



Sell Suppression!

Knowledge about Automatic Fire
Systems



 FIRE-LITE® ALARMS
by Honeywell

Honeywell
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Honeywell Power Products

Agenda

- Who is Fire-Lite Alarms
- Why Sell Suppression?
- Automatic Fire Suppression
- Definitions and Hardware
- References – get more information
- Questions



Who is Fire-Lite Alarms

- Small to Mid-Sized Systems Leader
- Simple to Install, Service & Troubleshoot
- Innovative and Cost Effective
- Easy Access to Information & Training



Automatic Fire Suppression

- Helps save lives and protect property by actively and quickly fighting a fire
- Operates without human intervention
 - Has detection, activation and delivery sub-systems
- Systems are either
 - Pre-engineered
 - Smaller, simpler
 - Engineered
 - Larger, complex



Why Sell Suppression?

- It's a growing business serving lucrative high technology companies
- More sprinkler systems installed than detection systems in the US
- Fewer dealers quoting suppression than detection – heavily regulated, bit of mystique
- System inspection, testing and maintenance is needed annually

Automatic Fire Suppression

- Types of Systems

- Clean Agent

- Discharges AGENT to suppress fire when activated by detection system
 - Used where there is high revenue loss potential
 - Little collateral damage due to rapid extinguish
 - Reaches shielded or obstructed areas



- Water

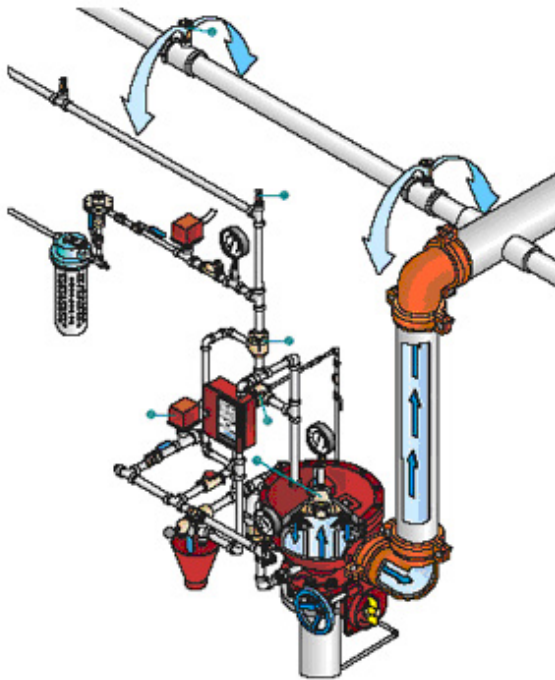
- Discharges water when thermal effects of fire are detected
 - More protection for structure rather than contents
 - Fire well developed when head activates @165F (or 135F)
 - Controls fire to place of origin



