

Called 2/4/72



Application Completes: Sections I, II, III (optional), IV, VI, and VII

1. Proposed Work Site at: 1122 Kte 88 Brick, NJ 08724

2. Name of Owner in Fee: The Price Company Tel. ()

Address 999 LAKE DR. ISSAQUAH WA 98027
street municipality zip code

3. Ownership in Fee: Public Private X

4. Principal Contractor: SIEMENS Tel. (856) 234-7666

Address 2000 CRAWFORD PL. MT. LAUREL NJ 08054

License No. OR, if new home, Builder Reg. No. Exp. Date

Federal Employee No. 13-2762488 FAX: (856) 2345690

5. Architect or Engineer: Tel. ()

Address

6. Responsible Person in Charge of Work DAVID NEFF

Tel. (856) 234-7666 FAX (856) 234-5690

~~Call #~~

Fire Protection

1.	Building	\$		
2.	Electrical			
3.	Plumbing			
4.	Fire Protection		75	
5.	Elevator Devices			
6.	Subtotal	\$		
7.	Less 20% for State Plan Review			
8.	Subtotal	\$	1	
9.	DCA Training Fee		14	
10.	Subtotal			
11.	Cert. of Occupancy			
12.	Other			
13.	TOTAL	\$	49	

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____
 no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

TOTAL COSTS

OPTIONAL (for office use only)

VII. DES
A. RES

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No. of dwelling units:

Before Construction

After Construction

Net Gain or Loss

B. NON-RESIDENTIAL

- 1. State Specific Use:**

- 2. Use Group:**

3. Change in Use Group. Indicate Former:

- ☐ Partial Releases
- ☐ Prototype Processing

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks

2. ☐ High Pressure Boilers

3. ☐ Pressure Vessels

4. ☒ Refrigeration Systems

5. ☒ Cross-Connections/Backflow Preventers

6. ☐ Hazardous Uses/Places of Assembly

7. ☒ Sprinklers

8. ☒ Smoke Control Systems in Open Wells

9. ☐ Underground Storage Tanks

LDS BR 10101194

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee, and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☐ Check if contractor.

Agent Name SIEMENS Building Technologies

Address 2000 Crawford Place Ste 300

MT Laurel NJ 08054

Telephone (856) 234-7666 FAX 5690

Signature [Signature]

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition _____

Name of Code & Edition _____

Other _____

Building _____
 Electrical _____
 Plumbing _____
 Fire Protection _____
 Mechanical _____

Energy _____
 Barrier Free _____
 Flood Hazard _____
 As Built Elevation Cert. _____
 Other _____

X. CERTIFICATES ISSUED (office use only)

☐ Temporary Certificate of Occupancy	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Temporary Certificate of Compliance	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Continued Certificate of Occupancy	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Certificate of Compliance	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Certificate of Occupancy	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Certificate of Approval	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____
☐ Lead Abatement Clearance Certificate	No. _____	DATE ISSUED _____	DATE EXPIRED _____	DATE REISSUED _____	DATE EXPIRED _____

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
FIRE PROTECTION
SUBCODE
TECHNICAL SECTION

Date Received 01/29/2002
Date Issued 12/15/02
Control # C1-11
Permit # 02-4646

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING
CONTRACTORS, NOTIFY THIS OFFICE, CALL UTILITY DIG NO: 1-800-272-1000

Block 1170 Lot 5 Qual
Work Site Location 1722 ROUTE 88 COSTCO WHOLESALE
HEAT DETECTORS

Owner in Fee COSTCO WHOLESALE
Address 999 LAKE DR
ISSAGUAN, VA 98027-
Tele. (856) 234-7666 Fax ()
Contractor SIEMENS FIRE SAFETY
Address 2000 CRAWFORD PL STE 300
MT LAUREL, NJ 08054-
Tele. (856) 234-7666
Lic. No. or Blatrs. Reg. No.
Federal Emp. No. 13-2762488

B. FIRE PROTECTION CHARACTERISTICS
Use Group Present Proposed U
Const. Class Present Proposed
Heating Systems [] New [] Existing [] HVAC
Type: [] Gas [] Oil [] Elect [] Solar
[] Other
Location:
Total Est Cost of Fire Prot Work \$ 17,190

JOB SUMMARY (Office Use Only)
PLAN REVIEW
[] No Plans Required
Joint Plan Review Required:
[] Bldg [] Elect
[] Plumb [] Elevator
[] Fire Plans Approved
Date: 2-4-02
Approved By: *[Signature]*
SUBCODE APPROVAL
[] CO [] CCO [] CA
Date:
Approved By:

INSPECTIONS
Type Alarm Sys
Failure Failure Approval Initial
Dates (Month/Day)

Suppr Test
Standpipe
Fire Pump
PreEng Sys
Mechanical
Smoke Ctl
TCO
Final
Other

D. TECHNICAL SITE DATA
Description of Work:
Water Supply Source
Method of Alarm/Suppr Sys Superv

Storage Tanks
Type: [] Flammable Liquid [] Combust Liquid
[] LPG [] LNG Capacity 0 Fuel
Alarm Systems [] 110V Interconnected NUMBER
[] System
Alarm Devices (smoke, heat, pulls, water/flow) 4
Supervisory Devices (tamper, low/high air) 0
Signalling Devices (horn/strobes, bells) 0
Other Devices 0
TOTAL 4
Suppression Systems
Fire Pump 0 GPM Type
Dry Pipe/Alarm Valves 0
Pre-action Valves 0
Sprinkler Heads (Dry and Wet) 0
Standpipes 0
Pre-Engineered Systems
Wet Chemical 0
Dry Chemical 0
CO2 Suppression 0
Foam Suppression 0
Halon Suppression 0
Other 0

Kitchen Hood Exhaust System 0
Smoke Control System 0
Gas [] or Oil [] Fired Appliances 0
Other 0
Other 0

Administrative Surcharge \$ 0
Paid [] Check \$ Minimum Fee \$ 0
Collected by: TOTAL FEE \$ 35
DCA Training Fee \$ 14

NOTIFY FIRE BUREAU
prior to work starting
call for permits

SIEMENS



**FirePrint™ Fire Detectors:
We've eliminated the guesswork
in fire detection.**

**Siemens Building Technologies
Cerberus Division**



The world's most intelligent fire detector.

The responsiveness of photoelectric, thermal and ionization technology—with unmatched accuracy, speed and false alarm resistance.



The FirePrint™ Fire Detector from Cerberus knows that all fires have distinctive characteristics or "fingerprints." It uses this intelligence to instantly identify a real fire emergency, ensuring you the earliest possible warning with the greatest false alarm resistance available. As you'll see, there's no other fire detector like it.

Remarkable reliability.

Using advanced software and a neural network similar to the human brain, the FirePrint detector combines the effects of photoelectric and thermal detection to sense both smoke and heat. And it actually exceeds the responsiveness of other photo, thermal, ionization or combination detectors.

This proven technology lets FirePrint recognize the traits of virtually every conceivable fire hazard. Unlike any other detector, it applies the data to distinguish fire from deceptive phenomena in seconds. These nonfire events include vehicle exhaust, cooking fumes, humidity, cigarette smoke, dust, temperature shifts, and radio interference from electronic devices.

Versatile, user-friendly design.

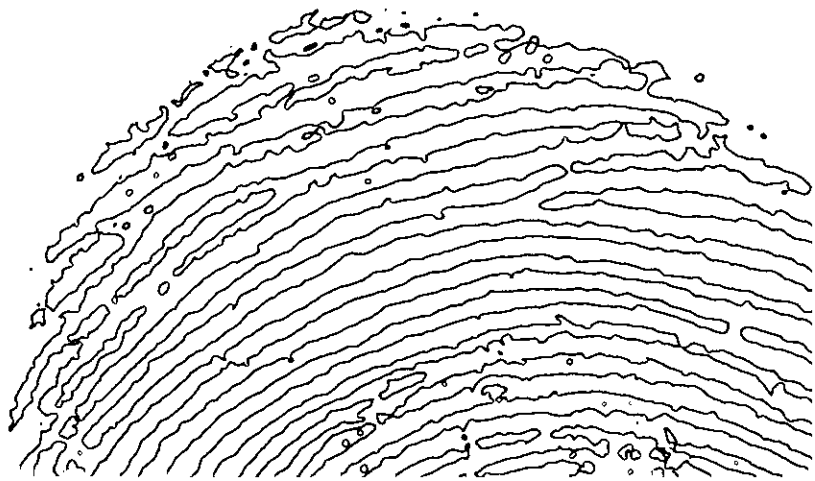
With one easy adjustment, this low-profile unit can be easily set to work in 11 different environments where fire situations most commonly occur.

At the price of a standard detector.

Even with its one-of-a-kind capabilities, FirePrint is priced just like an ordinary detector.

Proven through 20 years of research and millions of installations.

FirePrint is the single solution, ideal wherever early detection is critical to life and property safety, and business continuation. This is the one detector for offices, high-rises, hospitals, schools, warehouses, airports, restaurants and manufacturing sites. With such revolutionary features, it's never been easier to feel confident about your choice in fire detection.



Preprogrammed for greater accuracy and flexibility.

FirePrint is ready to perform with maximum efficiency in any of the 11 installations shown here, representing the comprehensive range of environments where a fire detector is normally used. Setting the detector couldn't be simpler. After installation, just key it for the appropriate environment. If the area's usage changes, FirePrint can easily be reset from the fire alarm panel to accommodate the transition.

Parking Garage-For indoor parking and vehicle service areas. Conditions include airborne dust, a high level of car and diesel fumes and possible cigarette smoke.



Office/Retail-Appropriate for a reasonably clean, climate-controlled atmosphere, this is the most commonly used setting.

Computer Room-This highly controlled environment is typically clean, has closely regulated climate control and contains costly equipment.



Health Care-A higher-level risk area relatively free of dust, but containing electronic equipment which emits radio frequencies.

Precious Storage-Contains sensitive materials or valuable equipment and is usually clean and dust-free. Earliest warning is desired.

Hostile Environment-Dirty, dusty and humid with radio frequencies from operating equipment, this is a "catch-all" application for areas previously considered too harsh for detectors. Contact our Applications Department if suitability is in doubt.



Lobby-A relatively clean area with sporadic dust and dirt, some radio interference from cell phone usage and possible cigarette smoke.

Equipment Storage, Transformer Rooms and Telephone Closets-Any equipment storage areas where environmental controls and cleanliness are less than normal.

HVAC Duct-Detectors installed in HVAC air duct.



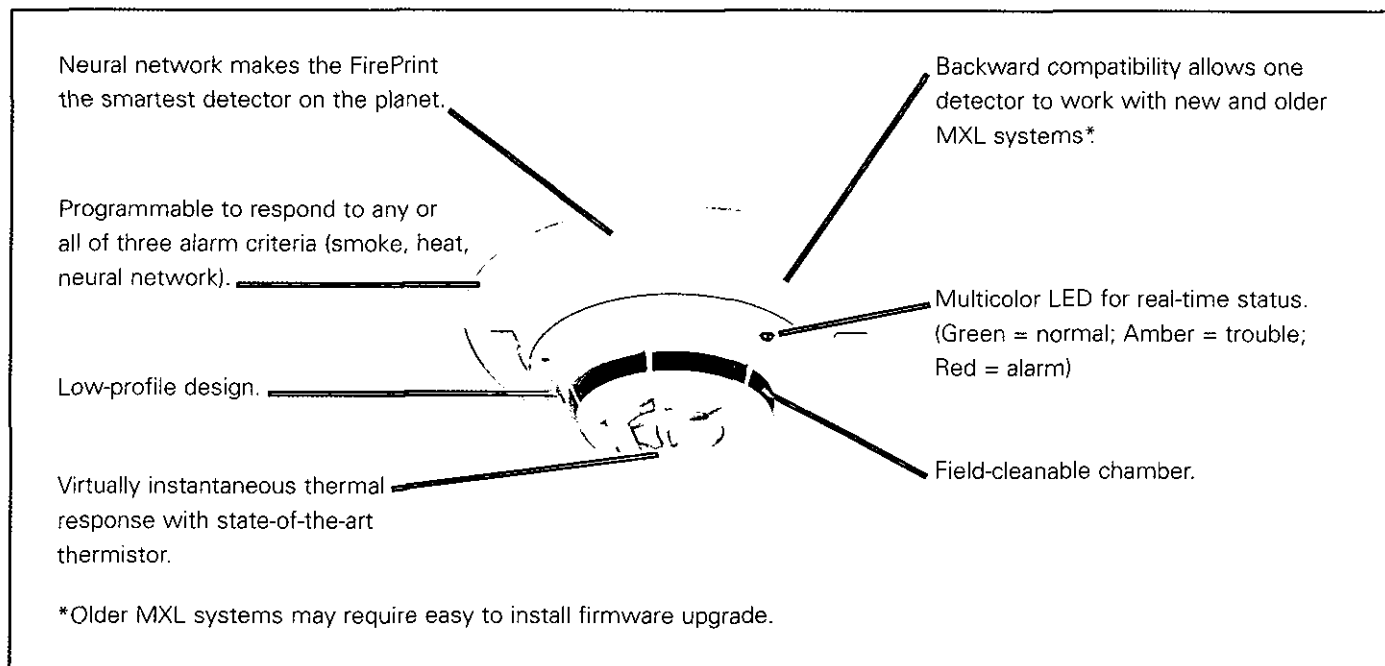
Warehouse -Contains airborne dust and a dock area with light to medium exhaust from forklifts, trucks, etc.



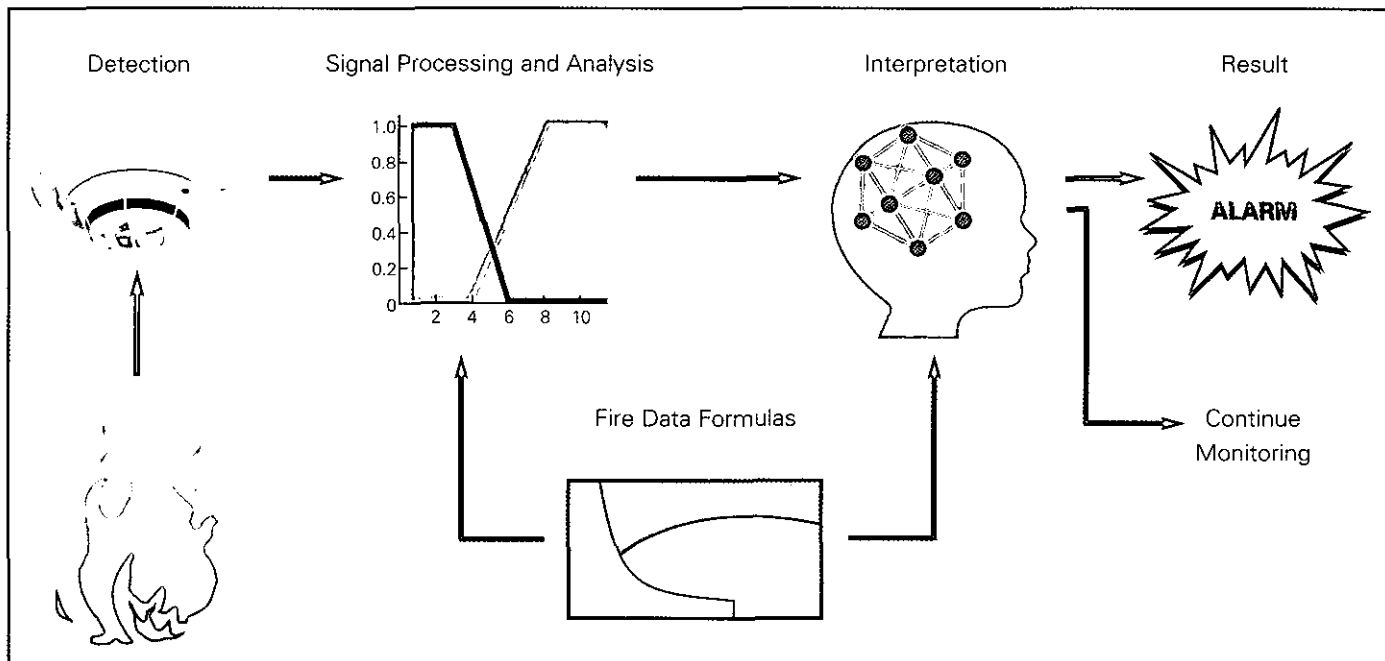
Dormitory -This setting can be used for any living quarters. Conditions may include airborne dust, light cooking fumes and cigarette smoke.



