Sprinkler Activation in Refrigerated Storage Areas

Protectowire provides the most dependable and cost-effective fire detection for refrigerated storage applications. When coupled with double interlocked pre-action sprinklers this system is virtually false alarm free.

- UL tested to -40°F with no change in operation.
- Factory Mutual approved.
- Avoids common problems of condensation, temperature fluctuations caused by open doors, etc.
- Freedom from unwanted water flow.
- Quick installation - saves both labor and material costs.
- If overheating does occur, the point of origin can be quickly located by a digital readout meter at the control panel.

Photos taken at: New England Shrimp Co., Inc., Ayer, Massachusetts, U.S.A.
The Protectowire Linear Heat Detector is a fixed temperature continuous Detector. It can be run through racks in a single length up to 3,500 feet (depending on control panel used) or divided into zones as required. When used in refrigerated storage areas protected by sprinklers, the Protectowire should be adjacent to the sprinkler heads. If the system is rack mounted, the vertical spacing should be 20 feet or less. (See typical rack and ceiling installation at right.)

When installing, run copper wire from the control panel to a zone box at the first rack (or beginning of ceiling protection). Use Protectowire for detection only. Attach copper wire for connection between runs of Protectowire (e.g., to connect various rack levels, to go from one rack to another, etc.).

Install Protectowire at every level of sprinkler piping. For alarm identification, use the Protectowire control panel with digital meter. This meter will indicate the location of any heat source which initiates an alarm. The meter will display the distance in feet (or meters) of Protectowire, from the start of the zone in alarm to the location of the alarm source.

A major problem in refrigerated areas is the danger of a false alarm which could cause water to flow in the pipes, leading to a costly problem. Protectowire is run in rack channels out of the way of fork-lifts and pallets. It is not rate compensated or rate of rise actuated. When properly installed it avoids all of the common causes of unwanted alarms.

The type of Protectowire recommended for this application is PHSC-135-XLT or PHSC-155-EPC.

Protectowire Linear Heat Detector is a component of a complete family of fire detection systems manufactured by The Protectowire Company.