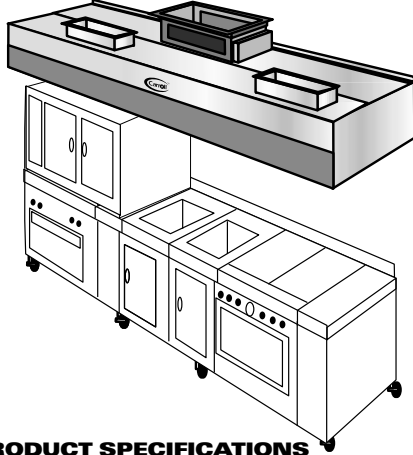




ITEM NO. _____

Carroll Manufacturing International
25 Johnson Street, Thornhill, Ontario L3T 2N8
Phone: 905-731-1050 · Fax: 905-731-8547

Website: www.carrollmi.com
Email: info@carrollmi.com

**PRODUCT SPECIFICATIONS**

Furnish Carroll Ventilator Model W1-C-S _____ (ventilator with fire damper) or NW1-C-S _____ (ventilator without fire damper) as shown on plans, in the depth indicated, in the overall length of _____, and to meet the following specifications.

GENERAL DESCRIPTION: Ventilator is a high velocity, centrifugal grease extractor with an air inlet that is parallel to the top surface of cooking equipment being ventilated. Grease extraction efficiency shall be 95% when properly installed and operated per Carroll recommendations. Extracted grease to be accumulated out of the exhaust air stream on fixed-in-place, full length, self-draining internal baffles; and removed periodically during the hot water/detergent cleaning cycle as controlled by the FWC Control Panel. Full length non-gasketed, quick-opening latch type hinged inspection doors to be provided for inspection and servicing of extraction chamber and wash manifold.

Ventilator shall include means for hanging or otherwise supporting. The fire damper shall be 280°F fuse link or thermostatically activated, with damper closure set to occur at 280°F. To reduce exhaust volume over specific cooking equipment, you must request Reduced Throat air baffles by adding the suffix "RT" to the model number.

MAKE-UP AIR OPTIONS: Ventilator shall include an air supply plenum with duct collar(s) and incorporate one of the following designs:

- Registers along the front panel for face discharge (Add suffix "SR" to the model number.)
- Perforated stainless steel front panels for face discharge (Add suffix "SP" to the model number.)
- Vertical full-length adjustable registers for perimeter downward discharge (Add suffix "SV" to the model number.)
- Adjustable registers for discharging directly into cavity of the ventilator (Add suffix "SI" to the model number.)

CONSTRUCTION MATERIALS: The ventilator shall be 18 gauge, type 304 all stainless steel construction. A number 4 finish shall be provided on all exposed surfaces.

LIGHT FIXTURES: Ventilator shall be equipped with 100 Watt Dome Incandescent or Recessed 150 Watt Incandescent or Recessed Fluorescent Fixtures. Light fixtures shall be prewired to a single connection point at the factory. Ventilators built in multiple sections shall be furnished with junction boxes for field connections by electrical contractor.

APPROVALS: Ventilator shall be U.L. Listed, listed by NSF, and in accordance with all recommendations of NFPA 96. The ventilator must meet all applicable codes.

Elite Series**Single Manifold Wash Ventilator**

- **Model W1-C-S**
- **Model NW1-C-S**

APPLICATION

Wall mounted canopy style ventilator with integral make-up air discharge for use over all types of cooking equipment. See "Air Supply Options" (below) and engineering views (reverse side) for available designs.

DESCRIPTION

These Elite Series models are wall-mounted canopy, hot water and detergent wash ventilators which are U.L. Listed under either the category "Exhaust Hood with Exhaust Damper," for the W1-C-S models or "Exhaust Hood without Exhaust Damper," for the NW1-C-S models. Units are offered in a selection of depths. All models feature integral internal grease extracting baffles arranged to provide for very high extraction rates. The W1-C-S model features a spring loaded, fuse-link fire damper located at the duct collar. A thermostatically-activated damper is available as an option.

OPERATION

When properly operated and maintained, 95% grease extraction may be accomplished. As air is drawn around the internal stainless steel baffles, grease, dust and lint particles are thrown out of the airstream by centrifugal force and collected. Liquified grease drains off into the sloping gutter, and all inner surfaces are periodically washed. Any "W1" Series ventilator can be totally integrated with Carroll W2 and DX Series Ventilators

AIR SUPPLY OPTIONS**"SR" & "SP" Style - Register or Perforated Front Panel Discharge**

Facing panel openings can typically supply 80% or more of exhaust air volume. Recommended supply air temperature range is 60° to 65°F, but, dependent upon volume, distribution and internal heat load, may be as low as 50°F.

