

SPECIFICATION

MODEL DW – EXHAUST ONLY WALL VENTILATOR

1. EXHAUST ONLY VENTILATOR

Canopy style ventilator to be suspended from roof structure as required and shall be sized as shown on plans. Canopy style ventilator shall be Duo-Aire Model DW exhaust only single shell ventilator. Canopy to be U.L. listed. Equipment furnished shall be wall style ventilator only or system. System shall include ventilator, ductwork, exhaust fan and curb. Separate make-up air with supply duct and linear diffuser may be included, as required.

2. VENTILATOR

The Duo-Aire ventilator shall be designed to exhaust a single row of commercial cooking equipment located along a wall. The ventilator shall meet all requirements for front, rear and end overhangs and include a three inch rear air space the full length of the ventilator for wall ventilator.

Ventilator shall be constructed of minimum 18 gauge 300 series stainless steel. All external seams shall be continuously welded, ground and polished to match original finish. There shall be no overlap of seams allowed. Construction shall be in complete compliance with requirements of NFPA 96, shall be U.L. Listed and bear the NSF seal.

The ventilator shall include a filter rack of the same material as the shell and shall be furnished with a full complement of U.L. aluminum grease filters, installed at not less than a 45° angle. Filters to be easily removable for cleaning, filter housing to drain into a full length grease trough complete with grease cup, and the grease trough and cup are to be easily removable for cleaning.

The ventilator shall contain a full complement of U.L. Listed incandescent light fixtures, pre-wired to a junction box on top of the ventilator and to the face mounted control panel. The lights shall be located approximately 36" on center.

The ventilator shall be equipped with a pre-wired, surface mounted control panel with switches for internal lights and an indicator light and switch for the exhaust fan.

The ventilator shall include a fully welded exhaust collar, mounted on the ventilator and sized to maintain a minimum exhaust air flow velocity of 1500 FPM.

The ventilator shall be furnished with hanger brackets as required to allow for proper suspension of the ventilator from the overhead supports. Optional full length support angles for attaching ventilator to wall may be required.

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3. **DUCTWORK**

The duct for the Duo-Aire ventilator shall be constructed to meet the requirements of NFPA 96, as well as all applicable local and state codes. The duct shall be sized to maintain the same air flow velocity as the exhaust collar. The duct shall run as direct as possible to the outside of the building and shall terminate in a manner consistent with all local, state and other applicable codes.

Installation of the ductwork, including but not limited to, welding of joints, support from structure, enclosing in fire rated assembly, if required, clearance from combustibles, penetrations of walls, ceilings or other rated assemblies and compliance with all applicable codes is the sole responsibility of the installing contractor.

4. **EXHAUST FAN AND CURB**

The exhaust fan shall be sized to move the required quantity of exhaust air, at full system static pressure. The fan selected shall not exceed 85% of full load at operating conditions. Design exhaust CFM shall be determined by applicable codes and the local code official having jurisdiction.

The roof exhaust fan shall be of the belt driven, up blast, vertical discharge type and shall be listed to meet the requirements of U.L. 762. The fan shall be complete with a hinged base, external grease collection device and external disconnect switch to specified voltage.

The roof curb shall be of a design compatible with the type of roof to which it is to be mounted and shall be sized to insure that the point of termination of the exhaust duct is at least 18" above the surrounding roof structure. The point of discharge of the exhaust fan must be at least 40" above the surrounding roof structure.

A complete static pressure calculation sheet, showing design exhaust CFM as well as hood, filter, collar entry duct and fan loss static pressures and a computerized fan selection print-out from the fan manufacturer shall be furnished as a part of the submittal documents for approval.

5. **MAKE-UP AIR SYSTEM**

System shall include a make-up air unit housing constructed of 18 gauge aluminized steel painted with a production enamel over a primed surface. Housing shall include fans, motor and driver sized to meet system static pressure, intake filters, master electric panel with motor overloads and contactors for supply and exhaust fans, relays, transformers as required and safety disconnect switch, a direct gas fired pre-heat section and gas controls may be provided, as required. Supply duct, curb cap and curb provided for mounting to system. A four-way linear diffuser for distribution of supply air into room space is provided for completion of system.

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