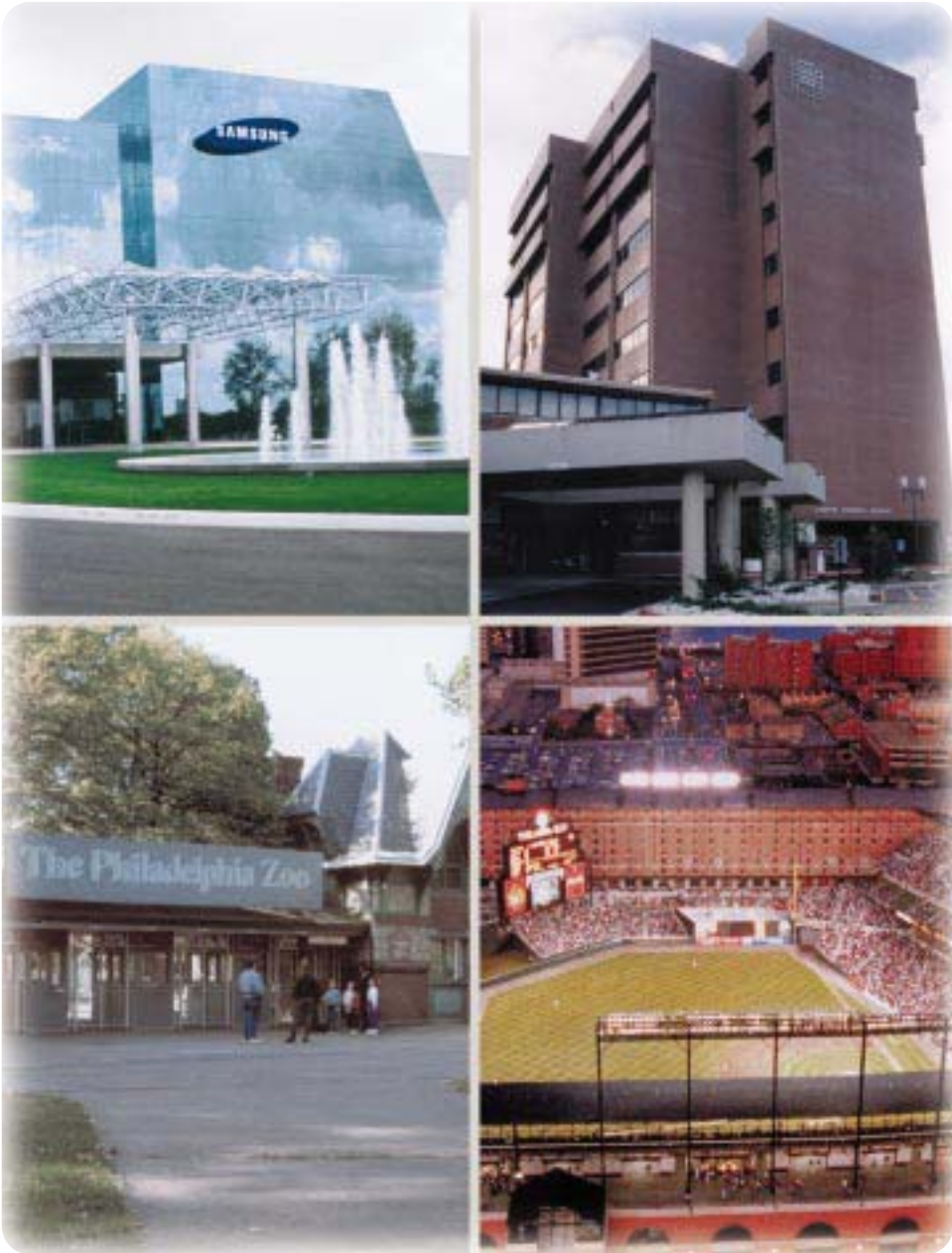


# SIMPLEX FIRE DETECTION AND ALARM SYSTEMS



FOR FACILITIES  
LARGE AND  
SMALL,  
SIMPLEX  
PROVIDES THE  
BEST FIRE  
DETECTION  
AND ALARM  
SOLUTIONS.