"SV" Style - Vertical Perimeter Discharge

Up to 80% of the exhaust air volume may be supplied through this system. To avoid discomfort to personnel, air must be tempered to 65°F or higher.

"SI" Style - Internal Discharge

Volume of make-up air supplied through this design varies with the type of cooking equipment used. Air may be untempered in most areas, dependent upon climate and cooking equipment. Consult factory for specific air supply volumes and where winter temperatures drop below 10°F.

COMBINATION SUPPLY AIR

More than one supply air option may be specified on a Carroll ventilator, the following are the possible combinations of supply air: SP/SI, SV/SI, SR/SI, SP/SV, SR/SV and SR/SP.

MAINTENANCE

At periodic intervals the full-length inspection doors should be opened for inspection of the internal components. Refer also to the Owner's Technical Manual for in-depth maintenance information.

AIR SUPPLY GUIDELINES

Appropriately conditioned supply air must be mechanically delivered to the space to replace exhausted air. Generally, 75% to 80% is so delivered, with the remaining 20% to 25% flowing naturally from adjoining areas.

EXHAUST/SUPPLY FAN UNITS

Exhaust fan(s) and supply fan(s) are to be furnished and installed by others to meet the Carroll Ventilator air volumes and static pressure drop for the entire system and must be in compliance with local codes.

- Exhaust fan(s) should be properly sized and include induced draft, squirrel cage design, with backward inclined or air-foil type blades.
- Discharge ducts should be vertical and located away from air intakes.
- Supply fan(s) should be equipped with throwaway or cleanable type filters.
- Exhaust and supply fans require a magnetic starter switch with a 120 volt holding coil and should be electrically interlocked for simultaneous operation.

FIRE PROTECTION

NFPA 96 and most other codes require a fire extinguishing system for protection of both the duct collar and plenum areas of ventilators and for the protection of cooking equipment (such as fat fryers, griddles, ranges and broilers) which may be a source of ignition of grease. Check with local fire authorities for exact requirements.

OPTIONAL EQUIPMENT

Consult Carroll regarding custom services addressing:

- Exhaust Fans, Supply Fans & Roof Top Units
- Fire Protection Systems
- Heat Recovery Units
- Reduced Throat (low air volume ventilators)
- Utility Distribution Systems
- Air Purification Units

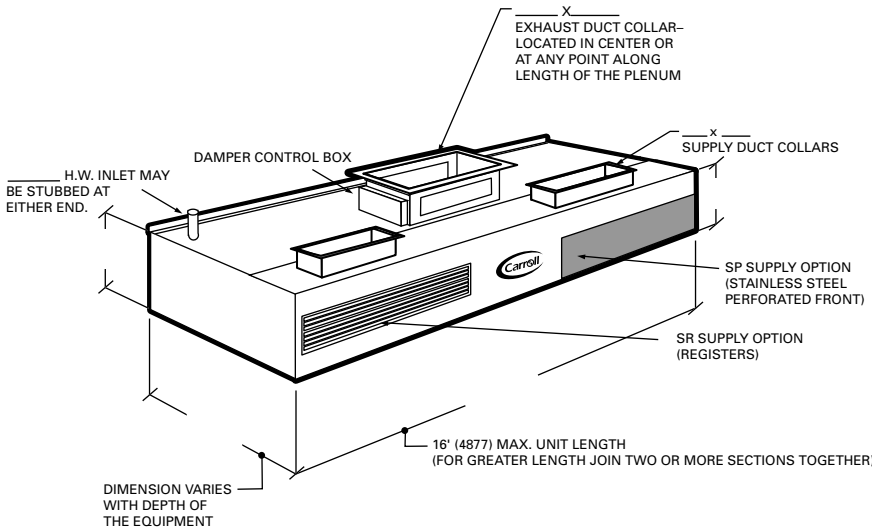


Model W1-C-S _____ (With Fire Damper)

Model NW1-C-S _____ (Without Fire Damper)

