## SPECIFICATION

## VERTICAL AIR CURTAIN (VAC SERIES)

The Model VAC series ventilation canopies shall be as manufactured by Duo-Aire, Inc. and shall be of the following design:

## MODEL: VAC-1 (Wall) VAC-2 (Single Island) & VAC-3 (Double Island) Vertical Air Curtain

Vertical air curtain design shall be in wall, single island or double island models. The ventilator shall be a modified double shell design, constructed of 18 gauge 300 series stainless steel. Stainless steel shall be of U.S. manufacture, and shall meet U.S. standards for gauge, thickness and alloy composition. The ventilator shall be U.L. listed and shall be designed to introduce replacement supply air vertically along the front edge of the ventilator in a quantity equal to at least 80% of the volume of air to be exhausted. The velocity at the air slot shall not exceed 300 FPM. The supply air slot shall not be equipped with registers, linear bar diffusers, balancing dampers or any other device meant to restrict full air flow at air outlet. Directional louvers will be installed in the air slot to provide directional supply airflow, as required.

The supply air plenum shall have fixed aluminum perforated metal air distribution baffles to insure equal distribution of supply air along entire length of the supply air slot. The supply air plenum shall also contain an air inlet collar, complete with U.L. listed fire damper per requirements of N.F.P.A. 96, and air volume damper as required.

The design exhaust CFM of the ventilator shall be sized per manufacturer's U.L. certification for test performance for high heat/high grease application. The combined air flow designs shall be verified by Underwriters Laboratories test results and manufacturer's listing requirements.

The ventilation canopy shall contain, as standard features, the following:

- 1. All stainless steel construction all surfaces, exposed or non-exposed shall be stainless steel.
- 2. Continuous welded external seams and corners, ground and polished to match adjacent metal finish.
- 3. A full complement of U.L. classified aluminum baffle type grease filters.

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- 4. Stainless steel grease trough and grease cup, removable for easy cleaning.
- 5. U.L. Listed incandescent lights, pre-wired to junction box on top of ventilator and control switch.
- 6. Face mounted control panel stainless steel, with pre-wired switch for ventilator lights and pre-wired switch for exhaust and supply fan, with indicator lights.
- 7. Three inch rear air space full length of ventilator.
- 8. Ventilator shall have either concentric or parallel duct collars installed.

Other electrical switches and indicator lights, as required, shall be mounted and pre-wired in the control panel and permanently labeled for function and operation mode. All switches and indicator lights shall terminate in junction boxes on top of ventilator and shall be color coded and number keyed using a terminal strip.

All wiring shall be in conformance with the National Electrical Code and applicable U.L. requirements.

All ventilators shall bear the U.L. label and NSF listing.

The ventilator shall conform to size and configuration as detailed on plans and shall meet performance requirements as scheduled.

Kitchen ventilation canopies of other manufacturer's differing in any aspect from this specification must be submitted for review and prior approval at least three (3) weeks prior to bid date, except that no manufacturer's ventilator shall be accepted if it deviates from the materials/construction requirement listed under "standard features".

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