Inside the FirePrint Detector.



How the neural network operates.



All for the price of an ordinary detector.

FirePrint™
Fire Detectors
Identify **FIRES** Before
They *Leave* Their **MARK.**



No Mistake About It

***A* NEW ERA**
In *Life* and
Property *Safety.*

Unrivaled technology eliminates the guesswork in fire protection.

The new FirePrint™ Fire Detector from Cerberus Pyrotronics knows that all fires have a distinctive “fingerprint.” And it uses this intelligence to instantly identify a real fire emergency, ensuring the earliest possible warning with unmatched resistance to false alarms.

THERE’S NO OTHER FIRE DETECTOR LIKE IT.

The FirePrint detector is programmed with an advanced, proven technology that allows it to distinguish the unique characteristics or “fingerprint” of genuine fire from deceptive phenomena like humidity, vehicle exhaust, cooking fumes, airborne dust, cigarette smoke, temperature shifts or radio interference from electronic devices.

Pre-programmed for 11 different environments or installations where fire situations most commonly occur, it knows the profiles of virtually every conceivable fire hazard. Unlike any other fire detector available, the FirePrint applies this data to establish that a true fire exists — all within a matter of seconds.

With such revolutionary response speed and accuracy, the FirePrint is the ideal solution anywhere early detection is critical to life safety, property protection and continuation of business. From small office buildings to corporate towers, hospitals, schools, restaurants, warehouses, airports and manufacturing sites.

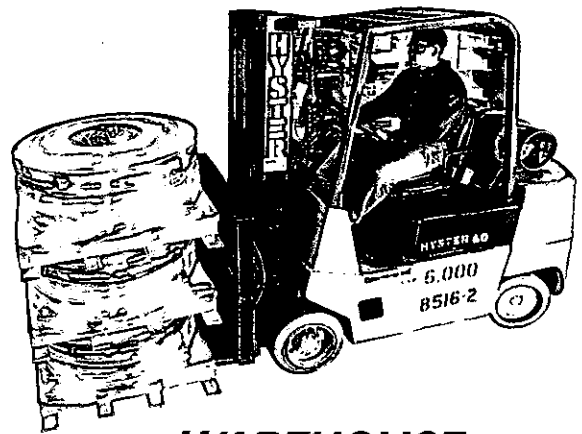
And since Cerberus Pyrotronics has made the FirePrint remarkably user-friendly and economical, it’s never been so easy to feel confident about your choice in fire protection.

PRE-programmed for greater **ACCURACY** and *flexibility.*

The FirePrint is ready to perform with maximum efficiency in any of the 11 different installations shown here, representing the comprehensive range of environments where a fire detector is normally used.

LOBBY

A relatively clean area with some radio interference from cell phone usage and possible cigarette smoke.



WAREHOUSE

Contains airborne dust and a dock area with light to medium exhaust from forklifts, trucks, etc.

Health Care

A higher level risk area relatively free of dust, but containing electronic equipment which emits radio frequencies.



Dormitory

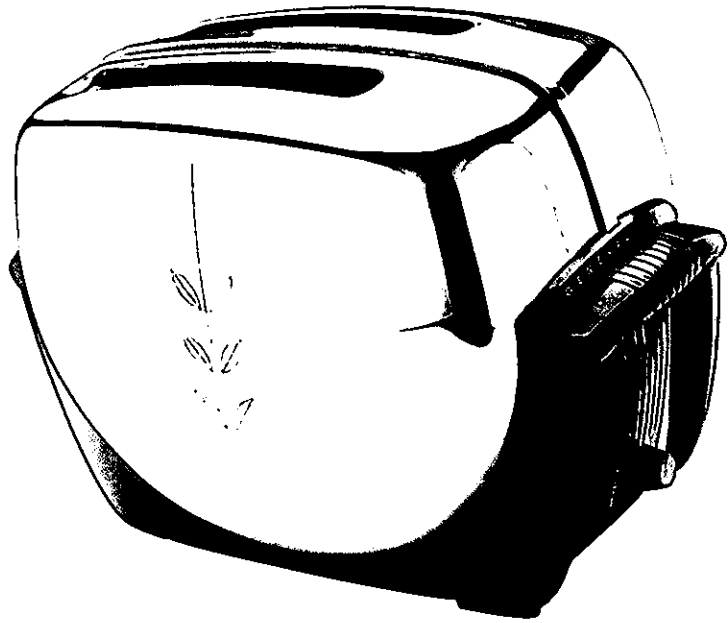
Here conditions may include airborne dust, cooking fumes and cigarette smoke.

HVAC Duct

Detectors installed in HVAC air duct.

OFFICE

A reasonably clean, climate-controlled atmosphere.



Utility Room

A normal to somewhat dirty environment with electromagnetic radiation.

HOSTILE ENVIRONMENT

Dirty, dusty and humid with radio frequencies from operating equipment.



Computer Room

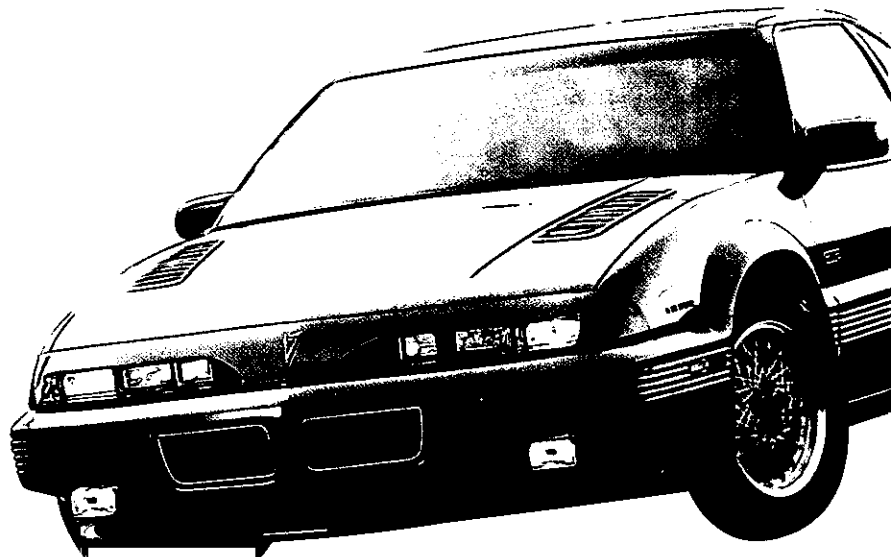
This highly controlled environment is typically clean, has closely regulated climate control and contains costly equipment.

Precious Storage

Contains sensitive materials or valuable equipment and is usually clean and dust-free. Earliest warning is desired.

Parking Garage

Conditions include airborne dust, a high level of car and diesel fumes and possible cigarette smoke.



How the CERBERUS PYROTRONICS **FirePrint™** *Works.*

This new generation of fire detector offers something no other detector can... experience.

The FirePrint is the result of 20 years of exacting research and development in the world's most sophisticated fire test center at Cerberus AG's Swiss headquarters. Here, and in actual working environments, engineers monitored and recorded deceptive phenomena, as well as real fires from combustible materials which would most likely be present in typical environments.

Converted to advanced software formulas, this information is actually programmed into the FirePrint detector. Using a neural network similar to the human brain, the detector constantly interprets data, allowing it to instantly identify

the all-important fingerprint of a fire or deceptive phenomena.

EASY TO USE.

Using the FirePrint detector couldn't be simpler. After installation, just set it for the type of room or area in which it will operate, based on the 11 pre-programmed environments. If the area's usage changes, the FirePrint can easily be re-set from the fire alarm panel to accommodate the transition.

SUPERIOR PERFORMANCE FOR GREATER PROTECTION AND SECURITY.

With the FirePrint, there's no compromise between safety and

accuracy. Unlike other detectors which actually delay an alarm for up to one minute to verify a fire, our unique technology:

- ensures rapid, precise identification for greater peace-of-mind.
- reduces false alarm potential and the resulting safety threat, work disruption and expense.
- maximizes life safety, property protection and continuation of business.

Compatible with all Cerberus Pyrotronics MXL Series fire detection systems, the FirePrint is appropriate for new installations and retrofits.

CERBERUS PYROTRONICS:

*Providing life and property safety
for more than 50 years.*

As part of the Cerberus AG family, the world's largest manufacturer of fire detection systems, we're dedicated to supplying total solutions for your building protection needs, from customized system configuration and installation to code and insurance conformance.

With more than 200 sales outlets throughout the world, we provide a comprehensive network of service and support long after installation. Building owners, consulting engineers and contractors know they can rely on us for 24-hour emergency service, maintenance, software updates, system audits, on-site training and customer education.

Now, with the FirePrint fire detector, we can offer even more advanced performance and peace-of-mind to our clients — backed by two decades of research and the world's largest fire test data base, and proven in three years of actual use with more than half a million detectors installed.

To learn how to put this state-of-the-art fire detection technology to work in your building, contact your local sales outlet or call Cerberus Pyrotronics at (201) 267-1300 for the sales outlet near you.

CERBERUS PYROTRONICS:

Trusted by clients worldwide for life and property protection.

Some of our installations include:

Amoco Corporation, Chicago, IL
Art Institute of Chicago, IL
BCE Place, Toronto, Canada
Biltmore Towers, Los Angeles, CA
Brookfield Zoo, Brookfield, IL
Department of Transportation, Washington, DC
Disney World, Orlando, FL
Embarcadero Center, San Francisco, CA
Far East Plaza (Twin Towers), Taipei, Taiwan
First National Bank of Chicago, IL
Fundacion Optalmologica Nacional, Bogota, Colombia
General Motors Plant, Caracas, Venezuela
General Motors World Headquarters, Detroit, MI
Hard Rock Café & Casino, Las Vegas, NV
Holiday Inn Crowne Plaza, Mexico
Holocaust Memorial Museum, Washington, DC
Intercontinental Hotel, Rio de Janeiro, Brazil
Johnson Space Center, Houston, TX
King Khalid International Airport, Riyadh, Saudi Arabia
Kuala Lumpur City Centre, Kuala Lumpur, Malaysia
National Art Gallery of Canada, Ottawa, Canada
Notre Dame University, South Bend, IN
Opera House, Sydney, Australia
Rockefeller Center, New York, NY
San Francisco Library, San Francisco, CA
Société Radio Canada, Montreal, Canada
Torre Banco Mercantil, Caracas, Venezuela
University of California at Berkeley, Berkeley, CA
U.S. Embassy, New Dehli, India
World Trade Center, New York, NY
Yale University, New Haven, CT



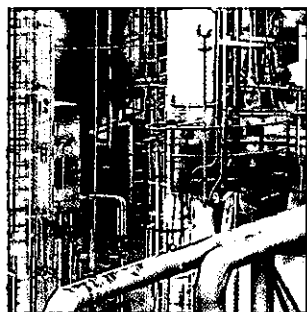
No Mistake About It

8 Ridgedale Avenue, Cedar Knolls, NJ 07927 (973) 267-1300 • Fax: (973) 397-7047
50 East Pearce Street, Richmond Hill, Ont. L4B 1B7 Canada (905) 764-8384 • Fax: (905) 731-9182

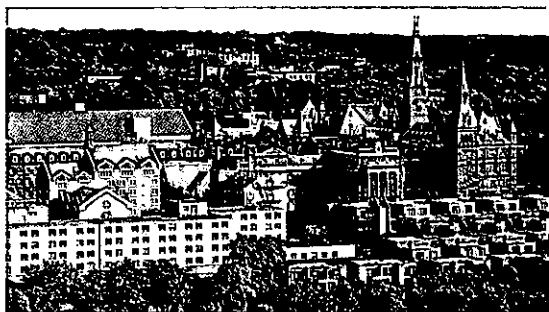
www.cerbpyro.com

©1997 Cerberus Pyrotronics

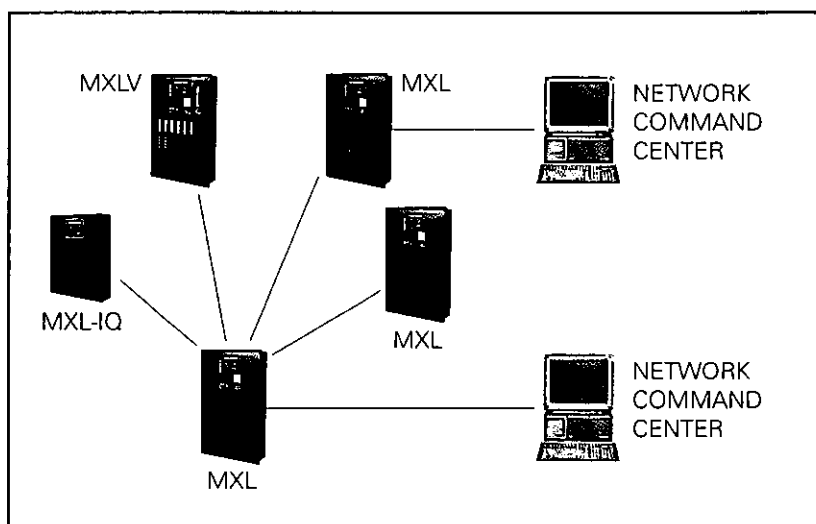
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C.



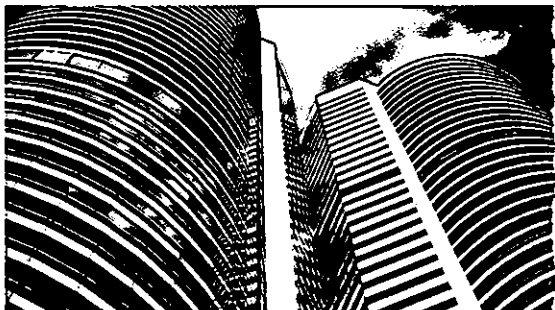
C. Star Configuration



FireFinder® Network Command Center Graphics

Powerful, yet easy-to-use, FireFinder is a PC-based color graphics display with system control that lets operators intuitively manage and monitor all MXL systems in the network. At a glance, it presents all the information necessary for a fast, confident emergency response, allowing the user to zoom in on specific areas, query devices and generate status reports. Features include:

- Simple colored icons that clearly represent system events, including alarms, trouble and supervisories.
- Graphical representation of the facility and its devices. Building drawings can be imported from many sources.
- Self-prompting action buttons, and a built-in macro manager for programming repetitive functions into a single button.