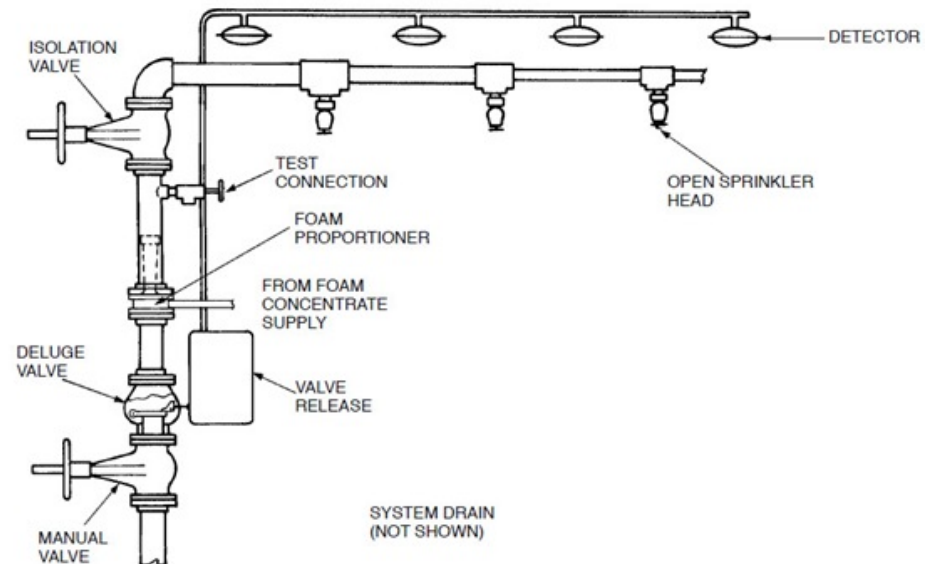
Suppression Systems Definitions

- Deluge System

- An automatic sprinkler system using water where all the sprinkler heads are open and the water is held back at a main (deluge) valve.
- When the valve is triggered, water is discharged from all the sprinkler heads simultaneously.
- The triggering device is usually a heat or smoke detector, or a manual release



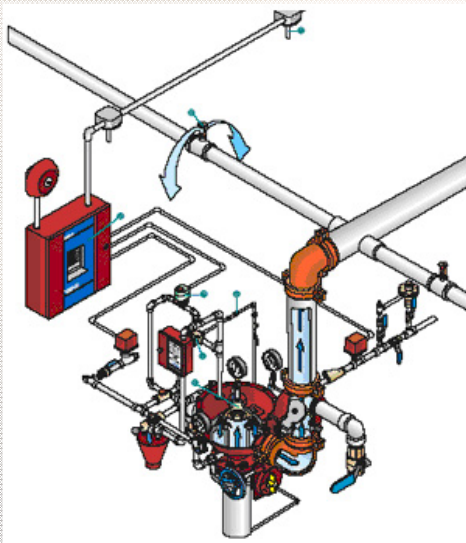
TYPICAL DELUGE SYSTEM



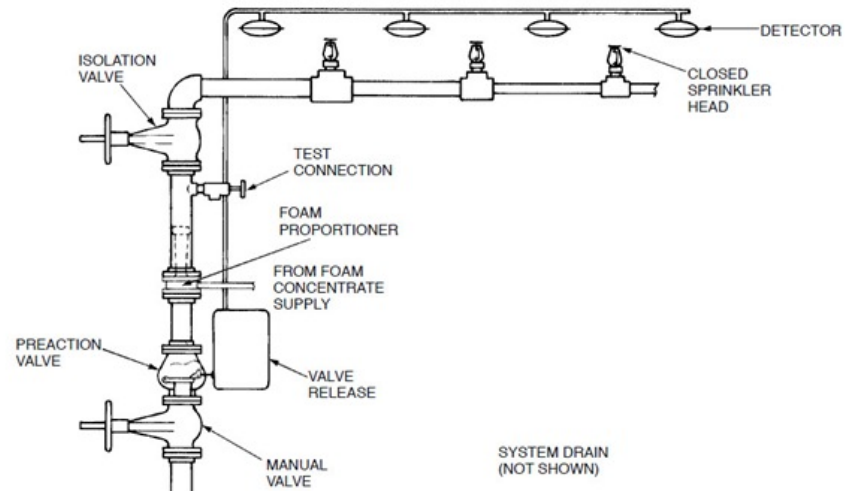
Suppression Systems Definitions

- Preaction System

- Automatic System using water where control valve is opened by a Control Panel, allowing water to flow to sprinkler heads.
- Air pressure in pipes ahead of water for supervisory purposes (loss of air pressure trips trouble signal)
- Only the sprinkler heads exposed to the heat of the fire will open and begin sprinkling the fire.
- Used in areas where piping systems are subject to mechanical damage and where it is important to prevent accidental discharge of water.

