

A diagram of a control panel. It features a central rectangular display area divided into two sections. The left section is labeled 'LIGHTS' and the right section is labeled 'FANS'. Above and below this central area are two small circles. To the left and right of the central area are two larger circles, each containing a smaller circle.

SEQUENCE OF OPERATION – HOOD CONTROLS

ELECTRICAL PACKAGE: DOW SERIES

Once all power, light and temperature sensor circuits are properly landed on the control terminal block the LCD interface will be illuminated. All temperature readings are measured by resistive temperature sensors (thermistors) installed in each hood exhaust riser. One room temperature sensor is installed in the space to measure ambient air temperature.

Two methods to activate system:

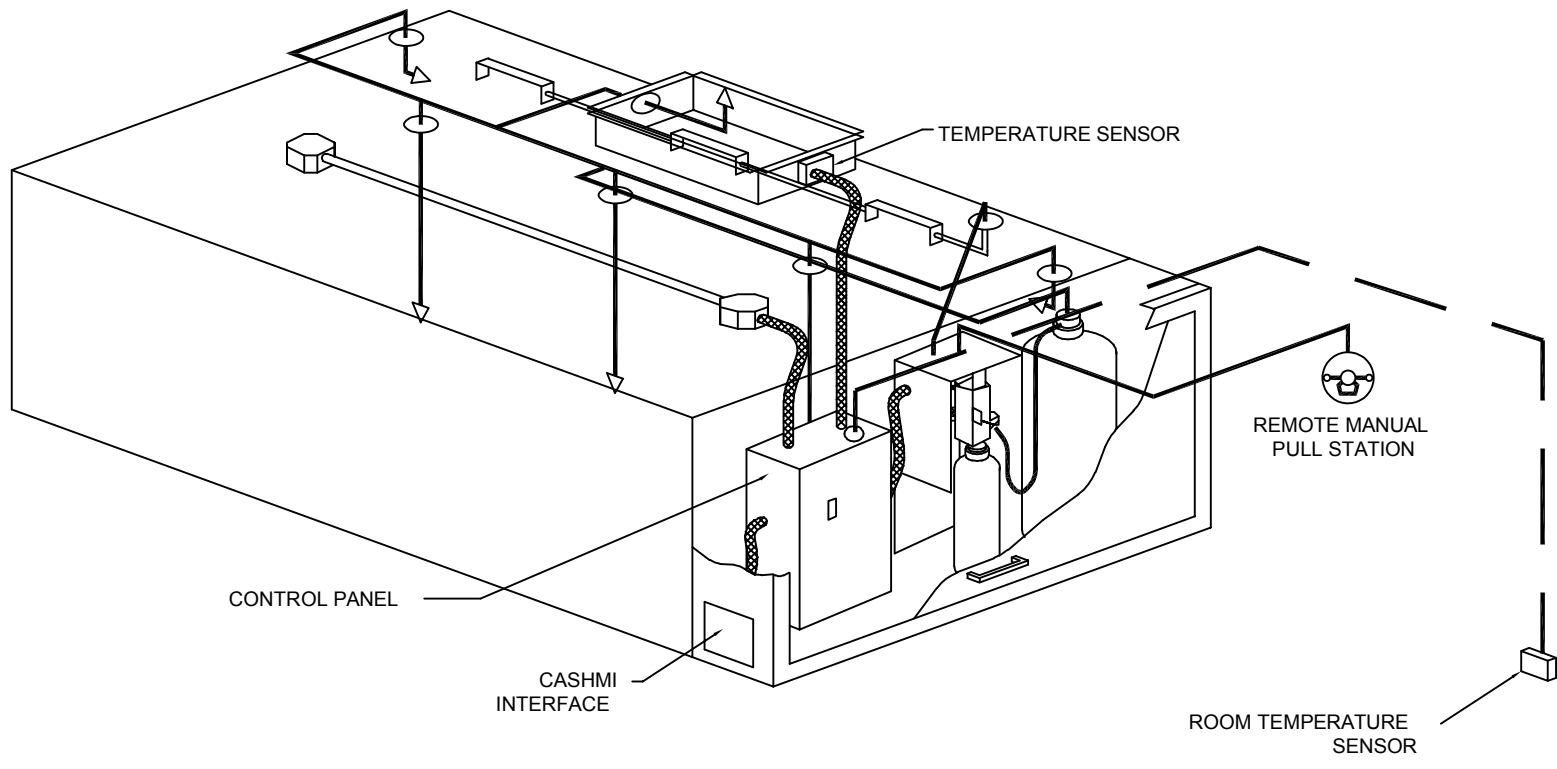
Manual activation:

1. Operator presses the fan button to engage the exhaust fan(s) and the exhaust fan(s) begin operation in low-CFM Prep Mode. Dedicated make-up air units (if applicable) for the hood remain off in Prep Mode.
2. Operator turns on the cooking appliances. Once the exhaust air temperature reaches 10 degrees (F) above ambient temperature in the space, the exhaust system will ramp up to a preset minimum speed (low-volume cooking conditions). Makeup air fan will power on at this point (also at minimum speed).
3. As the temperature of the exhaust air increases, the exhaust and make-up air fan speeds increase proportionally. The fans will modulate between preset low-speed and high-speed exhaust levels, dependant upon on the exhaust air temperature (cooking load).
4. At any point, operator may engage the 100% override option on the touch screen and run the fans at full speed for a fixed period of time (adjustable). After this period, fan modulation based on temperature will resume.

Automatic activation:

1. If the operator does not manually engage the exhaust system, the SC-EMS will automatically activate Prep Mode when the exhaust air temperature reaches 5 degrees above ambient temperature. When the air temperature at the hood collar increases to 10 degrees above ambient, the exhaust and makeup air fans will ramp up to preset low speeds for low volume conditions.
2. System will continue operating per steps 3 & 4 (above)

At the end of the day, after cooking operations have ceased, the system will enter its Cool Down mode (similar to Prep mode). Once the exhaust air temperature drops to less than five degrees above ambient, the fans will shut off.



HOOD CONTROL DETAILS

GENERAL NOTE (TYP OF ALL SHEETS)

THESE DRAWINGS ARE FOR INFORMATION PURPOSES ONLY

The information conveyed in this set is intended to communicate design intent for use in the planning and bidding processes only. These documents are not for use in construction or to locate utilities or other requirements. The Kitchen Equipment Contractor and other sub-contractors are to verify all information and produce construction documents. TDD, parent company and affiliates will not be liable for action taken as a result of the design and equipment portrayed in these plans.

NKEC: Not included in the Kitchen Equipment Contract

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