# SIMPLEX

## HAS YOU COVERED.

### FOUR KEY COMPONENTS OF FIRE SAFETY

People, information, property, and time. To alert, to record, to communicate. To detect fire before it spreads. To announce information in real-time. This is the Simplex difference.

Simplex, the market leader in fire detection and alarm systems, has a full range of products; broad experience in systems integration, project management, and installation; regulatory expertise; and the commitment to service that you need to get the fire detection system that best protects your facilities and its occupants. With knowledge, superb technology, and customer understanding, Simplex fire detection and alarm systems are the leading choice for protecting people, property, and peace of mind.

The following pages describe the four key components of the Simplex approach to fire safety and building management:

**1 Building systems knowledge and expertise** Simplex applies its experience with thousands of fire detection and alarm systems to your facility. With over 1,500 NICET (National Institute for Certification in Engineering Technologies) certified employees and over 100 years of experience, Simplex can adapt quickly to offer solutions for your changing requirements. Our sales, installation, and service teams work together to ensure that your fire alarm system is up and running on time and on budget.

**2 Customer-focused product design, service, and support** At Simplex, product design begins with our customer's requirements. Our Voice of the Customer program formally incorporates customer feedback in everything we do, from design through installation and maintenance. So our products and services are engineered to give you code compliance, safety, and cost effectiveness. Moreover, we offer a complete range of products and services to suit every application.

**3 Innovative, technology-enabled products and services** Simplex technology leads the industry. For example, Simplex is the first fire systems supplier to offer BACnet™ compatibility, simplifying the interface to other building systems using an open architecture design.

Patented TrueAlarm® addressable analog sensors constantly measure and adjust for environmental conditions to assure quick response to fires and reduce nuisance alarms. TrueAlert™ is the industry's first addressable notification system, offering true end-to-end intelligence with interactive communications between each appliance and the control panel.

Our own UL-listed and FM-approved Central Station is backed by our FlashRoute<sup>SM</sup> Central Monitoring technology. FlashRoute provides a seamless transfer of communications and control via a patented, real-time switching process to a completely redundant backup site, eliminating the risks associated with present day remote monitoring communications techniques.

**4 A global network of local industry experts** With the comprehensive geographic coverage of 170 wholly-owned branch offices and 65 international subsidiaries and affiliates, our logistical support and consistent high quality services simply can't be matched. Simplex has developed knowledge-based information tools to share information and knowledge throughout our organization. Wherever you're located, you benefit from Simplex expertise, knowledge, and experience.

# CUSTOM DESIGNED TO YOUR APPLICATION

With over 500,000 customers in more than 65 countries, Simplex has solved many challenges by designing the best-in-class products, applications, and services for customers around the globe. Simplex fire systems cover the whole range of facility types:

- Small corner stores to giant shopping malls
- Health clinics to multi-building medical centers
- Bed-and-breakfasts to major resorts
- Preschools to universities
- Small office buildings to high-rise office towers
- Manufacturing, automotive, and high technology
- Airports, nuclear power plants and professional sports stadiums

Simplex has extensive, specialized experience in many industries. Every day Simplex is working closely with consulting and specifying engineers, architects, building owners, contractors and local fire service officials. Simplex leverages this expertise to offer superior solutions by integrating total building safety designed to meet unique customer requirements. A complete portfolio of solutions is available including:

- Fire detection
- Video badging
- Access control
- CCTV monitoring
- Voice and data networking
- Paging
- Intercom systems
- Central monitoring
- Workforce management



## **Camden Yards**

*Camden Yards, home of the Baltimore Orioles, is considered one of the finest parks in Major League Baseball. Opened in 1992, the success of Camden Yards inspired Cleveland, Denver and other cities to build their own versions of this new retro style ballpark. While Baltimore fans watch their beloved Orioles play, a 2120/4100 fire alarm system from Simplex provides reliable, technologically advanced protection. The 4100 system is capable of supporting up to 1,000 addressable points and utilizes the Simplex TrueAlarm smoke sensing system, which provides outstanding early-warning detection.*