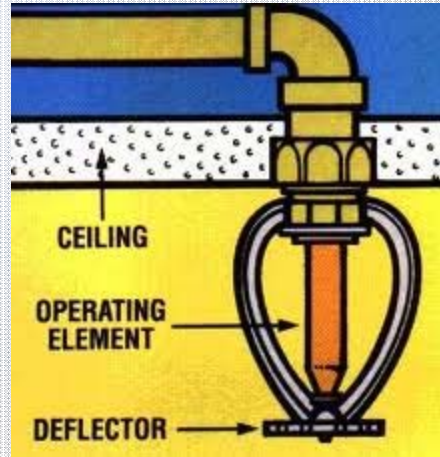


TYPICAL PREACTION SYSTEM



Water Applications

- Sprinkler Head
- Sprinkler Discharge
- Concealed Sprinkler
- Sprinkler Water Valve –
(OS&Y) Open Stem & Yoke



Suppression Systems Definitions

- Extinguishing Agents
 - Consist of various wet and dry agents that can extinguish, suppress, and/or prevent the re-ignition of fires. (expensive)
- Cross Zone
 - an application requiring two or more input zones to become active at the same time before a particular releasing output activates.



Suppression Systems Definitions

- Dual Hazard
 - uses both a wet chemical and water to suppress the fire. A wet chemical agent is used to blanket the fire with foam followed by water to cool it to reduce flare up. Used for example in restaurants for extinguishing grease related fires.
- Soak Timer
 - Related to Deluge and Preaction systems, this function allows for setting a specific time for the actual flow of water released. A length of time is set to control how long the releasing circuit remains active.



Agent Applications

- Computer room
- Paint spray booth
- Commercial kitchen



Controlling an Agent Discharge

- Automatic release
 - Controlled by panel
- Manual release
 - Manual release station
- Aborting a discharge
 - Dead man stations
 - Numerous local codes



Abort Type Methods

- UL (864) – A releasing event starts the Pre-discharge timer. If the Abort Switch is pressed, the timer counts down to 10 seconds and holds there. If the Abort Switch is released, the timer resumes the countdown from 10 seconds.
- IRI (UL 864) – Int'l Risk Insurers method functions the same way as the UL type, except that the Abort Switch will not function unless it is pressed before the cross-zoned second input device activates.



Abort Type Methods

- NYC – A releasing event starts the Pre-discharge timer. Pressing an Abort Switch will stop the Pre-discharge timer. Releasing the Abort Switch resets the Pre-discharge timer to the original time plus 90 seconds. The Abort Switch can be operated multiple times, with each operation resetting the Pre-discharge timer to the original time plus 90 seconds.
- Local Jurisdiction – A releasing event starts the Pre-discharge timer. Pressing an Abort Switch will stop the Pre-discharge timer. Releasing the Abort switch resets the Pre-discharge timer to the original time. The Abort Switch can be operated multiple times, with each operation resetting the Pre-discharge timer to the original time.

Equipment

MRP-2001 & MRP 2002

Fire-Lite Releasing Panels
For
Deluge/Preaction and Agent Release



MRP-2001 & MRP-2002 Systems Overview

- Universal Enclosure
- Four programmable Class B or Class A Output Circuits programmable for Releasing Solenoids
- Dual Hazard Operation
- Pre-Programmed Custom Application Templates
- Built in programmer: Integral 80 Character Display
- ANN-BUS support
- 256 event History storage
- 7.0 amps total usable current



MRP-2001 Standard Features

- Six zone Control Panel for single and dual hazard deluge and pre-action applications
- Meets:
 - NFPA 13 (Installation of Sprinkler Syst.)
 - NFPA 15 (Water Spray Fixed Systems)
 - NFPA 16 (Deluge Foam Systems) Standards
- Compatible with Conventional Input Devices:
 - Two-wire smoke detectors
 - Four-wire smoke detectors
 - Pull Stations
 - Waterflow devices
 - Tamper switches and other normally-open contact devices.



