2 billion in direct property damage each year.

As a society, we rely on modern fire protection and life safety systems to aid in alerting occupants, calling for help, extinguishing or slowing the fire, and containing the danger if possible. But what happens when one of these 'forgotten', yet critical, systems fails to work?

## Fire Protection System Failure Investigations

Envista's Fire Protection Engineering team has decades of experience providing expert consulting across a wide range of technical disciplines from mechanical, electrical, and structural engineering to fire investigation and industrial hygiene.

With specialized expertise working with building codes and standards, detection equipment, fire suppression systems, and fire-related construction techniques, our team has performed thousands of post-loss investigations following complex, catastrophic fires and other accidents resulting from the failure or lack of proper fire protection systems.

We not only help determine the cause of fire protection system failure but can also perform physical inspections and conduct testing and maintenance audits mandated by local building codes and standards so that stakeholders are able to ascertain liability and subrogation potential.

**Advancements in fire protection engineering technology and life safety practices have resulted in drastic declines (54%) in fire deaths over the last 40 years in the U.S., a period in which the Country saw drastic (46%) population growth.<sup>2</sup>**

## Areas of Expertise

Our experts have the knowledge and capability to inspect fire protection systems and analyze incidents relating to:

- » Commodity Fire Characteristics; Product Testing and Evaluation
- » Dry Chemical Systems
- » Wet Chemical Systems, UL300 Systems
- » Evaluations of Fire Growth and Smoke Transport
- » Explosion Venting
- » Fire Barriers
- » Fire Sprinkler Systems
- » Fire Walls and Other Passive Barriers
- » Gaseous Agents
- » Separation Distance
- » Smoke Control

## For More Information

To learn more about Envista's fire protection engineering services or to submit an assignment, contact us at [project@envistaforensics.com](mailto:project@envistaforensics.com).

<sup>1</sup> US population by year, race, age, ethnicity, & more | USAFacts

<sup>2</sup> Latest NFPA "Fire Loss in the U.S." report shows 8 percent increase in U.S. fires from 2019 to 2020 | NFPA