Customer-focused product design, service,  
and support

# WHEN CUSTOMERS TALK, SIMPLEX LISTENS.



## **Samsung Austin Semiconductor**

*At the \$1.3 billion Samsung Austin Semiconductor fabrication plant in Austin, Texas, Simplex used its fire alarm expertise, the outstanding flexibility of its 4120 Fire Detection Network, and the vast resources of the field network to deliver a high quality, early detection solution. Further illustrating the breadth of its overall capabilities, Simplex installed the elaborate Samsung system with its own professional installation team while meeting an extremely aggressive construction schedule.*

At Simplex, customer ideas and feedback influence product design through our Voice of the Customer program. In addition to product design, customers give us important insights into installation efficiencies, expandability, maintenance, and support.

- **Easy to expand** Simplex fire alarm products are modular. You buy only the features you need. Our modular design simplifies and reduces the cost of later upgrades.
- **Easy to operate** Our customers reinforced to us the importance of increasing efficiency and reducing personnel cost. So Simplex 4020, 4100, and 4120 panels share a common operator interface. Our common operator interfaces, with their menu-driven text, and our optional graphical operator interfaces are designed to reduce training cost and assure the correct response in an emergency. We also offer local languages for international customers.
- **Easy to install** Years of working with customers taught Simplex many ways to ease the installation process. For example, digital identification of line faults saves time in repairing wiring faults. And during construction and renovation, you can easily replace TrueAlarm smoke sensors with interchangeable heat sensors, without reprogramming, so you're always protected.
- **Life-cycle cost benefits** Simplex fire products are designed and built to last. When you need to upgrade or expand your system, our backward compatible/forward engineered designs provide a cost-effective migration path from your existing system to the latest technology.



# PROTECTING YOUR LONG-TERM INVESTMENTS

The Simplex 4120 Peer-to-Peer Distributed Network Fire Alarm System is ideal for both high-rise towers and multi-building facilities. A 4120 networked system can accommodate up to 392,000 addressable points, and is compatible with the Simplex 4100, 4020, and 4010 fire panels as well as legacy 2120 Multiplex and 4002 fire alarm panels. Simplex networks can also be integrated with other building systems, such as security and HVAC, using a variety of gateway and protocols including BACnet.

- **Fast and reliable** The 4120 distributed, peer-to-peer token ring fire alarm network simplifies expansion and assures high survivability of communications and rapid response times.
- **Minimizes maintenance** Patented TrueAlarm addressable analog design makes it possible to pinpoint the exact location of alarms and troubles throughout the network and to adjust the sensitivity of sensors to real-world environmental conditions. Built-in diagnostics pinpoint the location of a network fault on the operator display. The 'Set Host' feature allows access from a remote location to all networked panels for rapid evaluation of system status.
- **Assures peak performance** Peak value logging, another patented TrueAlarm feature, allows you to monitor and calibrate the performance of your system to changing environmental conditions.
- **Keeps occupants informed** Our integral voice evacuation system lets you create extensive voice messages in multiple languages. Each message may be unique to a specific area or hazard and may be activated manually or automatically.



**First Canadian Place**

*In some ways, First Canadian Place, the 72-story office and retail complex that's the lifeblood of Toronto's financial district, is like a small city. On any given work day, as many as 300,000 people pass through the doors of Canada's tallest building. So the owners of the property, when they set out to upgrade the 3.4 million square-foot complex, wanted the best and most technologically advanced fire detection and alarm system. The engineer's specification also called for a system with the survivability to withstand a catastrophic event such as the World Trade Center disaster. In this extremely challenging retrofit project, Simplex was able to meet each and every requirement and fulfill the customer's vision for a state-of-the-art fire detection system.*

Excellent, technology-enabled products and services

# FROM SMALL TO LARGE, SIMPLEX HAS A FULL RANGE of FIRE ALARM SYSTEMS.

Manufactured to provide the highest levels of reliability, survivability and accuracy

Simplex fire products are tested and listed by leading test laboratories and meet or exceed local regulatory requirements.

