

## **SEQUENCE OF OPERATION:**

- 1. THE SYSTEM'S GAS SOLENOID VALVE SHALL CLOSE UPON ANY OF THE FOLLOWING:
  - A. WHEN CARBON MONOXIDE IS DETECTED.
  - B. SHUT DOWN OF HOOD (LOSS OF DRAFT)
  - C. ALARM SIGNAL FROM PANIC BUTTON.
  - D. ALARM SIGNAL FROM FIRE ALARM PANEL.
- 2. UNDER NORMAL OPERATION CONDITION, KITCHEN EXHAUST FAN IS ON HIGH SPEED, GAS CONTROL PANEL IS POWERED, GAS SOLENOID CAN BE MANUALLY OPENED VIA AUTHORITY KEY SWITCH.
- 3. UPON DETECTION OF CARBON MONOXIDE OR COMBUSTIBLE GAS, GAS CONTROL PANEL SHALL GO INTO ALARM, CLOSING GAS SOLENOID VALVE AND GENERATING A TROUBLE SIGNAL FOR BMS / BAS, FIRE ALARM PANEL
- 4. UPON LOSS OF POWER TO HOOD OR GAS CONTROL PANEL, GAS SOLENOID SHALL CLOSE, MANUAL RESET OF SYSTEM IS REQUIRED TO OPEN GAS SOLENOID VALVE.
- 5. UPON SENSOR FAILURE OR FAULT, SYSTEM SHALL GO INTO ALARM AND CLOSE GAS SOLENOID VALVE.
- 6. INCIDENT ON COOKING LINE SHALL ACTIVATE HOOD ANSUL SYSTEM AND CLOSE THERMALLY—ACTIVATED GAS VALVE.

## NOTES:

- 1. INSTALLATION OF SYSTEM MUST CONFORM TO NATIONAL AND LOCAL APPLICABLE CODES AND REQUIREMENTS.
- BASIS OF DESIGN AMERICAN GAS SAFETY (AGS) MERLIN CT1500S VENTILATION INTERLOCK SYSTEM INCORPORATING. CO DETECTOR AND AIR DIFFERENTIAL SWITCH. CONTACT LOCAL REPRESENTATIVE: EMERSON SWAN 781.986.2000
- 3. SYSTEM SHALL BE THE ULTIMATE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. GAS SOLENOID, MERLIN CONTROL PANEL, DETECTORS, DIFFERENTIAL SWITCHES, EMERGENCY STOP BUTTONS SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR. LIAISE WITH ELECTRICAL CONTRACTOR AND KITCHEN CONTRACTOR FOR LOCATION AND POSITION OF EQUIPMENT. ELECTRICAL CONTRACTOR TO INSTALL WIRING AND CONDUIT.
- 4. 120VAC LINE VOLTAGE TO MERLIN PANEL AND GAS SOLENOID. 12VDC FROM MERLIN PANEL TO DETECTORS / SENSORS. SIGNAL WIRE FROM DETECTORS AND DIFFERENTIAL SWITCHES TO MERLIN PANEL. VOLT FREE CIRCUIT TO REMOTE EMERGENCY STOP BUTTON.