The Cerberus tradition

Know-how that helped build an industry.

With our unique 50-year history, Cerberus truly is your single source for complete life safety solutions. We invented the first ionization, analog and field configurable detectors. We've also worked with consulting engineers and facility managers on virtually every type of building and structure—protecting lives and business missions below ground, at sea, even in space.

In response to the new safety risks and technological advances that have changed the face of life safety, Cerberus has provided thousands of customers with migration paths for their systems. And as part of the Siemens Building Technologies group, you can be sure we'll effectively assess and manage your risks for the greatest possible peace of mind.

To put the MXL Series' brainpower to work for you, call 973-593-2600, fax 973-593-6670 or visit www.cerbpyro.com

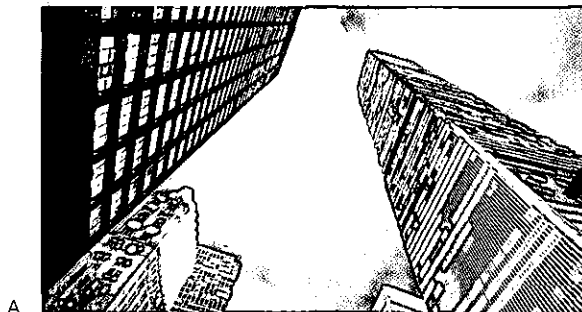
CERBERUS TRADITION

Networking Multiple MXLs

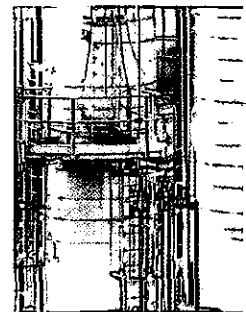
**Superior redundancy,
fault tolerance and
wiring efficiency.**

Ideal for large or high-risk facilities, this peer-to-peer network coordinates multiple MXL systems to act as a single system, while ensuring that each MXL control panel performs its own life safety functions independently. This includes evacuation and notification of occupants, HVAC control and elevator capture, even if catastrophic failure occurs in another part of the building. Among its many capabilities, the network can:

- Interface with other building management systems.
- Accommodate virtually any size facility by interconnecting up to 64 units, providing a system capacity of more than 4,000 nodes and 200K intelligent devices.
- Minimize the risks and costs of faults by automatically compensating for one or many faults in the network communication path.
- Accommodate any building or campus architecture using one of the wiring configurations pictured at right.



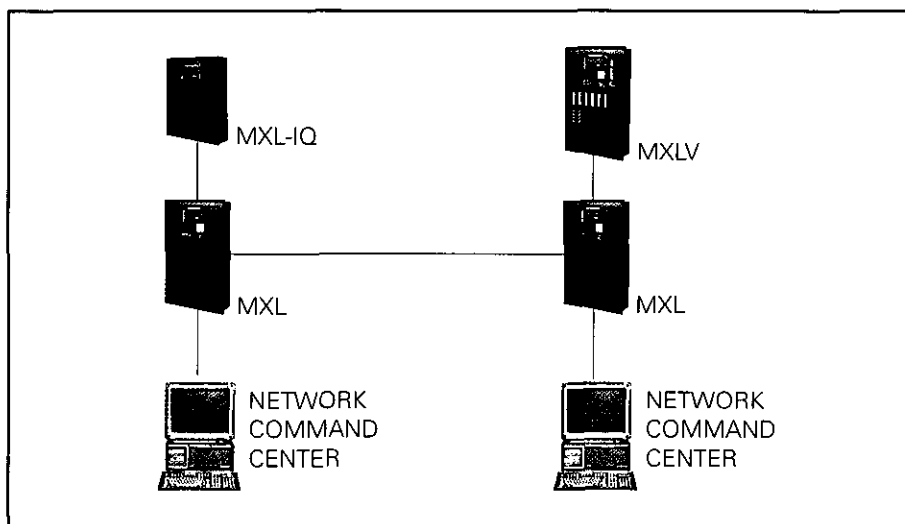
A.



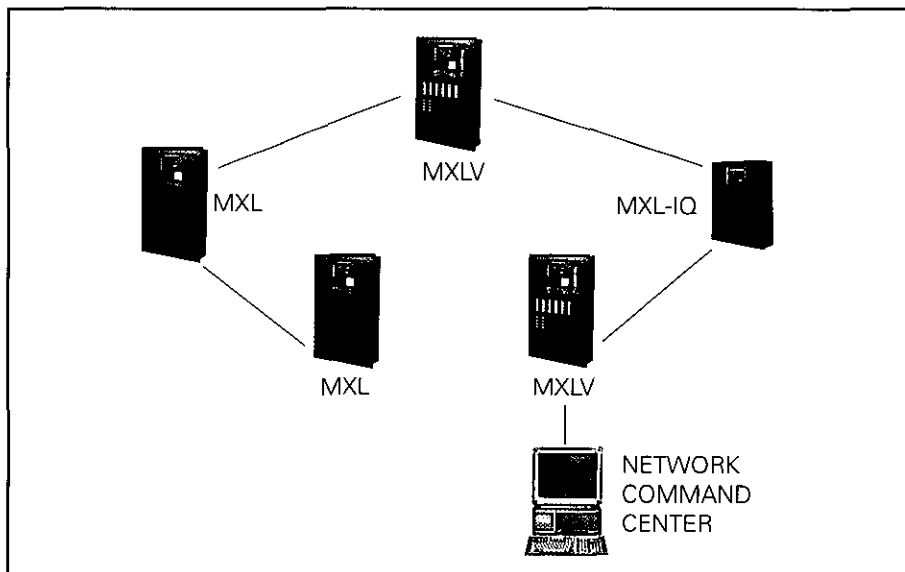
B.

Three flexible wiring configurations are possible, depending on facility size.

A. Bus Configuration



B. Loop Configuration



Siemens Building Technologies, Inc.
8 Fernwood Road, Florham Park, NJ 07932
Phone: 973-593-2600 • Fax: 973-593-6665

Siemens Building Technologies, LTD
50 East Pearce Street, Richmond Hill, Ont L4B 1B7 Canada
Phone: 905-764-8384 • Fax: 905-731-9182

Visit us on the Web: www.cerbpyro.com

Vesda is a trademark of Vision Systems

Cerberus Division

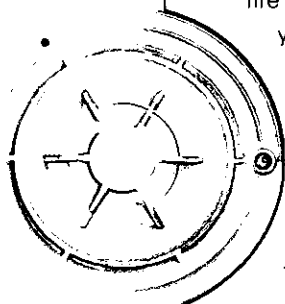


The FirePrint™ Intelligent Fire Detector

**A mind of its own for greater
life and property protection.**

Set FirePrint for any of 11
environments where fires
are most likely to occur:

Parking Garage
Dormitory
Lobby
HVAC Duct
Warehouse
Office
Health Care
Computer Room
Precious Storage
Utility Room
Hostile Environment



Using a neural network which operates similarly to the human brain, FirePrint combines the world's largest bank of fire test data with the conditions in your building to decide if a fire situation exists. False alarms are eliminated because the detector knows and recognizes the difference between false alarm conditions and genuine fire.

Through the MXL system, FirePrint can be set for the type of environment it's protecting. This allows the detector's decision-making process to adjust as needed, looking for the fire scenarios it expects to find in a specific environment.

For example, dramatically different situations exist in a hotel. A lobby environment and its fire scenarios differ greatly from those in a parking garage, delivery dock, kitchen or guest room. Therefore, each area needs to be managed uniquely—and FirePrint is the one detector that can handle them all.

Likewise, deceptive phenomena which trigger false alarms, such as cigarette smoke, radio interference, vehicle exhaust and steam, are as familiar to FirePrint as fire itself. Like a ship's radar, the detector distinguishes between fire and more friendly elements in an environment without any compromise to fire response speed. That's the way a fire detector should work.



Notification Devices

The sound of safety.

Developed to meet ISO 9001 quality standards and ADA requirements, this complete line of products is both energy-efficient and easy to install. The wide selection includes:

- Bells
- Strobes
- Electromechanical horns
- Multitone electronic horns
- Weatherproof horns
- Explosion-proof horns
- Speakers
- Chimes



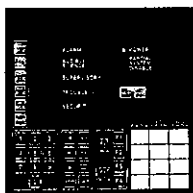
The extensive capabilities and features of each MXL system include:

Total detection and control

The control panel command center of your MXL can promptly detect and signal the presence of fire, smoke, heat, off-normal sprinkler conditions and security violations. In an emergency, it can control ventilation, capture elevators, close fire doors, activate audible and visual evacuation signals, alert authorities and can complete complex sequences of operation with superior dependability and speed.

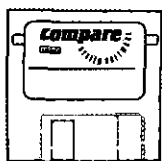
Easy, powerful operation

Instantaneous system status—Each control panel has an 80-character LCD display that instantly supplies the operator with all necessary system management information. Also available to alert the operator locally or remotely are LEDs, sounders, remote annunciators, printers, video and graphic display packages and pager interfaces.



UL sensitivity testing—MXLs can function as UL listed/ULC accepted test instruments for instant listings of all smoke detector sensitivities, printed or displayed in easy-to-read text with multilingual capability.

Compare™ System Software



This software utility file compares a new set of operating parameters loaded into your MXL against the previous system setup, and generates a printed report of the differences. At the touch of a button, *Compare* identifies the system areas which require testing without having to retest the entire system.

Portable device programmer and tester

Easy to use and ruggedly built, this battery-operated tool enables you to test or program any Pyrotechnics device (detector, manual station, etc.) and verify its operation before it is installed.

Automatic environmental compensation for detectors

Through this feature, microprocessor-controlled detectors are automatically adjusted for temperature, humidity, dust, dirt and other environmental factors that can trigger false alarms. This accurate, continuous response to the environment helps ensure that detectors report alarm conditions only when a genuine condition exists.

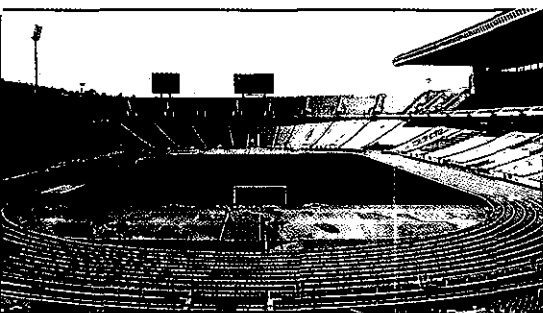
System programming via laptop computer

Here's the fastest, most accurate system programming software in the industry, with off-line design and easy upload capability that provides reliable on-site programming through a laptop. Features include built-in configuration and error checking, warning and error messages, configuration printout and password protection. Together with the device programmer, last minute changes required by local authorities are handled on the spot.

Event History Software

A detailed log of all system activity, up to 800 events are stored in nonvolatile memory, including alarms, trouble, operator activity, detector mode and verifications. Data can be retrieved from the system via keyboard or laptop, either for visual review or printed for your records.

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System profiles

MXL

The most powerful fire protection system in the life safety industry.

The foundation of the series, the MXL is the most widely accepted analog fire protection system. Using distributed intelligence and advanced communication techniques, the system can monitor an unlimited number of points of detection, yet remain extremely cost-efficient. Its flexible architecture allows easy expansion at any range, eliminating costly upgrades or retrofitting. The MXL is adaptable to the requirements of a majority of installations, from small offices to corporate towers, convention centers, assisted living and health care facilities, colleges and airports.

MXL-IQ

All the power of an MXL, fit for small and midrange applications.

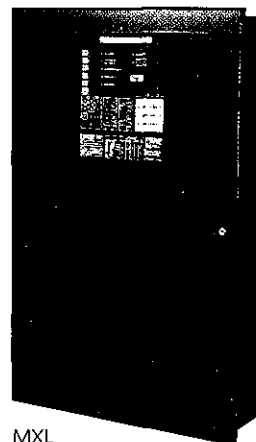
With up to 240 detector points, expandable to more than 750 input and output points, the MXL-IQ is ideal for schools, nursing homes, small office buildings, strip malls, hotels and apartment buildings. Microprocessor technology allows high-speed communication and control of all system fire/smoke detectors, heat detectors, manual stations, monitoring devices, remote detector zones, remote audible/strobe zones and logic control relays. This model is ideal for special hazards applications requiring extinguishing agents like FM-200 or pre-action sprinklers. It also manages unique detection products including Vesda™ air sampling systems.

MXLV

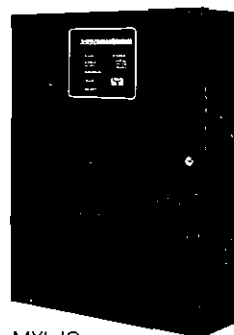
The most efficient communication of fire event information.

The MXLV is a complete package that enhances safety with versatile emergency voice evacuation features and the flexible architecture of the base MXL. These attributes make the system applicable for highly populated structures, including high-rise offices, hotels and hospitals. Or sprawling complexes such as airports, universities and industrial plants. Features/options include:

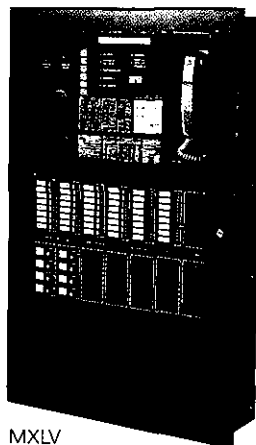
- 1, 2 or 3 Channel Audio—Allows up to 1, 2 or 3 simultaneous audio signals to be active in various areas of a facility. These can be interrupted with live paging whenever necessary.
- Message Player—When automatic voice announcements are required, the MXLV can provide multiple digitally recorded messages for clear instructions to your facility's occupants.
- Multiple Command Centers—Up to 4 complete command consoles can be installed in various locations around a facility, allowing operators at any location to fully control the system when necessary.
- Firefighter's telephone—Features a master telephone at the command center and phones and jacks distributed throughout the building, allowing the fire response team to communicate directly during their operation.



MXL



MXL-IQ



MXLV



The ideal balance of brains and brawn to protect lives, property and businesses.

When early warning and evacuation are critical, our Cerberus Pyrotronics MXL Life Safety Systems use their *intelligence and strength to perform* like nothing else. Built for unrivaled speed and accuracy, these are the most popular systems of their kind. Their flexibility allows more end-user participation in system design and greater cost efficiency. And they're as easy to install and maintain as they are smart. From the powerful, basic MXL for most size facilities, to the MXL-IQ for small and midsize buildings and the MXLV with voice evacuation, suitable for any structure.

A wise move.

For the greatest possible protection, MXLs can be partnered with all major building management systems, as well as our own Cymphony™ Integrated Life Safety System. They also operate with a full range of reliable, high-performance components, including:

FirePrint™ Intelligent Fire Detector

Ideal virtually anywhere, FirePrint is a true fire detector. Its ability to detect both smoke and heat provide the fastest possible response to fire situations, with unmatched false alarm immunity. We're so sure of its proven performance that we back FirePrint with a written No False Alarm Guarantee.