## How to choose the fire system that's right for you

The diagram on this page and the chart on the right describe the full range of Simplex fire alarm systems. Use this summary information to begin the process of selecting a Simplex system to meet your facility's special requirements.

### Ideal Simplex System

4004



4005



4010



4020



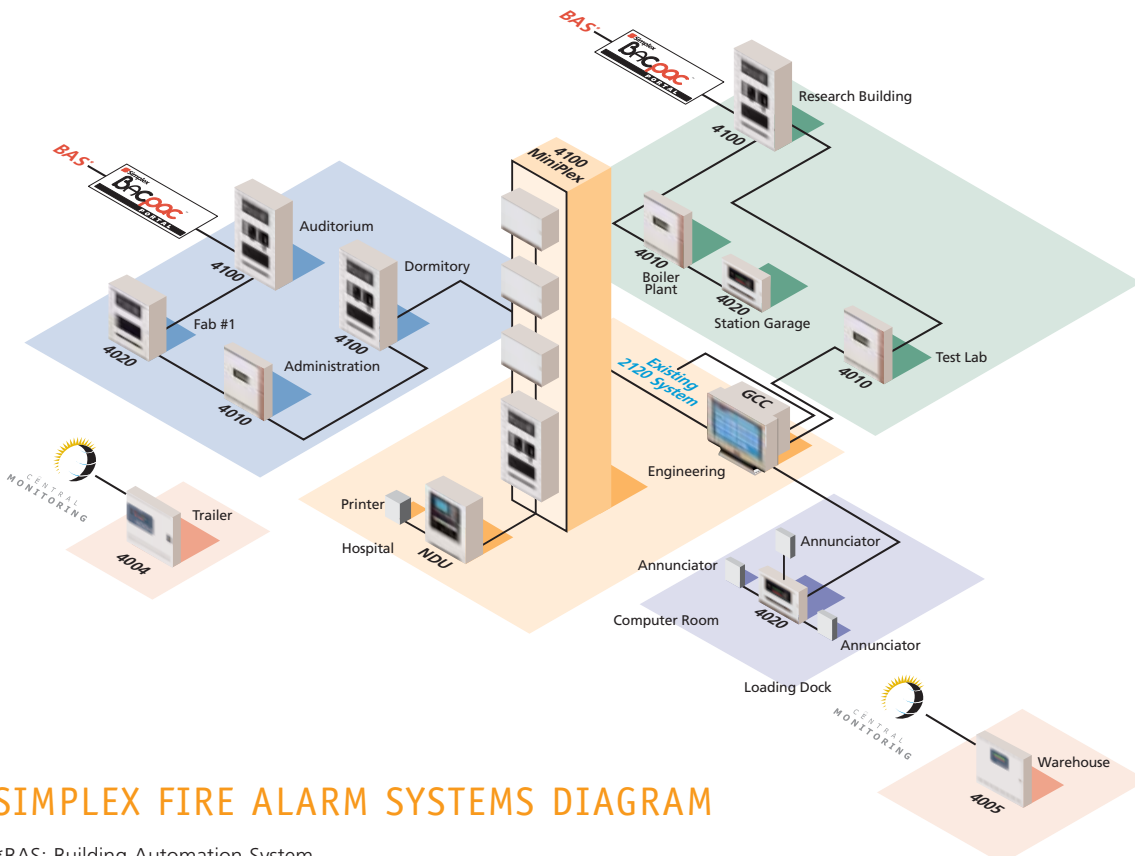
4100/  
4100  
Voice



4100  
Miniplex



4120  
Distrib-  
uted  
Network



## SIMPLEX FIRE ALARM SYSTEMS DIAGRAM

\*BAS: Building Automation System

Building Size	Application	Capacity	Decision Factors
1-2 stories	Restaurants, small stores, churches, inns, small nursing homes, small board and care facilities	2-8 zones (non-addressable)	For small facilities, the 4004 non-addressable (zoned) panel is our simplest, most economical fire panel designed with many of the elements of higher-capacity systems, including modular design, 100% on-site programming, drift compensation, and optional voice with 4003 Voice Evacuation System.
1-4 stories	Department stores, bulk merchandise stores, warehouses, apartments and condominiums, small office buildings, nursing homes, inns and motels, small board and care facilities	8-36 zones (non-addressable)	Efficiently designed for small to medium-sized facilities, the 4005 non-addressable (zoned) panel incorporates many of the elements of higher-capacity systems, including modular design, 100% on-site programming, menu-driven 80-character LCD operator display, event history logs, drift compensation, and optional voice with 4003 Voice Evacuation System.
1-6 stories	K-12 schools, small hospitals, nursing homes, strip malls, inns and motels, small hotels, small office buildings, assisted living facilities, apartments and condominiums, small board and care facilities	250 addressable analog points	For small and mid-size buildings with more than 16 zones, the addressable 4010 is more economical than conventional zoned systems.  Supports device-level ground fault detection and device-level short circuit isolation, automatic maintenance alerts, connectivity to a 4120 network, auto-programming, remote access, TrueAlarm smoke sensors, menu-driven operator interface, and optional voice with 4003 Voice Evacuation System.
1-6 stories	Small hospitals, K-12 schools, small board and care facilities, nursing homes, strip malls, inns and motels, small hotels, assisted living facilities, residential apartments and condominiums, small office buildings	508 addressable analog points	The 4020 system has double the point capacity of the 4010, making it an efficient way to protect as many as 300 discrete areas. Proven technology provides short circuit isolation, automatic maintenance alerts, connectivity to a 4120 network, remote access, TrueAlarm smoke sensors, BACnet compatibility, 100% on-site programming, menu-driven operator interface, and optional voice with 4003 Voice Evacuation System.
