CORE Protection Fire System

The Self Cleaning hood is required to be installed to achieve CORE Protection. The daily basic operation of the CORE Protection system is identical to the Self Cleaning hood. In the event of a hood fire, CORE Protection is activated.

If the hood Firestat installed in the riser senses a temperature hotter than its internal setpoint or if the remote manual actuation device (push/pull station) is pushed, an electric signal is sent to the appliance protection fire system solenoid and the hood duct and plenum water system solenoid. Two electric water solenoids are energized allowing the flow of water to the hood duct and plenum and the appliance nozzles. At the same time, surfactant is continually injected into the water stream to help suppress the fire.

Once the fire system is activated, a "Fire System Activated" light is illuminated on the hood control panel and an audible alarm sounds. All gas and electric appliances under the hood must be electrically interlocked to shut off. This is achieved via a gas valve relay and/or a shunt trip breaker. Two timers are also energized upon fire system activation. The first timer is factory set for 30 minutes and keeps the duct and plenum water spray system running for a minimum of 30 minutes. The second timer is set for 15 minutes and keeps the appliance water spray running for a minimum of 15 minutes. This is necessary to ensure complete extinguishment of all fire potential.

The fire system is electrically operated and thus requires a battery backup system. In the event of a loss of electrical power, all gas and electric appliances under the hood must be electrically interlocked to shut off. This is achieved via a gas valve relay and/or a shunt trip breaker. The battery backup will automatically energize upon a loss of power. The battery backup will monitor the fire system circuit for up to 24 hours and be able to operate the fire system circuit for a minimum of 30 minutes. Once power is restored, the battery will automatically recharge.