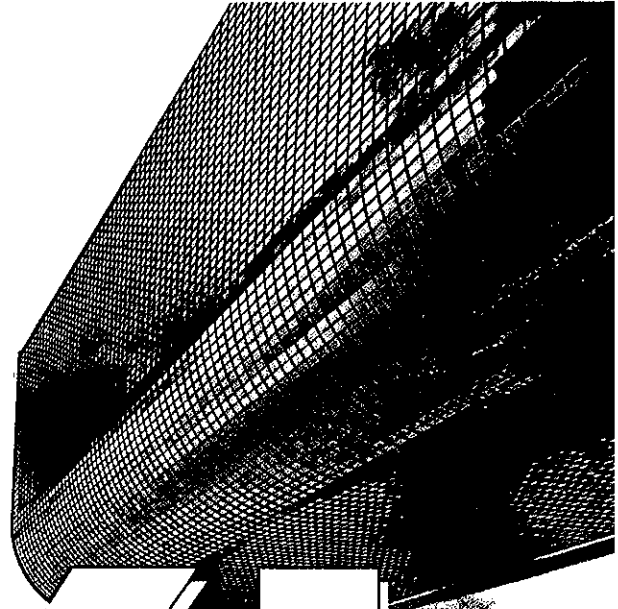
Notification Devices

To enhance life safety, we manufacture an extensive line of ADA-compliant signaling appliances designed to maximize energy efficiency.

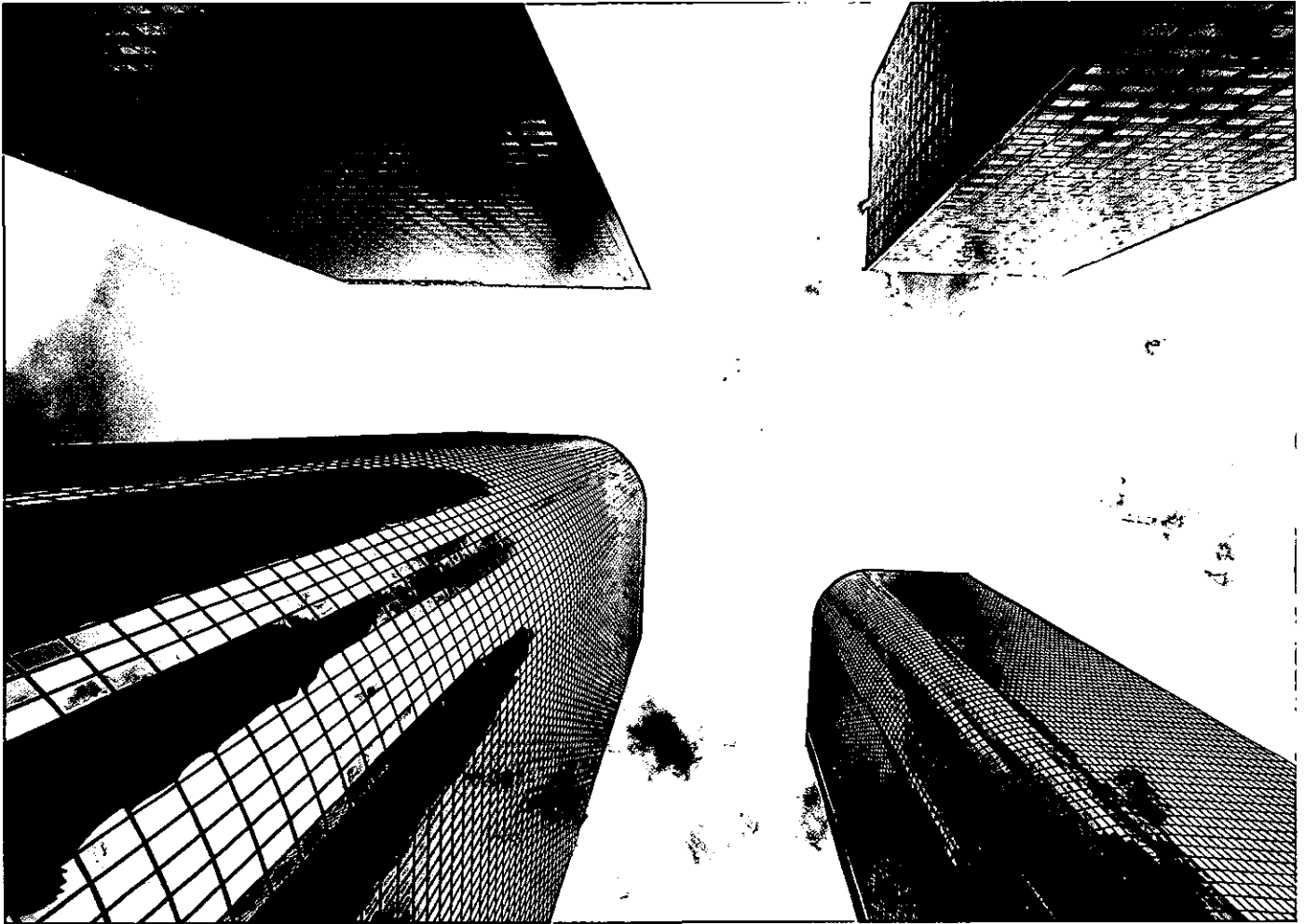
Multiple MXL Networking

Facilities requiring multiple MXL systems can be wired to easily work as one system, and managed through FireFinder, our user-friendly, PC-based graphical control center.

BRAINS AND BRAWN



SIEMENS



**MXL Series Intelligent Life Safety Systems
Taking higher intelligence to a new level.**

Cerberus Division

SIEMENS TRI Series

Cerberus Division

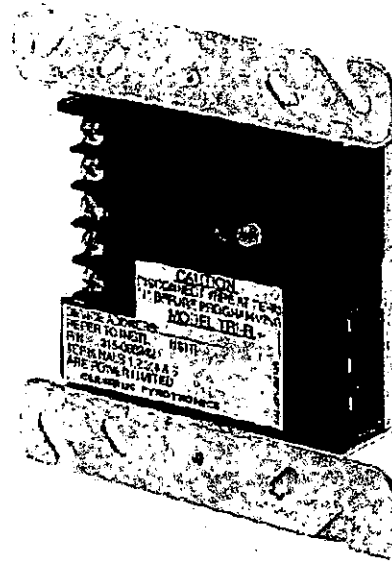
Intelligent Initiating Devices Interface Modules

ENGINEER AND ARCHITECT SPECIFICATIONS

Intelligent Interface Modules For MXL Panels

TRI-S, TRI-D, TRI-R

- Interfaces and Supervises Normally Open or Normally Closed Contacts
- Integral SPDT Relay (up to 4 amps) on TRI-R Model
- Dual Input on TRI-D Model
- Multi-color L.E.D. indicates status (green, amber, red)
- Easy front access to programming port and wiring terminals
- Mounts in 4 inch square 2 1/4 box, or double gang box
- Dynamic Supervision
- Comes with 5x5 inch faceplate
- Two wire operation
- **SensorLink** Model FPI-32 Programs and Verifies Device's Address and Tests Device's functionality
- Electronic Address Programming is Easy and Dependable
-  UL Listed



Introduction

Cerberus Pyrotronics TRI Series Intelligent interface modules are designed to provide the means of interfacing direct shorting devices to the MXL system's ALD loop circuit.

Cerberus Pyrotronics TRI Series Intelligent interface modules provide the market's most advanced method of address programming and supervision, combined with sophisticated control panel communication. Each TRI Series interface module incorporates a microcomputer chip. The TRI Series microcomputer chip technology and its sophisticated bidirectional communication capabilities with the control panel, achieve the state of an "Intelligent Device."

Description

The TRI Series intelligent interface modules are available in three models. The TRI-S and TRI-R are designed to monitor a normally open or closed dry contact. The interface module reports the contact's status to the control panel. The TRI-S model can only monitor and report the status of the contact, while the TRI-R incorporates an addressable Form C relay. The TRI-R relay and contact device input are controlled at the same address. For the MXL system, the relay and input contact can be

controlled as a separate function. The relay is typically used where control or shunting of external equipment is required.

The TRI-D is a dual input module and is designed to supervise and monitor two sets of dry contacts. This interface module requires two address settings. The TRI-D is ideal for monitoring a waterflow switch and its respective valve tamper switch.

The TRI has a multi-color Light Emitting Diode that flashes green when operating normally, amber if unit is in trouble condition, and red to indicate a change of state. The TRI-D flashes twice, once for each address, the TRI-R red L.E.D. indicates a change of state in the relay.

The device's microcomputer chip has the capacity of storing, in memory, identification information as well as important operating status information.

SIEMENS Cerberus Divisions' innovative technology allows all TRI Series intelligent interface modules to be programmed by using the **SensorLINK** model FPI-32 Programmer/Tester. The FPI-32 Programmer/Tester is a compact, portable, menu driven accessory that makes programming and testing an interface device faster, easier and more dependable than previous methods.

CATALOG NUMBER **6179**

The FPI-32 eliminates the need for mechanical addressing mechanisms, such as program jumpers, DIP switches or rotary dials, because the FPI-32 electronically sets the TRI interface's address into the interface's microcomputer chip nonvolatile memory. Vibration, corrosion and other conditions that deteriorate mechanical addressing mechanisms are no longer a cause for concern.

The TRI Series is fitted with screw terminals for connection to an addressable circuit.

The TRI Series is fully compatible on the same MXL circuit with all intelligent FPIL and ID-60 Series detectors, MSI Series addressable manual stations or any other addressable intelligent modules, such as the CZM or ICP.

All TRI Series intelligent interface modules are UL listed.

Environmental operating conditions for all TRI Series modules are 32°F (°C) to 120°F (49°C) with a relative humidity of not greater than 93% non-condensing.

Engineer and Architect Specifications

The addressable interface module shall incorporate a custom microprocessor based integrated circuit that shall provide communication with its compatible control panel. The addressable interface module shall be a Cerberus Pyrotronics TRI Series that shall be compatible with a Cerberus Pyrotronics MXL control panel.

Cerberus Pyrotronics TRI-S Series intelligent interface modules shall provide the means of interfacing direct shorting devices to the control panel's addressable circuits. The intelligent interface modules shall be available in three models. The TRI-S and TRI-R shall be designed to monitor a single normally open or normally closed dry contact. The interface module shall report the contact's status to the control panel. The TRI-S model

shall only monitor and report the status of the contact, while the TRI-R shall incorporate an addressable Form C relay. The TRI-R relay and contact device input shall be controlled as a separate function at the same address by the MXL control panel. The TRI-D shall be a dual input module designed to supervise and monitor two sets of dry contacts. This interface module shall require two address settings.

Modules shall have tri-color L.E.D. indicating status of the unit, indicating green in normal conditions, amber if the unit is malfunctioning, and red when it changes state.

The addressable interface module shall be UL listed.

The addressable interface module shall be dynamically supervised and uniquely identifiable by the control panel.

The addressable interface module's address shall be programmed with the use of a portable programming accessory. The programming accessory shall be a Cerberus Pyrotronics FPI-32 Programmer/Tester. The portable programmer shall be menu driven. Once the

desired address is entered the programmer shall set and verify the address. The programming accessory shall also be capable of testing the interface's functionality. The addressable interface module's address shall be set by electronic means only. No mechanical means such as programming pins, DIP switches or rotary dials shall be required.

The TRI Series shall be compatible on the same MXL circuit with other Cerberus Pyrotronics intelligent FPIL and ID-60 Series detectors, TRI Series addressable interfaces, MSI Series addressable manual stations or any other Cerberus Pyrotronics MXL addressable intelligent module.

Ordering Information

Model	Description	Shipping Wt.	
		Lb.	Kg.
TRI-S	Single Input	7 oz.	2
TRI-R	Single Input w/ Relay	7 oz.	2
TRI-D	Dual Input	7 oz.	2

Mounting Data

Addressable Interface Model TRI-S, TRI-D, TRI-R mounts directly into a 4 inch square 2 1/4 deep box or a double gang box (user supplied). A 5 inch square off-white faceplate is included with each TRI.

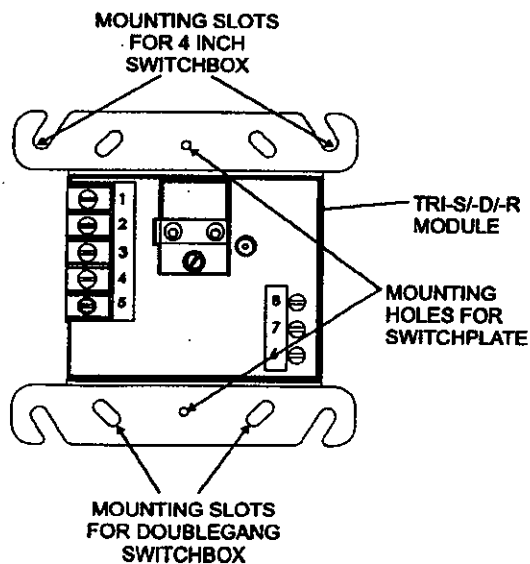


Figure 9
Mounting the TRI-S/-R/-D

Typical Wiring

(Refer to Figures 2, 3, 4, 5, 6 or 7) Refer to the appropriate wiring diagram below and wire the addressable interface module accordingly.

Note: Remove all slack from these wires by pulling excess wiring back through the holes.

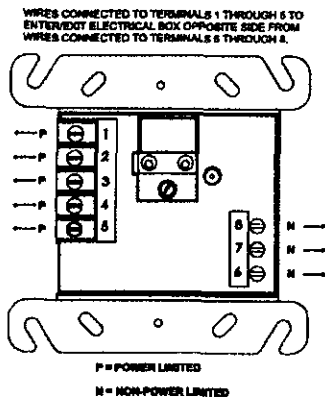


Figure 5
TRI-R Power Limited Wiring

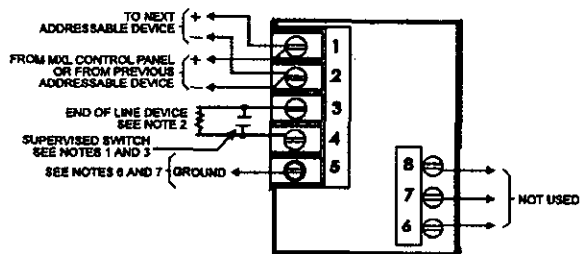


Figure 7
Model TRI-S Wiring

Note: **Recommended wire size:**
18 AWG minimum
14 AWG maximum
Wire larger than 14 AWG can damage the screw terminals.