1-12 stories	Hospitals, high-rise buildings, colleges, universities, high schools, industrial plants, commercial and government facilities	1,000 addressable analog points	Encompassing all the features and benefits of the 4020 system, the 4100 has a high point capacity that makes it suitable for protecting more than 400 discrete areas. Integral voice, with extensive messaging and multiple languages, is also available.
1-12 stories	Hospitals, high-rise buildings, colleges, universities, high schools, industrial plants, commercial and government facilities	1,000 addressable analog points	Encompassing all the features and benefits of the 4100 and 4100 Voice systems, the 4100 Miniplex is appropriate for any building with six or more stories or a warehouse with more than 200,000 square feet (18,580 square meters). The distributed design creates significant cost savings on installation, materials, power, and battery standby requirements over non-distributed systems.
1-200 stories	High-rise office towers and multi-building facilities such as hospitals, colleges and universities, stadiums, manufacturing and other industrial facilities, government buildings, airports, and sports stadiums	392,000 addressable analog points	For multi-building and large, complex facilities, the 4120 Fire Alarm Network System links multiple fire alarm control panels, simplifies expansion, assures high survivability of communications, and results in rapid response times. An optional graphical operator interface reduces training costs.

# FLEXIBLE SYSTEM OPTIONS

## TO MEET YOUR FACILITY'S NEEDS

With a broad, flexible product line and many peripherals, Simplex can meet all your unique fire safety needs. Simplex fire products are designed to be compatible with each other, to meet local and national building codes, and to give you the ability to change their configuration as your facility's needs change. Simplex builds the principles of modular design, product-to-product compatibility, and consistent user interfaces into every fire system and peripheral device.



### Graphic Command Center (GCC)/ Network Processing Unit (NPU)

Our Windows® based desktop Graphic Command Center, and its counterpart, the Network Processing Unit, are UL-listed and FM-approved Proprietary Receiving Units designed for use with Simplex 4120 network systems. These workstations can display multi-level facility layouts and precise action messages for accurate alarm response. Each can recognize up to 50,000 points for annunciation and control, and up to 500,000 events may be stored in historical logs for viewing and electronic database analysis. Rack-mount models and optional languages are available. In addition, all models support the integration and isolation of multiple network loops, offering maximum flexibility and survivability for large single- and multi-building networks.