MRP-2001 Standard Features

- Dual Hazard Operation
- Cross-zone (double-interlock) Capability
- Extensive Transient Protection
- Adjustable waterflow discharge time and two soak timers



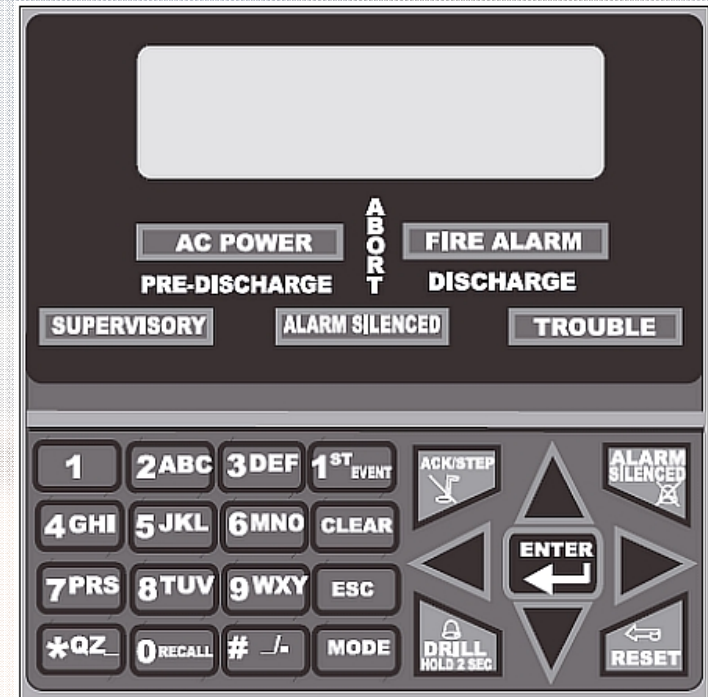
MRP-2002 Standard Features

- Six zone, FACP with 7 Amp Power Supply for single and dual hazard agent releasing applications.
- MRP-2002 meets:
 - NFPA 12 - CO2 Extinguishing Systems
 - NFPA 12A - Halon 1301 Extinguishing Systems
 - NFPA 12B - Halon 1211 Extinguishing Systems
 - NFPA 2001 - Clean Agent (FM-200, etc.)



MRP-2002 Standard Features

- In addition to the features found on the MRP-2001, the MRP-2002 provides the following additional features:
 - Adjustable pre-discharge, discharge and waterflow delay timers
 - Programmable Abort operation
- Supports four abort types:
 - UL, IRI, NYC, Local Jurisdiction/AHJ



MRP-2001 & MP-2002 Programming

Programs like the MS-5UD & MS-10UD



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SYSTEM ALL NORMAL  
10:00A 092105
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MRP-2001 & MP-2002 Programming

Preprogrammed Templates for I/O Mapping and Cross Zoning:

- Preconfigured applications
- Simplified initial setup
- Prevents mapping input zones to incompatible output circuits
- Customizable

MRP-2001 & MP-2002 Programming

Preprogrammed Template Example

TEMPLATE 8: CROSS-ZONE WITH MANUAL RELEASE SWITCH						
	INPUT ZONES					
	1	2	3	4	5	6
OUTPUT CIRCUITS	2-WIRE SMOKE	FIRE	WATERFLOW	MANUAL RELEASE	PULL STATION	SUPV.
#1 ALARM NAC	X	X		X	X	
#2 WATERFLOW NAC			X			
#3 RELEASE SOLENOID 1	C1	C1		X	X	
#4 SUPV. BELL NAC						X

References

- NFPA 70 - National Electrical Code
- NFPA 72 - National Fire Alarm Code
- NFPA 101 - Life Safety Code
- NFPA 13 - Installation of Sprinkler Systems
- NFPA 15 - Water Spray Fixed Systems for Fire Protection
- NFPA 16 - Installation of Foam-Water Sprinkler & Foam-Water Spray
- NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
- NFPA 12A - Standard on Halon 1301 Fire Extinguishing Systems
- NFPA 12B - Standard on Halon 1211 Fire Extinguishing Systems
- NFPA 2001 - Standard for Clean Agent Fire Extinguishing Systems
- NFPA 70 - National Electrical Code Handbook
- NFPA 101 - Life Safety Code Handbook
- NFPA Fire Protection Handbook



Summary

- Suppression is a good business opportunity
- There is special equipment and knowledge used
- Fire-Lite offers two panels, one for water and agent release
- These panels are easy to install and program
- There are good resources for further education



Thank you!

A recording of today's webinar will be posted to www.firelite.com

Questions?

Please submit by typing into the "questions" box on the right side of your screen.