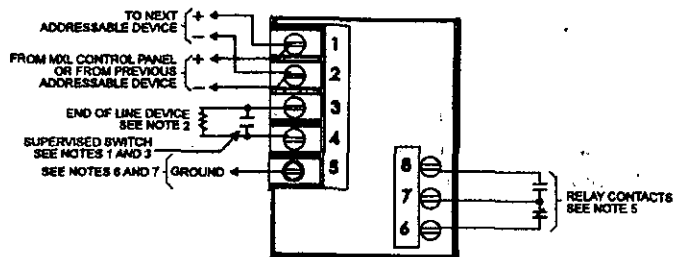


Figure 6
Model TRI-R Wiring

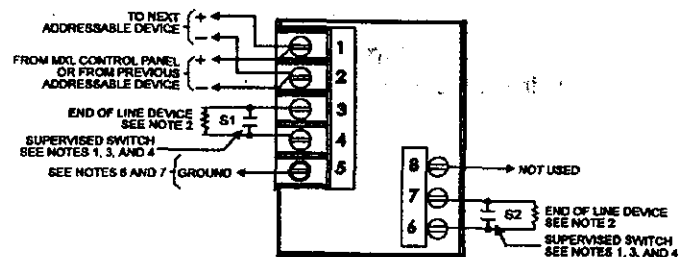


Figure 8
Model TRI-D Wiring

NOTES:

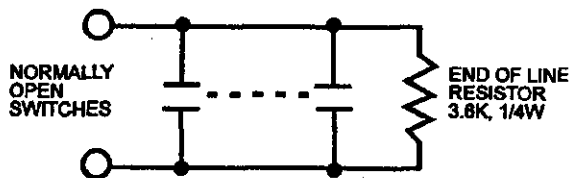
- All supervised switches must be held closed and/or open for at least a quarter of a second to guarantee detection.
- Use UL listed EOL Model EL30/31 with 3.6K, 1/4W resistor, P/N 140-820185. Order Model EL-30/31 separately.
- The supervised switches have the following ratings:
Voltage maximum: 27VDC
Current maximum: 3.5mA during polling
Contact resistance maximum: 10 ohms
Maximum Cable length: 200 feet (18 AWG)
C_{Line to Line}: 0.02uF
C_{Line to Line}: 0.04uF
Max line size: 14 AWG
Min line size: 18 AWG
- Supervised switch S1 is on the first programmed address, and Supervised switch S2 is on the second programmed address.
- Relay contacts are rated:
4A, 125 VAC resistive
4A, 30 VDC resistive
Inductive:
3.5A, 120 VAC (0.6PF)
3.0A, 30 VDC (0.6PF)
2.0A, 120 VAC (0.4PF)
2.0A, 120 VAC (0.35PF)
2.0A, 30 VDC (0.35PF)
- If a Good Local Earth Ground is Available:
a. Terminal 5 must be connected to earth ground.
b. Use wire nuts to pass the shield wire through the electrical box with NO connection to the device terminal block or to local ground.
c. Use shielded wire to connect the switch wiring.
d. Tie the switch wiring shield to the ALD wiring shield. Do not connect shield to terminal 5 or the local earth ground.
- If a Good Local Earth Ground is NOT Available:
Connect shield to terminal 5
If ALD wiring is not shielded, the switch wiring must be in metal raceway.
- In supervisory:
TRI-S/-R draws 1.6mA
TRI-D draws 1.6mA

IMPORTANT
Terminal 5 of the TRI-S/-D/-R must be connected to a known good earth ground for proper operation.

CAUTION
Ground Shield ONLY at the specific location on the Control Panel.

The relay is shown in standby condition.

Typical Wiring Continued



NOTES:

1. There can be any number of normally open switches.
2. The end of line resistor must be located at the last switch.
3. Do not wire a normally closed switch across the end of line resistor.

Application	FPI-32	
	Switch	Device Use
Fire Alarm	Normally Open	Alarm
Fire Trouble	Normally Open	Trouble
Fire Supervisory	Normally Open	Trouble

Figure 3
Wiring Normally Open Switches

SIEMENS

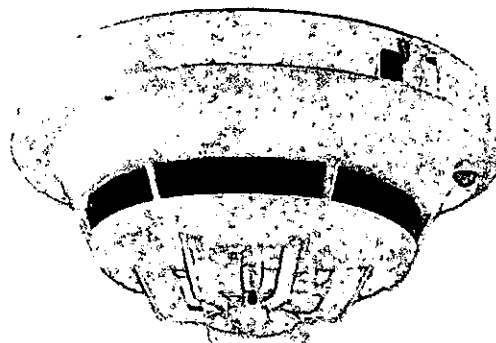
Cerberus Division

FP-11 FirePrint™ Detector

Intelligent Fire Detector for MXL, MXL-IQ, and MXLV Control Panels

ENGINEER AND ARCHITECT SPECIFICATIONS

- Most Sophisticated "Detector Intelligence" available today
- Multi-Criteria fire detection for the price of a photoelectric detector
- FirePrint™ Technology to discriminate between deceptive phenomena and an actual fire
- Easily programmed to match specific hazard profiles from the control panel
- Pre-Alarm reporting based on fire profile selected
- Remote sensitivity measurement capability
- System logic activation based on any of three inputs from detector (smoke, heat or neural network)
- Field cleanable chamber with replaceable chamber parts available
- Multi-color detector status LED
- Two-wire operation
- Compatible with SENSORLINK, Model FPI-32 field programmer/tester
- Supports EnviroLINK software based automatic environmental compensation
- Backward compatible with older MXL systems (Rev. 2 and above)
- Optional fully programmable relay base, audible base, and duct housing
-  UL Listed, ULC Listed



Introduction

The Cerberus Pyrotechnics FP-11 Intelligent Fire Detector provides the life safety industry with the most highly evolved detection system available today. The FP-11 utilizes advanced detection technology that allows the detector to distinguish non-threatening deceptive phenomena, such as cigarette smoke, from actual fire hazards, while optimizing detection for the area in which it is installed. No other detection system available today offers a higher level of protection or nuisance alarm immunity. The FP-11 uses state-of-the-art microprocessor circuitry with error check, detector self-diagnostics and supervision programs.

The FP-11 intelligent fire detector is compatible with the Cerberus Pyrotechnics SENSORLINK, Model FPI-32 field programmer/tester, which is a compact, portable, menu-driven accessory for electronically programming and testing detectors, easily and reliably. The FPI-32 elimi-

nates the need for cumbersome, unreliable mechanical programming methods and reduces installation and service costs by electronically programming and testing the detector prior to installation.

The FP-11 fire detector is compatible with the Cerberus Pyrotechnics MXL family of control panels including the MXL, MXL-IQ, and MXLV.

The FP-11 detector is Underwriters Laboratories and Underwriters Laboratories of Canada Listed.

Description

The FP-11 is a plug-in, two-wire, multi-sensor detector with both photoelectric and thermal inputs and is compatible with Cerberus Pyrotechnics' MXL family of control panel systems. Each detector consists of a dust resistant, field cleanable photo chamber, a solid state non-mechanical thermal sensor, microprocessor based electronics with a low-profile plastic cover and base.

CATALOG NUMBER **6175**

The FP-11 utilizes state-of-the-art ASIC and surface mount technology for maximum reliability. Every FP-11 fire detector is shipped with a protective dust cover.

The FP-11 fire detector utilizes an infrared light emitting diode (IRLED), and light sensing photodiode. Under normal conditions, light transmitted by the LED is directed away from the photodiode and scattered through the smoke chamber in a controlled pattern. The smoke chamber is designed to manage light dissipation and extraneous reflections from dust particles or other non-smoke airborne contaminants in such a way as to maintain stable, consistent detector operation. When smoke enters the detector chamber, light emitted from the IRLED is scattered by the smoke particles and is received by the photodiode.

The FP-11 also utilizes a modern, accurate, shock-resistant thermistor to sense temperature changes. The "on-board" FirePrint technology allows the detector to gather smoke and thermal data, and to analyze this information in the detector's "neural network." By comparing data received with the common characteristics of fires, or fire fingerprints, the FP-11 can compare these "Fire Prints" to those of deceptive phenomena that cause other detectors to alarm. The advanced FirePrint technology allows the FP-11 to accurately determine a true fire hazard from a non-threatening deceptive phenomenon WITHOUT needing to use alarm delaying verification and confirmation techniques, which can increase the probability of losses due to fire.

The Cerberus Pyrotechnics FP-11 provides the highest level of detector intelligence available today with a detector/control panel link that allows the user to program the detector for the specific hazard profile using a simple software menu selection. Detectors are optimized by selecting one of the following applications:

- Office/Retail
- Lobby
- Computer Room
- Dormitory
- Healthcare
- Parking Garage
- Utility/Transformer Room
- Hostile Environment
- Precious Storage
- Air Duct
- Warehouse/Light Manufacturing

The software does the rest; no guessing on detector sensitivities or alarm verification; the control panel programs the FP-11 detector for the protected area without hassle and without confirmation delays. Once optimized for the hazards in the protected area, the FP-11 provides the best detection you can buy. Should the operator or installer forget to program the detector, the FP-11 will revert to a default setting that allows it to operate as a standard photoelectric or photo-thermal detector.

The FP-11's FirePrint technology monitors input from both the photo chamber and the thermal sensor, evaluating this information with sophisticated mathematical formulas, or algorithms, comparing this input to charac-

teristics of both threatening fires and deceptive phenomena that would "fool" any ordinary detector. This technology was developed over years of research and reviewing the results of over 20 years of fire test data in one of the world's most advanced fire research centers. The results of this research are the mathematical models that form the algorithms used in FirePrint. No other fire detector has this level of intelligence or this amount of research and development supporting its design.

The microprocessor's software can identify and disregard false input caused by radio frequency (RFI) and electromagnetic (EMI) interference, and validates all trouble conditions before annunciating or reporting to the control panel. The FP-11 detector's microprocessor uses an integral EEPROM to store the detector's address and other critical operating parameters which include the assigned program values for alarm and trouble thresholds. Communications within the detector itself and between the FP-11 and the control panel, or with the FPI-32 field programmer/tester, are supervised and safeguarded against disruption by reliable, microprocessor based error checking routines. Additionally, the microprocessor supervises all EEPROM memory locations and provides a high degree of EEPROM failure fault tolerance.

In MXL(V) applications, the FP-11 determines its operating status to be normal, in alarm, or in trouble depending on the difference between the alarm threshold values stored in the detector's memory and the detector's latest analog measurement. The detector then communicates changes in its status to the control panel.

In addition, the MXL(V) control panel will sample the value of the FP-11's analog signal over a period of time in order to determine if those values indicate excessive buildup in the photo chamber; if so, the MXL(V) will indicate that the particular detector requires maintenance.

The FP-11 is listed as a self-testing device. The FP-11's visible light emitting diode (LED) flashes green every 4 seconds to indicate it is communicating with the control panel and that it has passed its internal self-test. Should the detector sense a fault or failure within its systems, the LED will flash amber and the detector will transmit that information to the control panel. A quick visual inspection is sufficient to indicate the condition of the detector at any time. If more detailed information is required, a printed report can be provided from the MXL panel indicating the status and settings assigned to each individual detector.

When the FP-11 moves to the alarm mode, it will flash amber and transmit that information to the control panel. When the MXL(V) confirms the detectors condition, the panel will instruct the FP-11 to flash red and to continue flashing until the system is reset at the control panel. At that same time, any user defined system alarm functions programmed into the system are activated. Each FP-11 detector can operate one remote alarm indicator, one auxiliary relay, or one audible base.

Detector sensitivity, calibration, and identification are dynamically supervised by the control panel. Detector sensitivity and pre-alarm levels are a function of the application chosen at the control panel and are controlled by the panel. If an alternate, non-FirePrint mode is selected, then the sensitivity can be changed from the control panel.

The SensorLINK FPI-32 Program/Test accessory is used to program and verify the detector's address. The technician selects the accessory's program mode to enter the desired address. The FPI-32 automatically sets and verifies the address and tests the detector. It also allows the user to change the device ID from that of an FP-11 to an older detector ID such as an ILP-1, ILPT-1, ILP-2, ID-60P or ID-60PT to allow for easy replacement of older detectors without the need of reprogramming the control panel.

The FPI-32 operates on AC power or rechargeable batteries, providing flexibility and convenience in programming and testing equipment almost anywhere. When in the test mode, the FPI-32 will perform a series of diagnostic tests without altering the address or other stored data, allowing technicians to determine if the detector is operating properly.

The FP-11 fire detector may be installed on the same initiating circuit with IL or ID series detectors (Photoelectric, thermal, or ionization), MSI series manual stations, TRI series interfaces, ICP output control devices, or CZM series of addressable, conventional zone modules.

All FP-11 detectors can be cleaned in the field, when required, by simply removing the detector cover and unsnapping the photo chamber. There is also the option of cleaning the interior of the detector with a clean, soft cloth or brush, or replacing the labyrinth and bug screen included in the detector maintenance kit, model DMK-11.

The FP-11 uses the Cerberus Pyrotechnics low profile surface mounting base, model DB-11. This base mounts on a 4-inch octagon, square, or a single gang electrical box. The base utilizes screw clamp contacts for electrical connections and self-wiping contacts for increased reliability. The base can be used with the optional LK-11 detector locking kit which contains 50 detector locks and an installation tool, to prevent unauthorized removal of the detector head. The DB-11 base has integral decorative plugs to cover the outer mounting screw holes.

The FP-11 is electrically compatible with existing MXL detector accessories including relays, remote lamps, duct housings, and audible bases. With duct housings, a base adapter and new detector housing cover are required (order AD-11UK upgrade kit). To use existing DB-3S base or audible base, the FP-11 requires a DB-ADPT base adapter.

All FP-11 detectors are approved for operation within the UL specified temperature range of 32 to 100 degrees F (0 to 38 degrees C).

Application Data

Installation of the FP-11 series of fire detectors requires a two-wire circuit of 18 AWG (minimum) thermoplastic fixture wire enclosed in conduit, or 18 AWG limited energy, shielded cable without conduit, if permitted by local codes. Field wiring should conform to local and National Electric Codes and the control panel wiring specifications.

"Tapping" is permitted only for Style 4 (Class B) wiring.

FP-11 fire detectors can be applied within the maximum 30 foot center spacing (900 sq. ft. areas) as referenced in NFPA 72. This applications guideline is based on ideal conditions, specifically, smooth ceiling surfaces, minimal air movement, and no physical obstructions between potential fire sources and the detector. Do not mount detectors in close proximity to ventilation or heating and air conditioning outlets. Exposed joints or beamed ceilings may also affect safe spacing limitations for detectors. Should questions arise regarding detector placement, observe NFPA 72 guidelines.

Good fire protection system engineering and common sense dictate how and when fire detectors are installed and used. Contact your local Siemens Cerberus Division distributor or sales office whenever you need assistance applying FirePrint in unusual applications. Be sure to follow NFPA guidelines, UL/ULC approved installation instructions, which are included with every Cerberus Pyrotechnics detector, and local codes as for all fire protection equipment.

Engineer and Architect Specifications

The detector shall be a Cerberus Pyrotechnics FP-11 addressable, multi-sensor (photoelectric-thermal) type with FirePrint application specific software with a Cerberus Pyrotechnics MXL series control panel. The detector shall have a plug-in "head" unit which mounts to a twist-lock base with self-wiping contacts. The detector shall incorporate microprocessor based circuitry which shall perform all detection and communications functions. No addressing mechanisms shall be contained in the detector's base. The detector shall operate on a two-wire circuit and shall include a multi-color LED indicator which shall flash green every four seconds indicating a normal condition, amber to indicate a detector fault, and red, when instructed by the panel, to indicate an alarm condition. The detector shall be listed with Underwriter's Laboratories, Inc.

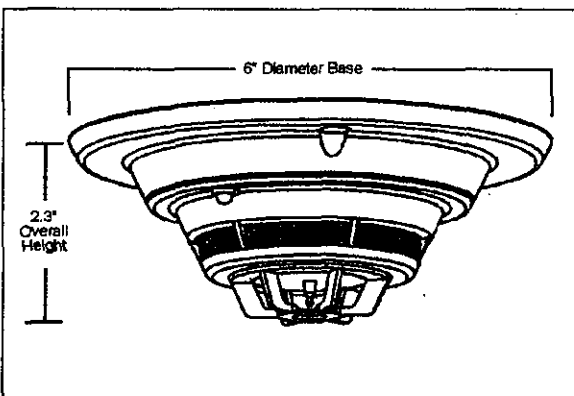
The smoke chamber of the detector shall effectively manage light dissipation and extraneous reflections from dust particles or other airborne contaminants in such a way as to maintain stable, consistent detector operation. The detector shall incorporate FirePrint software technology enabling the control panel to program the detector to match the environment in which the detector is installed. This software shall give the user a minimum of eleven (11) environment choices. This system shall automatically set detector alarm and pre-alarm points as well as calculation factors for weighing input from the detectors sensors. The detector shall be capable of operating in a factory defined default mode if the operator or installer fails to properly program the detector.