### BACpac™ Portal

The first open systems solution to link fire detection and alarm systems to other building systems, the BACpac portal offers easy connection to other building systems without compromising fire system performance. Conforms to the ASHRAE (American Society of Heating, Refrigerating and Air-conditioning Engineers) and ANSI (American National Standards Institute) standards for interoperability of building automation devices.



### 4003 Voice Evacuation and Emergency Communications System

A cost-effective way to add voice capability to any stand-alone fire panel in small and medium-size building applications.



### 4009 IDNet Notification Appliance Circuit (NAC) Extender

An economical solution for compliance with ADA (Americans with Disability Act) requirements, the 4009 IDNet NAC Extender expands the capacity of virtually any fire alarm control panel, both non-addressable and addressable. Provides enhanced troubleshooting diagnostics and options for monitoring and notification of remote, unoccupied buildings.



### Network Display Unit (NDU)

Another system annunciator/operator control option for 4120 networks, the NDU has a two-line, 80-character, high resolution display for central annunciation of up to 2,500 points.



## The TrueAlarm Family of Smoke and Heat Detection Products

The TrueAlarm family of smoke and heat detection products includes both intelligent addressable analog sensors as well as non-addressable detectors.

All TrueAlarm systems use advanced drift compensation technology, and automatically adjust to ambient conditions, virtually eliminating nuisance alarms, expensive “sensitivity” testing, and associated production losses.



### TrueAlarm Addressable Analog Smoke and Heat Sensors

The two-wire T-Tapped wiring of Simplex addressable systems has been shown to reduce installation cost by 30% or more.

TrueAlarm smoke detection systems report dirty sensor conditions automatically. Even better, they also identify “almost dirty” sensors that need cleaning before they drift beyond their specified sensitivity. Your maintenance costs are reduced because you clean only the sensors that require cleaning.

Peak value measurements for each TrueAlarm sensor are stored in memory at the control panel. This allows evaluation of each sensor to accurately determine if a different sensitivity would better protect each location. The results: peak efficiency, performance, and protection, based on historical fact — not speculation.

TrueAlarm analog heat sensors are self-restoring and use fast response thermistor technology. Each analog sensor's temperature alarm setting is selectable at the control panel. Additionally, each sensor may also be used for utility temperature monitoring applications, such as freeze alerts and monitoring of climate controlled environments.



### TrueAlarm Non-Addressable Smoke and Heat Detectors

For non-addressable and legacy systems, each TrueAlarm photoelectric detector incorporates an onboard microprocessor that provides automatic drift compensation. TrueAlarm heat detectors are self-restoring and use fast response thermistor technology.

## The TrueAlert Family of Notification Appliances

The TrueAlert family of notification appliances includes the industry's first addressable systems as well as traditional non-addressable systems. All TrueAlert appliances satisfy the requirements of the American with Disabilities Act.

Simplex is the only major manufacturer of fire detection and alarm systems that manufactures its own notification appliances to ensure commitment, quality, compatibility, and accountability to every customer.



### The TrueAlert Addressable Notification Appliances

The industry's first addressable notification system is the result of Simplex innovation and leadership in the fire detection and alarm systems industry. TrueAlert addressable notification appliances are intelligent systems that routinely perform diagnostics, reducing down-time and providing enhanced system survivability.

Another industry first, the TrueAlert system's addressability permits selective area evacuation on the same intelligent signaling line circuit. Only Simplex TrueAlert addressable appliances, with T-Tapped connectivity, reduce installation cost by 30% or more versus conventional wiring methods — savings that will carry on to future retrofits and expansions.

Building owners and operators are also discovering the cost-effective value of the TrueAlert system's unique “Daytime Testing” feature, which is non-obtrusive to building occupants.



### TrueAlert Non-Addressable Notification Appliances

TrueAlert non-addressable notification appliances have been designed for quick, convenient installation. Their Smartsync™ feature allows individual control of audible and visible appliances on a single, non-addressable circuit, reducing the cost of equipment and installation.