Detector addressing shall be accomplished electronically, using a portable field programming/test accessory. Mechanical addressing schemes such as programming pins, dip or rotary switches, or plug in cards, shall not be used. The field programming device shall be a Cerberus Pyrotechnics model FPI-32 which is menu driven and operates on either 120 VAC or rechargeable battery. Once the desired address has been entered at the FPI-32 programming device, the device will download the data into the detector's non-volatile memory and verify that the detector has been correctly programmed. The programming device shall be capable of also downloading an alternate device ID code to allow programming of the detector for use with older Cerberus Pyrotechnics fire alarm system components. Communications between the detector and the programming device shall be supervised by error checking algorithms. The field programming device shall also be capable of performing diagnostic tests to determine if the detector is operating properly and to display the detector's device ID and assigned address.

The detector shall be capable of bi-directional communications with the control panel and shall be dynamically supervised and uniquely identifiable by the control panel. The control panel shall be capable of analyzing the signal for the detector's analog value for calibration, sensitivity and address identification. These values shall be displayed upon command from the control panel as well as the detector's application program setting. The detector's sensitivity or application setting shall be individually controlled from the control panel. Should the detector sensitivity voltage shift beyond an acceptable level and remain there for a predetermined duration, a detector trouble signal shall be annunciated at the MXL control panel, which uniquely identifies the detector.

Each detector shall be capable of operating one remote alarm indicator, auxiliary relay, or audible base. The relay, remote alarm indicator, or audible base should be normally activated by the associated detector, but shall be capable of being programmed for control by control

Dimensions



logic and independently of the detector. All detectors, remote alarm indicators, audible devices, and or relays connected to the addressable initiating circuit shall be capable of being in alarm or activated simultaneously.

The detector and base should have no visible mounting screws or components that will attract from the aesthetics of the unit when mounted. If screws or holes for screws are visible, cover plugs must be provided to cover the screw or mounting hardware.

The FP-11 fire detector shall be compatible with the standard DB-11 base, AD-11P air duct housing, AD-11XPR Air Duct Housing with Relay, ADBX-11 audible base and the DB-11XRS relay base. A locking mechanism shall be installed in those areas where tamper resistant installation is required.

Technical Specifications

Current Requirements: Normal 750 μ a
Alarm 750 μ a

Operating Temperature: +32°F (0°C) to 100°F (38°C)
per UL 268/268A

Humidity: 0-93% Relative Humidity
Non-Condensing

Ordering Information

Model	Description	Part Number
FP-11	Addressable FirePrint Fire Detector	500-095112
DB-11	Detector Mounting Base for Series 11	500-094151
AD-11P	Air Duct Housing for Series 11	500-095858
AD-11XPR	Air Duct Housing w/Relay for Series 11 Intelligent Detector	500-096062
DB-X11RS	Relay Base for Series 11 Intelligent Detectors	500-096125
RLI-1	Remote (red) alarm indicator - 4" octagon box mount	500-390673
RLI-2	Remote (red) alarm indicator - single gang box mount	500-390674
LK-11	Base Locking Kit for Series 11 detectors	500-695350
DMK-11	Series 11 Maint Kit (replacement labyrinth and bug screen)	500-695338
AD-11UK	Air Duct Housing Cover / Adapter Kit	500-695967
DB-ADPT	Base Adapter to DB-3S Base	500-094187

In Canada Order:

FP-11C	Addressable FirePrint Fire Detector (ULC)	500-095112C
DB-11C	Detector Mounting Base for Series 11 (ULC)	500-095887
AD-11PC	Air Duct Housing (ULC)	500-095984

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July 1999
Supersedes sheet dated 8/98

SIEMENS FPT-11

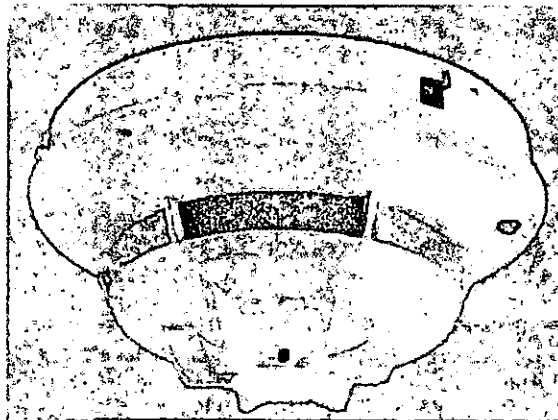
Cerberus Division

Intelligent Thermal Detector for MXL, MXL-IQ and MXLV Control Panels

ENGINEER AND ARCHITECT SPECIFICATIONS

FPT-11

- Microprocessor Based Design
- Rate of Rise and Fixed Temperature
- Innovative Technology Provides High Speed, Fault Tolerant System/Detector Communications
- Multi-Color Detector Status LED
- Optional Fully Programmable Relay Base and Audible Base
- Two-Wire Operation
- Backward Compatible with Older MXL Systems (Rev 2 and Above)
- Compatible with SensorLINK, Model FPI-32 Field Programmer/Tester
-  Listed, ULC Listed
CSFM, FM, NYMEA Approved



Introduction

Cerberus Pyrotronics FPT-11 intelligent thermal detector provide an advanced method of detection, address programming and supervision, combined with sophisticated control panel communication. The FPT-11 detector uses a state-of-the-art thermistor providing 135°F fixed temperature and 15° per minute rate-of-rise alarm points. The user also has the option of disabling the rate-of-rise feature leaving just a fixed temperature sensor.

The FPT-11 intelligent thermal detector is compatible with Cerberus Pyrotronics' **SensorLINK** FPI-32 field programmer/tester. The FPI-32 is a compact, portable, menu-driven accessory which makes programming and testing detectors faster, easier and more reliable than other methods. The FPI-32 eliminates the need for cumbersome, unreliable mechanical programming methods and reduces installation and service costs by electronically programming addresses and functionally testing the FPT-11's performance before the detector is installed.

The FPT-11 thermal detector operates with the Cerberus Pyrotronics MXL family of control panels including MXL, MXL-IQ and MXLV.

The FPT-11 intelligent thermal detector is Underwriters Laboratory listed and Underwriters Laboratory of Canada listed.

Description

The FPT-11 is a plug-in, two-wire thermal detector, compatible with Cerberus Pyrotronics MXL family of control panels. Each FPT-11 has microcomputer chip technology and highly stable solid state electronic circuitry.

The FPT-11 utilizes a modern, accurate, shock-resistant thermistor to sense temperature changes. This electronic sensing method virtually eliminates thermal lag associated with mechanical temperature sensing devices and provides almost instantaneous temperature information to the control panel. The FPT-11, in its default

CATALOG NUMBER **6176**

mode, is a combination 135°F fixed temperature and 15° per minute, rate-of-rise detector. It can be programmed from the control panel as a fixed temperature detector without rate-of-rise, at the users option.

The FPT-11 detector's microprocessor uses an integral EEPROM to store the detector's address. Communications within the detector itself and between the FPT-11 and the control panel, or with the FPI-32 field programmer/tester, are supervised and safeguarded against disruption by reliable, microprocessor based error checking routines. Additionally, the microprocessor supervises all EEPROM memory locations and provides a high degree of EEPROM failure fault tolerance.

The FPT-11 is listed as a self-testing device. The FPT-11's visible light emitting diode (LED) flashes green every 4 seconds to indicate it is communicating with the control panel and that it has passed its internal self-test. Should the detector sense a fault or failure within its systems, the LED will flash amber and the detector will transmit that information to the control panel. A quick visual inspection is sufficient to indicate the condition of the detector at any time. If more detailed information is required, a printed report can be provided from the MXL panel indicating the status and settings assigned to each individual detector.

When the FPT-11 moves to the alarm mode, it will flash amber and transmit that information to the control panel. When the MXL(V) confirms the detectors condition, the panel will instruct the FPT-11 to flash red and to continue flashing until the system is reset at the control panel. At that same time, any user defined system alarm functions programmed into the system are activated. Each FPT-11 detector can operate one remote alarm indicator, one auxiliary relay, or one audible base; but only one accessory per detector.

An FPI-32 Programmer/Tester is used to program and verify the detector's address. The user selects the Program Mode to enter the desired address. The FPI-32 Programmer/Tester then automatically sets and verifies the address as well as tests the detector. The FPI-32 has rechargeable batteries, so a detector's address can be programmed by the user from the most convenient location. The user can also separately test the detector for functionality. When the user selects the Test Mode, a series of tests are automatically conducted and the user is informed whether the detector has passed or failed.

The FPT-11 detector is compatible on the same MXL initiating circuit with other Cerberus Pyrotechnics IL Series, FP Series or ID-60 Series addressable ionization, photoelectric, or thermal detectors, MSI addressable manual stations, TRI Series addressable interfaces, or CZM Series addressable conventional zone modules.

Each FPT-11 thermal detector is capable of operating one "X" or "I" Series remote alarm indicator or auxiliary relay or audible base. The FPT-11 detectors use a surface mounting base, Model DB-11, which mounts on a 4-inch octagonal, square or single gang electrical box. Relay

base Model DB-X11RS mounts to a 4-inch square deep electrical box. Audible base Model ADBX-11 also mounts to a 4-inch square deep electrical box.

The DB-11, and the DB-X11RS and ADBX-11 use screw-clamp terminals for all electrical connections and self-wiping contacts for reliability. The bases also contain a provision for an optional concealed locking mechanism to prevent unauthorized removal of the detector head, Model LK-11.

Application Data

The MXL uses ALD loop circuits with each circuit capable of supporting up to sixty FPT-11 intelligent detectors.

The detector, or group of detectors, require a two-wire circuit of minimum 18 AWG thermoplastic fixture wire enclosed in conduit, or minimum 18 AWG limited energy, shielded cable without conduit if permitted by local building codes. Wiring should conform to local and National Electrical Codes, and to the control panel's wiring specifications. T-tapping is permitted only for Style 4 (Class B) wiring.

Engineer and Architect Specifications

The addressable thermal detector shall incorporate a custom microprocessor based integrated circuit which shall provide communication with its compatible control panel. All of the detector's communication circuits shall be contained within the detector head. No communication electronics or address identification mechanisms shall be contained within the detector's base. The detector shall be a Cerberus Pyrotechnics FPT-11 thermal detector which shall be compatible with the Cerberus Pyrotechnics MXL family of control panels. The thermal detector shall consist of 135°F rated sensor with rate-of-rise compatibility.

The detector's address shall be programmed with the use of a portable programming accessory. The programming accessory shall be a Cerberus Pyrotechnics FPI-32 Programmer/Tester. The portable programmer shall be menu driven. Once the desired address is entered the programmer shall set and verify the address. The programming accessory shall also be capable of testing the detector's functionality. The detector's address shall be set by electronic means only. No mechanical means such as programming pins, dipswitches or rotary dials shall be required to set the detector's address. The detector shall be capable of bi-directional communication with the control panel.

The detectors shall be compatible on the same MXL initiating circuit with other Cerberus Pyrotechnics ID-60 Series, IL Series, FP Series or MSI Series addressable manual stations, TRI or CZM Series addressable conventional zone modules.

The detector shall be capable of operating one remote alarm indicator or auxiliary relay or audible base. The relay or remote alarm indicator is normally activated by the associated detector, however, the MXL system shall be capable of being programmed to operate the relay or remote alarm indicator independently of the associated detector. All detectors and/or relays connected to the initiating circuit can be in alarm or activated simultaneously.

The addressable thermal detectors shall insert into the standard Model DB-11 base or the DB-X11RS relay base or the ADBX-11 audible base. The base assembly in which the detector is installed shall be of the twist-lock design with screw-clamp terminals. The base shall use self-wiping contacts and shall accept other compatible plug-in detectors. A locking mechanism shall be installed in those areas where tamper resistant installation is required.

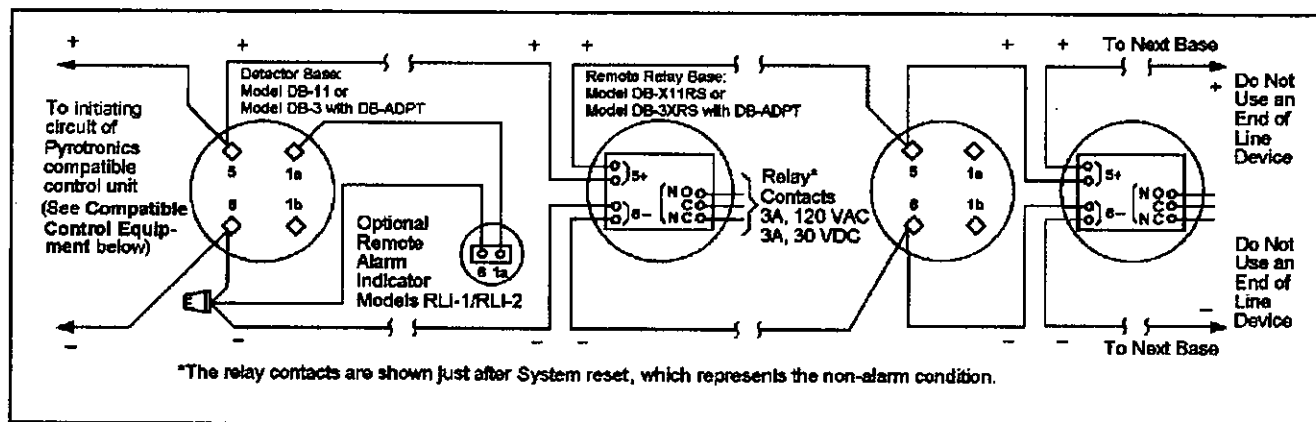
Technical Specifications

Current Requirements:	Normal 750 μ a Alarm 750 μ a
Operative Temperatures:	+32°F (0°C) to 100°F (38°C)
Humidity:	0-93% Relative Humidity Non-condensating

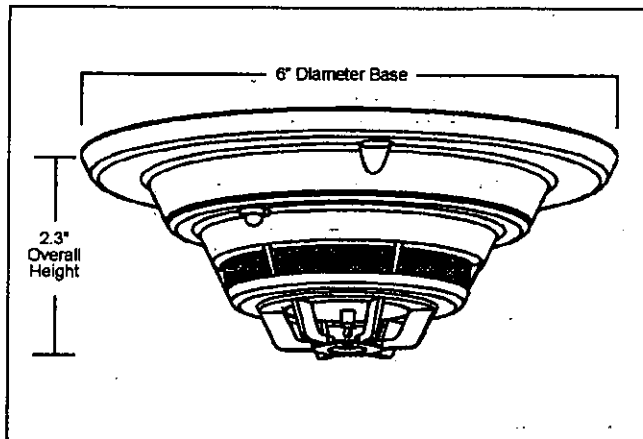
Ordering Information

Model	Description	Part Number
FPT-11	Addressable Thermal Fire Detector	500-095918
DB-11	Detector Mounting Base for Series 11	500-094151
DB-X11RS	Relay Base for Series 11 Intelligent Detectors	500-096125
ADBX-11	Audible Base for Series 11 Intelligent Detector	500-096181
RLI-1	Remote (red) alarm indicator octagon box mount	500-390673
RLI-2	Remote (red) alarm indicator single gang box mount	500-390674
LK-11	Base Locking Kit for Series 11 detectors	500-695350
DB-ADPT	Base Adapter to DB-3S Base	500-094187
In Canada Order:		
FPT-11C	Addressable Thermal Fire Detector (ULC)	500-095918C
DB-11C	Detector Mounting Base for Series 11 (ULC)	500-095687
DB-X11RSC	Relay Base for Series 11 Intelligent Detectors (ULC)	500-096125C
ADBX-11C	Audible Base for Series 11 Intelligent Detector (ULC)	500-096181C