# LOCAL SERVICE AND SUPPORT

Simplex has found that local knowledge and hands-on involvement with installations are crucial to getting your fire alarm system up and running quickly and efficiently. By tightly linking research and development, manufacturing, quality assurance, project management, installation, training, and service, Simplex eliminates installation errors. Our local Simplex representatives can help you with all aspects of your fire safety system to ensure that your system meets local regulatory requirements and applicable project specifications.

- **Design** Simplex professionals work with engineers, architects, building owners, and fire officials to understand requirements, analyze building specifications, perform site surveys, and propose effective, economical solutions. Modular product design and a clear migration path make it possible to retrofit existing systems and preserve your original investment.
- **Project management** Simplex can assist you with financing, scheduling, installation, and coordination of other trade professionals, often providing a convenient, single-supplier interface for the whole project.
- **Testing and maintenance** After installation, Simplex technicians configure and test your system. Leading technology and flexible maintenance programs keep your fire system operating at peak efficiency and often reduce your overall maintenance cost.
- **Financing** With 100% lease financing from Simplex Financial Services, you avoid expensive, complicated third-party leases. You can lease any Simplex system, with associated installation, maintenance, monitoring and training services.
- **Central Monitoring** From our state-of-the-art central monitoring facilities, Simplex actively monitors thousands of businesses, alerting local authorities of problems and keeping you up-to-date. Our Central Monitoring Services provide instantaneous, 100% mirroring of on-site reports of alarms and troubles, and backup communication to your local fire department.



# SIMPLEX EXPERIENCE COMES TO YOUR SITE.

Simplex, is a leading international company. Your local Simplex Representatives are highly trained industry experts. Our logistical support and consistent, high-quality services simply can't be matched.



Simplex is the only company able to offer the geographic coverage and comprehensive services of 170 wholly-owned branch offices and 65 international affiliates and subsidiaries. Simplex offices are staffed by factory-trained employees whose exclusive assignment is to help customers maximize their benefit from Simplex products and services.



## Worldwide Visitor Center

Current and potential customers are encouraged to schedule a visit for hands-on demonstrations of the latest in Simplex solutions. You can also tour our R & D and manufacturing facilities located in the same building.



*Right from the start, Simplex can help you design a fire alarm and detection system that meets safety, engineering, and cost requirements. By providing a convenient, single-supplier interface for the whole project, Simplex assures efficient scheduling and installation.*

# SIMPLEX MEETS YOUR FIRE SAFETY REQUIREMENTS WITH KNOWLEDGE, SERVICE, AND TECHNOLOGY.

Customers all over the world in large and small businesses, institutions, and governments choose Simplex fire detection and alarm systems. Simplex, with more than 100 years of experience, is distinguished by four key qualities:

- Building systems knowledge and regulatory expertise
- Customer-focused design, service and support
- Innovative, technology-enabled products
- A global network of industry leading experts

By working collaboratively with customers, Simplex delivers complete fire detection and alarm solutions, from system design through installation, maintenance, monitoring, and upgrades.



*With more than 680,000 square feet of manufacturing space and the latest state-of-the-art equipment, our new ISO 9001 Certified manufacturing facility in Westminister, Massachusetts also houses world-class research and development, quality assurance operations, our Central Monitoring Station and Worldwide Visitor Center. To learn more about our comprehensive line of products, or for a factory tour, please contact your local Sales Representative.*

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## Simplex: Your source for complete building safety systems

In addition to fire detection and alarm systems, Simplex is an international leader in security, central monitoring, communications, time, and workforce management systems. Simplex offers superior solutions that let you integrate total building safety. Video badging, access control, CCTV monitoring, voice and data networking, paging, intercom systems, a complete portfolio of services, and much more are available.

We're focused on building relationships that last. Wherever you are, whatever you need, Simplex can provide local advice, solutions, and support specifically designed for your applications. It's no wonder over 500,000 companies of every size, all around the globe, have come to Simplex for protection of people, property and peace of mind.

**For more information about Simplex's Fire Detection and Alarm Solutions, contact your local Simplex Sales Representative, call 1-800-SIMPLEX in the U.S., or visit our website at [www.simplexnet.com](http://www.simplexnet.com)**

**PROTECTING PEOPLE, PROPERTY AND PEACE OF MIND**

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