Typical Wiring Diagram



Dimensions



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Cerberus Division

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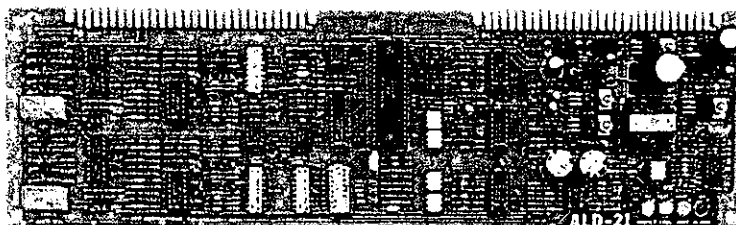
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March 2000
Supersedes sheet dated 7/99

ALD-2I Analog Loop Driver

ENGINEER AND ARCHITECT SPECIFICATIONS



- Dynamic Supervision
- 2 Intelligent Analog Device Circuits
- Remote Smoke Detector Sensitivity, Voltage Read-out/Printout
- Device Identification
- 32 Character Custom Alphanumeric Message Per Device
- Accepts Remote Conventional Zone Modules (CZM-1)
- Alarm, Trouble, Supervisory, Security and Status Reporting
- Supports Audible Bases
- Short Circuit Isolation with LIM-1
- On Board Microprocessor
- Isolated Power Supply
- Power Limited Per NEC 760
- Programmable Input/Output Module
- 60 Intelligent Devices Per Circuit
- Remote Smoke Detector Sensitivity Adjustment
- Independent Control of Detector Relays (Up to 60 per Circuit)
- Intelligent Contact Monitoring Devices
- Supports T-Tap Wiring
- Style 4 (Class B) or Style 6 (Class A) Wiring
- Degrad Mode
- On-Board Ground Fault Detection
-  Listed, ULC Listed, FM, CSFM, NYMEA, and City of Chicago Approved

Description

The ALD-2I is an MXL Network option module that supplies two intelligent analog circuits utilizing Cerberus Pyrotronics "I" series, "IL" series and FirePrint intelligent devices. It occupies two addresses on the Network and, through the use of a unique communications protocol, devices connected to the ALD-2I circuits are dynamically supervised by the MXL Control Panel. Smoke detectors are monitored for sensitivity and notification is given when the sensitivity is outside normal parameters. Each of the ALD-2I circuits supports the use of up to 60 alarm, trouble, security, status and supervisory type devices as well as remote conventional initiating device zone modules (CZM-1) and intelligent output devices (TRI-B6R, ICP). Sensitivity of any smoke detector can be queried and adjusted from the control panel. Sensitivity as well as

other device information can be displayed and printed at the control panel. The ALD-2I supports the use of relay bases and audible bases (independently controllable).

To provide analog loop short circuit isolation, the LIM-1 isolation module can be used to prevent a single short from interrupting loop device communication.

Each ALD-2I circuit can be wired in either a Style 4 (Class B) or Style 6 (Class A) configuration. When using the Style 4 method, T-Tapping is permitted with no loss of supervision.

The ALD-2I has an on board microprocessor that provides it with the ability to function in a degrade mode and initiate alarm conditions even if the MXL main microprocessor fails.

The ALD-2I plugs into one full width option slot in the MOM-2 or MOM-4 card cage.

This equipment is approved for operation over the temperature range of 0°C and 49°C.

Engineer and Architect Specifications

Intelligent analog device circuits shall be provided by an ALD-2I Analog Loop Driver Module. This module shall plug into one full width slot of the MOM-2 or MOM-4 card cage as a part of the Cerberus Pyrotechnics MXL, MXLV or MXLIQ systems.

Each ALD-2I shall provide two circuits. Each of these circuits shall support the use of up to 60 intelligent devices, as well as remote conventional initiating zone modules. Sensitivity of any smoke detector can be queried and adjusted from, as well as displayed at, the control panel. Sensitivity change shall be performed either manually or automatically through the time based logic.

The ALD-2I shall support the use of relay bases, audible bases, and remote lamps.

ALD-2I circuits shall be capable of being wired to meet the requirements of either NFPA Style 4 or Style 6. When wired as a Style 4 circuit, it shall support the use of parallel branch circuits (T-Tapping).

The ALD-2I shall utilize an on board CPU as well as network interface circuitry and A/D converters. It shall be capable of operation in a degrade mode in the event of MXL main processor failure or loss or network communication link. In the degrade mode the ALD-2I circuits shall be capable of sensing an alarm condition from its connected devices and activating local notification appliance circuits through a degrade alarm bus.

ALD-2I circuits shall meet the requirements of NEC 760 for power limiting.

Electrical Specifications

1. Electrical Ratings

Module Ratings:	
Supervisory	30VDC, 175mA max
Alarm	30VDC, 175mA max

Initiating circuits are rated:

Supervisory	30VDC peak, 66mA max
Alarm	30VDC peak, 66mA max
(60 devices in alarm)	

- All wiring must be in accordance with Article 760 of NEC and local building codes.
- Only the devices in the following list may be used. A maximum of 60 devices (excluding CZM-1, CZM-1B6, LIM-1 and ICP) in any combination may be connected to a single loop. The UL identifiers for compatibility are the same as the model names specified below.
- No end of line device is required.

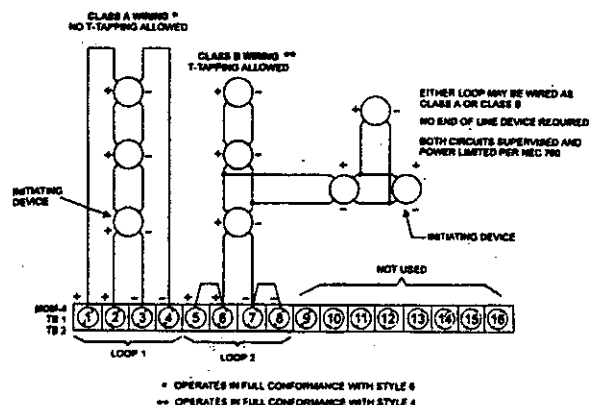
Compatible Devices	Installation Instructions
CZM-1	P/N 315-090725-8
CZM-1B6	P/N 315-095355-2
FP-11/FPT-11*	P/N 315-095821-4
ID-601/601H	P/N 315-090287-2
ID-601A/601AH	P/N 315-090287-2
ID-608/601BH	P/N 315-093234-4
	P/N 315-093235-4
ID-60T-136	P/N 315-090288-2
IL-1/1H	P/N 315-095387-1
IL-1A/1AH	P/N 315-095387-1
IL-1B/1BH	P/N 315-093234-4
	P/N 315-093235-4
ILP-1/LPT-1	P/N 315-092594-6
ILP-1(f)	P/N 315-093234-4
	P/N 315-093235-4
ILP-2**	P/N 315-095028-3
ILT-1	P/N 315-093336-1
MSI-10/20	P/N 315-090903-3
MSI-10B/20B	P/N 315-093329-3
TR-66/66R/66D	P/N 315-093315-3
TR-68M	P/N 315-094547-1
TR-S/D/R	P/N 315-098242-2

*The FP-11/FPT-11 is only compatible with MXL/MXLV Rev. 10.0 or greater firmware and MXLIQ Rev. 6.0 or greater firmware.

**The ILP-2 is only compatible with MXL/MXLV Rev. 8.0 or greater firmware and MXLIQ Rev. 3.0 or greater firmware.

- Both circuits are power limited to NFPA 70, per NEC 760. Each detector, or group of detectors, requires a two-wire circuit of 18 AWG minimum thermoplastic fixture wire enclosed in a conduit of 18 AWG limited-energy shielded cable without conduit, if permitted by local building codes.
- Total circuit resistance must not exceed 100 ohms.
Maximum Capacitance:
0.4µF, between loop+ and loop-
0.8µF, between loop+ and chassis
0.8µF, between loop- and chassis
- T-Tapping is not allowed on Class A loops.

Wiring Diagram



NOTICE: The use of other than Cerberus Pyrotechnics detectors and bases with Cerberus Pyrotechnics control equipment will be considered a misapplication of Cerberus Pyrotechnics equipment and as such void all warranties, either expressed or implied with regard to loss, damage, liabilities and/or service problems.

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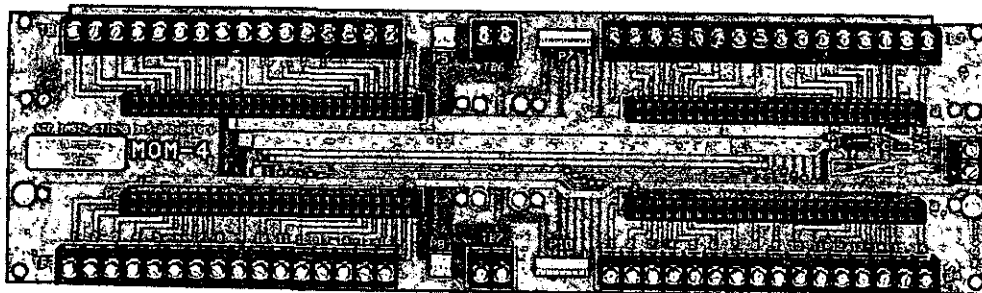
February 2000
Supersedes sheet dated 7/99

MOM-4

Network Option Module Card Cage

ENGINEER AND ARCHITECT SPECIFICATIONS

- Four Half-Width or Two Full-Width Option Module Slots
- Clamp-Type Screw Terminals for Field Wiring Connections
- Mounts in MXL Main Cabinet or MXLR Remote Units
- Gold Plated Connectors
- Provides Input Terminals for Auxiliary DC Power
- Accepts CRM-4, CZM-4, ALD-2I, NET-7, CSM-4, CMI-300, REP-1, NIM-1R and XLD-1
-  Listed, ULC Listed, CSFM, NYMEA, FM, and City of Chicago Approved



Description

The MOM-4 card cage provides the MXL main unit or remote units with card slots for option modules. Each MOM-4 supplies connection space for either two full width option modules (ALD-2I, CZM-4, NIM-1R, XLD-1) or four half-width option modules (CSM-4, CRM-4, CMI-300, REP-1, NET-7), or a combination of one full and two half-width modules. Note: only one CMI-300 may be used per MXL system. Modules are supplied with card guides.

The MOM-4 also provides a means of connecting the option modules to the MXL network. It supplies 24V unfiltered/unregulated DC and 5VDC to power the option modules. The DC is routed to the MOM-4 from the MMB-2 main board or the PSR-1 power supply.

Screw terminals are mounted on the MOM-4 to provide easy access for field wiring connections. Screw terminals are also provided for connection to an auxiliary power supply for use with CSM-4 notification appliance circuits (when additional audible/visual power is required).

The MOM-4 mounts in one of the MXL system back-boxes located at the main MXL or MXLR remote units. Up to two MOM-4s may be installed in the MBR-1 backbox (only one when TSP-40 printer is used). Up to three MOM-4s may be installed in the MBR-2 backbox (only two when TSP-40 printer is used).

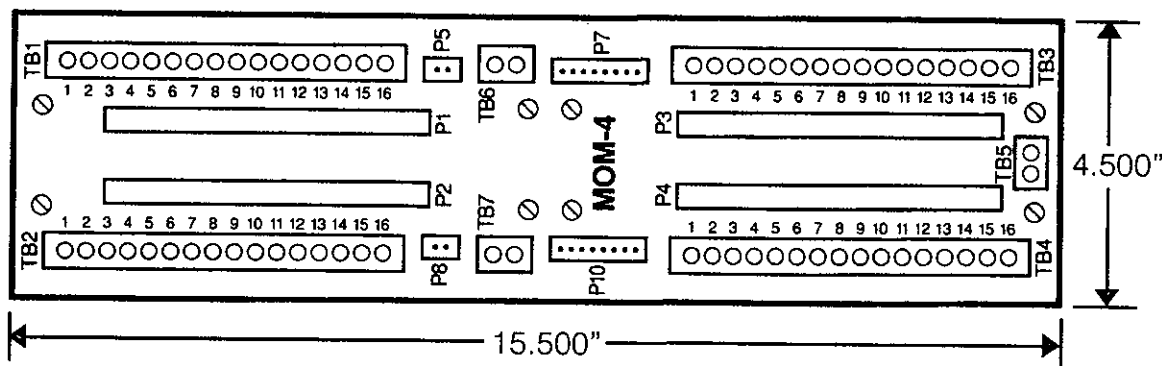
Engineer and Architect Specifications

Interface between optional circuit cards and the MXL system network shall be provided by a MOM-4 expansion card cage. The MOM-4 shall provide two full-width edge connector-type plug-in slots for the addition of the following system option card modules: CZM-4 conventional zone module; NIM-1R LifeLINK Network Interface Module; XLD-1 "X" Series Device Module; REP-1 Network Repeater; NET-7 Style 7 Network Module; CRM-4 controllable relay module; CSM-4 controllable signal module; ALD-2I analog loop driver module; CMI-300 CXL modem. The ALD-2I, CZM-4, NIM-1R and XLD-1 shall occupy one full slot in MOM-4 and CRM-4, REP-1, NET-7, CSM-4 and CMI-300, shall each occupy one half slot in the MOM-4.

The MOM-4 shall also provide a distribution point for option module power. The MOM-4 shall supply necessary screw terminal connections for any option module field wiring. This shall allow the replacement of modules without the removal of field wiring.

The MOM-4 shall be mounted in one of the MXL system backboxes located at the main MXL unit or MXLR remote units.

Dimensional Data



MOM-4 Circuit Board Layout

Compatible MXL Modules

Model	Description	Part Number
CSM-4	Signal Crt. Module	500-890402
CRM-4	Relay Module	500-890401
CZM-4	Conv. Zone Module	500-890488
CMI-300	CXL Interface Module	500-891238
REP-1	RS485 Repeater Module	500-892954
NIM-1R	Network Interface Module	500-892953
XLD-1	"X" Series Device Interface	500-893383
ALD-2I	Analog Loop Driver	500-891618



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 Tel: (905) 764-8384
 FAX: (905) 731-9182

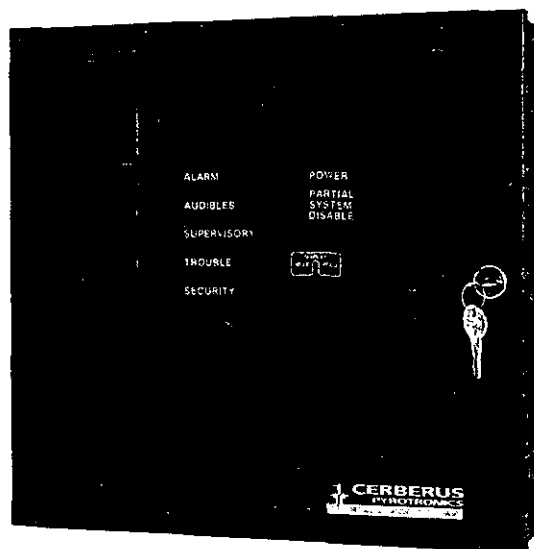
April 1997
 Supersedes sheet dated 8/96

RCC-1

Remote Command Center

ENGINEER AND ARCHITECT SPECIFICATIONS

- Remote MKB for Display and Control
- 80 Character LCD Display
- Auto Backlight
- Supertwist High Resolution
- Full Command Keypad
- MXL Network Interface (Style 4 or Style 7)
- Metal Enclosure with Keylock Door
- Restricts Keypad Access
- Optional Printer/Peripheral Interface (PIM-1)
- Supervised
-  Listed, ULC Listed, FM, CSFM, NYMEA and City of Chicago Approved



Description

The RCC-1 is a full control remote command and display center for use with the MXL. It includes the display/keypad, a PS-5N7 power supply and local network interface, and a small sheet metal enclosure with a lockable door. The door restricts access to the command and control keypad located on the RCC-1. The RCC-1 is connected to the MXL's local network and is powered by the system power supplies or other listed, compatible supplies such as the PS-35 or Alarm-Saf model AS/PS5-BFS-24UL. The RCC-1 is capable of being connected to the MXL's local network in either Style 4 or Style 7 wiring configurations. Located inside the RCC-1 enclosure, the PS-5N7 modules acts as an interface to the MXL network and also supplies the required 5 VDC to the unit. Adjacent to the PS-5N7 are mounting studs for a PIM-1 modules. The addition of a PIM-1 to the RCC-1 allows the connection of a printer (PIM-2, PAL-1), VDT, Color Graphics (MXL-G, MXL-GT) or other peripherals.

Up to four RCC-1s may be operated in a fully supervised mode. Additional RCC-1s can be used and operated in a non-supervised mode.

This equipment is approved for operation over the temperature range of 0°C to 49°C.

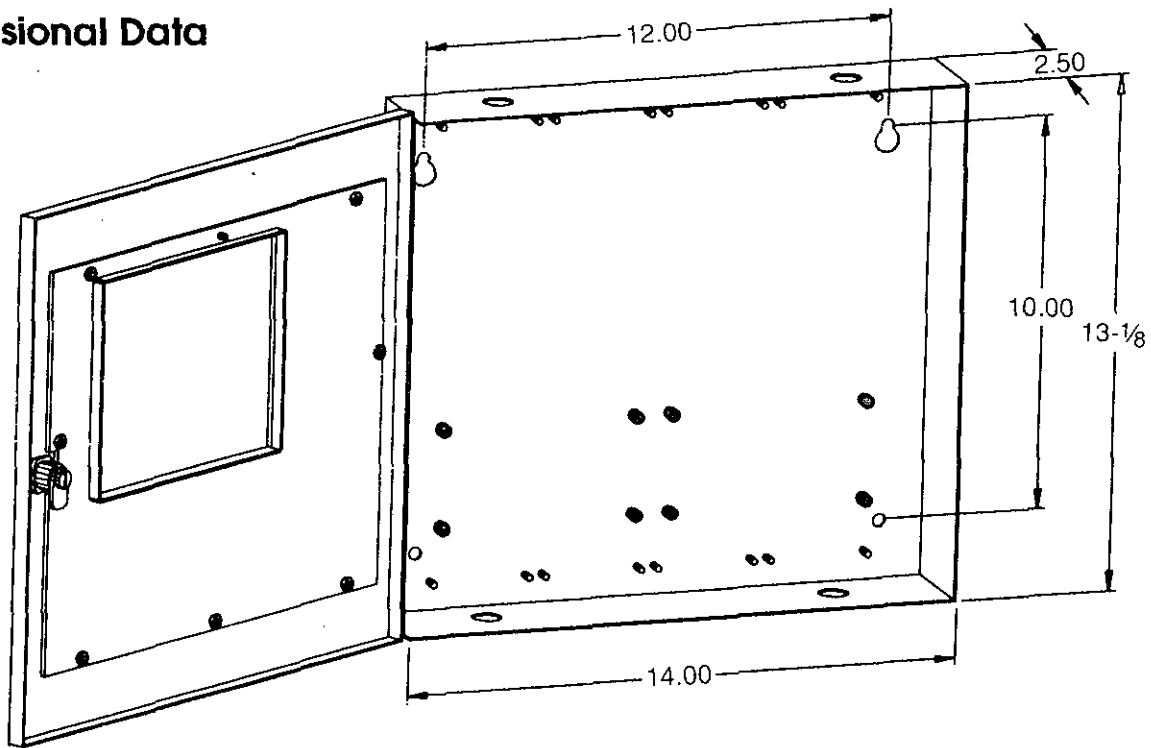
Engineer and Architect Specifications

Through the use of the RCC-1 keypad, the operator may acknowledge events, silence audibles, and reset the system. The menu driven display allows the listing to the display and optional printing of a wide range of data including the detector voltages, sensitivity settings, event log, system status, and more. In addition, password access allows the operator to perform control and test functions such as changing smoke detector sensitivity settings, disarming input and output devices, manually controlling relays, executing display and lamp test, walk test, etc. Access to the keypad controls is restricted by a locked enclosure door. The only keys accessible without opening the door are the HOLD and NEXT display control keys. As an option, a GenBox-WD clear lens may be inserted instead of the metal cover section in the door. This permits viewing of the full display and keypad but does not allow access to any of the keys. The RCC-1 is shipped with the sheet metal section in the door.

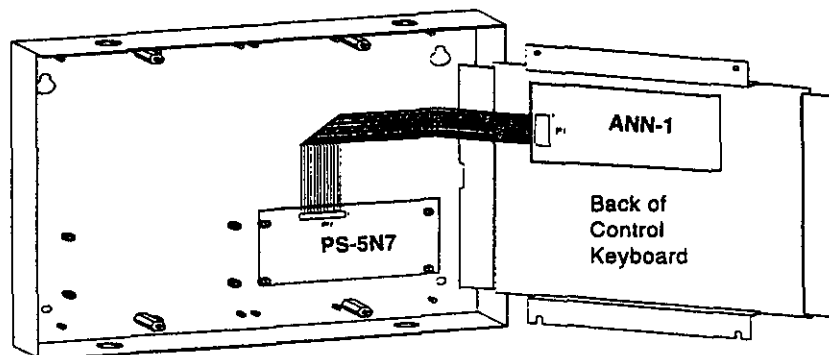
Ordering Information

Model	Description	Part No.
RCC-1	Remote Command Center	500-692533
GenBox-WD	Clear Lens for RCC-1 Door	500-692502
	Installation Instructions	315-092535

Dimensional Data



Typical Wiring Configuration



Cerberus Pyrotechnics
8 Ridgedale Avenue
Cedar Knolls, NJ 07927
Tel: (201) 267-1300
FAX: (201) 397-7008

2/97
5M
CPY-IG
Printed in U.S.A.

Cerberus Pyrotechnics
50 East Pearce Street
Richmond Hill, Ontario
L4B 1B7 CN
Tel: (905) 764-8384
FAX: (905) 731-9182

April 1996
Supersedes sheet dated 5/95



Fire Safety Division

Siemens Building Technologies
Fire Safety Division
2000 Crawford PL. Suite 300
Mount Laurel, NJ 08054
TEL: [856-234-7666]
FAX: [856-234-5690]

To Whom It May Concern:

This letter concerns the Fire Alarm System repair/replace installation at the Brick COSTCO facility.

Siemens Building Technologies will be replacing the (FACP) Fire Alarm Control Panel, pull stations, smoke and heat detectors, the monitoring modules for the duct mounted smoke detectors and we will be replacing the Annunciator as well. We will leave the existing Audible/Visual indicating appliances, as they are fully compatible with the new system. I am including specification sheets (cut sheets) for the proposed equipment. There will not be any new wiring as this is for replacing the existing system initiating devices. All work will be done in accordance with NFPA 72 and NJ State Fire Alarm Codes.

Respectfully

A handwritten signature in black ink, appearing to read "D. J. Neff", written over a horizontal line.

David J. Neff

TOWNSHIP OF BRICK

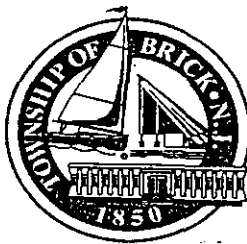
OCEAN COUNTY, NEW JERSEY

401 CHAMBERS BRIDGE ROAD • BRICK, NJ 08723

Joseph C. Scarpelli, Mayor

Township Council:

Steven N. Cucci — President
Stephen C. Acropolis
Kimberley S. Casten
Gregory S. Kavanagh
Kathy M. Russell
Tony R. Shupin
Frederick J. Underwood, Sr.



Department of Administration & Finance

Division of Inspections
Daniel F. Newman Jr.
Construction Official
(732) 262-1030
Fax: (732) 262-8954
<http://www.twp.brick.nj.us>

Date: 9/25/02

Siemens

2000 Crawford Place

Mt. Laurel, NJ 08054

Re: Costco, Brick

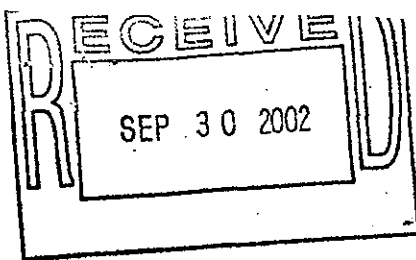
An application for a Building Permit has been approved for the following:

fire protection

Please be sure to pick up the permit or call for arrangements by mail. The fee for the permit is \$49-. If arrangements have not been made to pick up and pay for the permit and an inspection reveals that the work has been completed, we will have no other alternative but to issue a violation notice which can result in a fine and/or summons.

Sincerely,

Daniel F. Newman, Jr.
Construction Official



TOWNSHIP OF BRICK

OCEAN COUNTY, NEW JERSEY

401 CHAMBERS BRIDGE ROAD • BRICK, NJ 08723

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Department of Administration & Finance

Division of Inspections

Daniel F. Newman Jr.

Construction Official

(732) 262-1030

Fax: (732) 262-8954

<http://www.twp.brick.nj.us>

Date: 9/25/02

Siemens

2000 Crawford Place

MT. Laurel, NJ 08054

Re: Costco, Brick

An application for a Building Permit has been approved for the following:

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Sincerely,

Daniel F. Newman, Jr.
Construction Official

Township of Brick

Counter Form
(PLEASE PRINT)

Site Location: MM 1722 Route 88
Block: 1170 Lot: 5
Owner's Name: The Price Company
Owner's Mailing Address: 999 Lake Drive
Issaquah, WA 98027
Phone: (856) 234-7066

BUILDING

Contractor: _____
Address: _____
Phone#: _____
Lis # _____
Federal Emp # or SSN _____

Technical Data

Description of Work: _____

Type of Work

☐ New Building ☐ Siding
☐ Addition ☐ Fence
☐ Alteration ☐ Pool
☐ Roofing ☐ Demolition
☐ Asbestos Abatement ☐ Sign _____ sq ft

Building Characteristics

Use Group Present: _____ Proposed: _____
No of Stories: _____
Height of Structure: _____
Area of the largest floor: _____
Area of New Building: _____
Volume of Structure: _____
Total Land Disturbed: _____
Cost of Alteration: _____
Cost of New Building: _____

Total Cost of Building Work: _____

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Please Print Name _____

ELECTRICAL

Contractor: _____
Address: _____
Phone#: _____
Lis #: _____
Federal Emp # or SSN _____

Technical Data

Item	Quantity
Lighting Fixtures	_____
Receptacles	_____
Switches	_____
Detectors	_____
Light Poles	_____
Motors w/ Fract. HP	_____
Emergency & Exit Lights	_____
Communication Points	_____
Alarm Devices/FAC Panel	_____
Total	_____

Pool _____
Spa/Hot Tub/Storable Pool _____
Electric Range _____ KW
Oven/Surface Unit _____ KW
Electric Water Heater _____ KW
Electric Dryer _____ KW
Dishwasher _____ KW
Garbage Disposal _____ HP
A/C Unit - Central Air _____ KW
Space Heater/Air Handler _____ KW
Baseboard Heating _____ KW
Motors 1+ HP _____
Transformer/Generator _____ KW
Light Stander _____ AMP
Service _____ AMP
Subpanel _____ AMP
Motor Control Center _____ AMP
Sign/Outline Light _____ KW
Furnace _____
Steam Boiler _____
Other: _____

Estimated Cost of Electrical Work: 22,800.00

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Please Print Name _____

CONTRACTOR'S SEAL

Counter Form
PLEASE PRINT

PLUMBING

FIRE

Contractor: _____
Address: _____
Phone #: _____
Lis #: _____
Federal Emp # or SSN _____

Contractor: Siemens Fire Safety
Address: 2000 Crawford Place ste 300
Mt Laurel, NJ 08054
Phone #: 856-234-7666
Lis #: _____
Federal Emp # or SSN 13-2762488

Technical Data

Fixtures	Quantity
Water Closets	_____
Urinals/Bidets	_____
Bath Tub	_____
Lavatory	_____
Shower	_____
Floor Drain	_____
Sink	_____
Dishwasher	_____
Drinking Fountain	_____
Washing Machine	_____
Hose Bib	_____
Gas Piping	_____
Fuel Oil Piping	_____
Water Heater	_____
Steam Boiler	_____
Hot Water Boiler	_____
Sewer Pump	_____
Interceptor/Separator	_____
Backflow Preventer	_____
Greasetrap	_____
Water Cooled A/C or Refrig. Unit	_____
Septic Tank Closure	_____
Sewer Service Connection	_____
Water Service Connection	_____
Active Solar System	_____
Auxiliary Meter	_____
Sprinkler Heads	_____
Sump Pump	_____
Other:	_____

Estimated Cost of Plumbing Work _____

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Please Print Name: _____

CONTRACTOR'S SEAL

Technical Data

Description of Work:
Heating Type: _____ Gas _____ Oil _____ Electric _____ Solar
Heating System is _____ New _____ Existing
Location of Furnace/Boiler: _____

Water Supply Source _____
Method of Valve Supervision _____
Local Alarm Supervision _____
Central Supervision: _____
Proprietary Supervision: _____

Flammable Storage Tanks _____ capacity _____ fuel
Combustible Storage Tanks _____ capacity _____ fuel
LPG Storage Tanks _____ capacity _____ fuel

Item	Quantity
Wet Sprinkler Heads	_____
Dry Sprinkler Heads	_____
Total	_____

Smoke Detectors	<u>2</u>
Heat Detectors	<u>2</u>
Total	<u>4</u>

Stand Pipes _____
Kitchen Hood Exhaust System _____

Pre-Engineered Systems:
CO2 Suppression _____
Halon Suppression _____
Foam Suppression _____
Dry Chemical _____
Wet Chemical _____

Gas/ Oil Fired Appliances:
Number of gas/oil fired appliances _____

Furnace _____
Gas/Wood Fireplace _____
Gas Logs _____
Wood Burning Stove _____
Other: Pull Stations, Annunciator, Monitoring Modules
FACP 1 For 1 Replacement.

Estimated Cost of Fire Work 17,190

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: David J. Neff

Print Name: DAVID J. NEFF