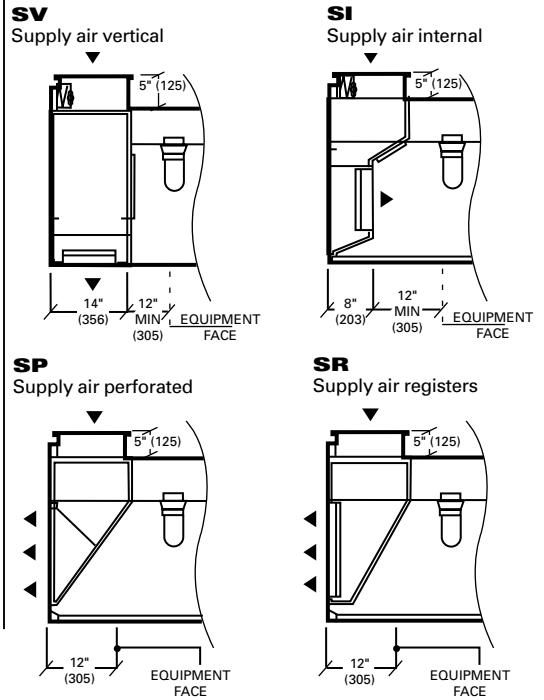


To complete the model number, insert the supply air option and desired depth of the unit in inches
 Example: "W1-C-SP-48" (See typical "Section View" below.)



Perspective View
 N.T.S. (FULL BOX-SHAPE SHOWN)

Supply Air Options



Engineering Data

Supply Air Option

For supply air option add one of the following suffixes to the model number:

- SP SR SV SI

MECHANICAL REQUIREMENTS

The type of cooking equipment and the type and volume of cooking determines the total exhaust volume. Refer to the Carroll Master Engineering Table to determine exhaust volume, duct sizes and static pressure.

ELECTRICAL

Provide 120 volt, 20 amp, 24-hour service to Carroll FWC Fan/Wash Control Panel. (See FWC Fan/Wash Control Panel specification sheet for details.) To be fused separately. Lights to be on a separate circuit, 120 volt.

VENTILATOR LENGTHS

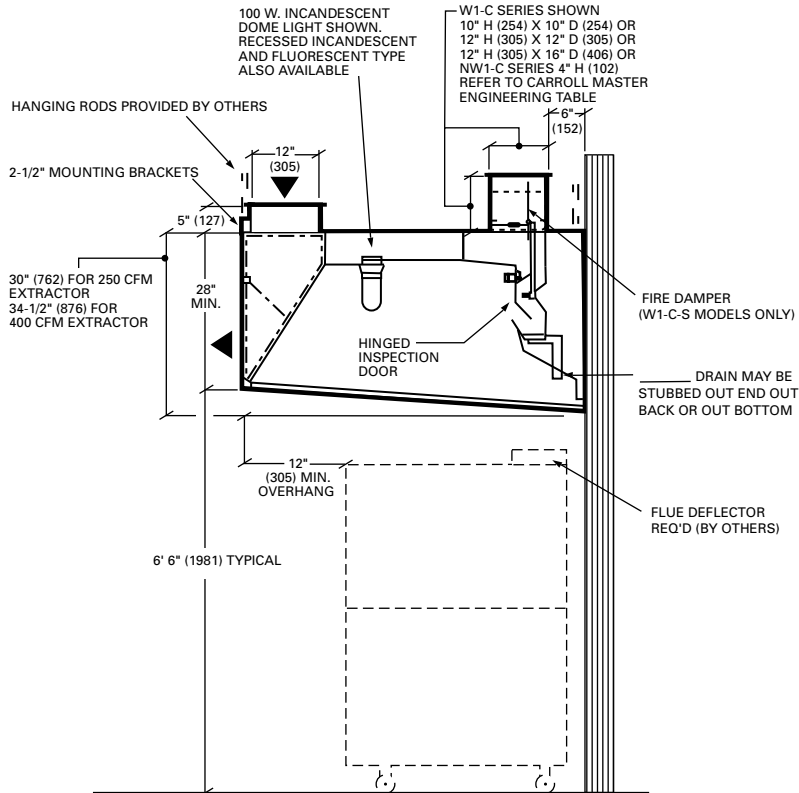
Maximum unit length is 16'-0" (4877 mm). For greater lengths, two or more sections must be joined. Check to ensure that there is adequate access into building and kitchen area.

HANGING WEIGHT

Ventilator Depth	42" (1067)	48" (1219)	54" (1372)	60" (1524)
Wt./linear ft. lbs.	75	80	90	95
Wt./linear m. kg.	112	119	134	141

ITEM No: _____
 Length: _____ Width: _____
 Height.: _____ Est. Wt.: _____
 Exhaust: CFM _____ S.P. _____ Collar _____
 Supply: CFM _____ S.P. _____ Collar _____

___ GPM @ 40 PSI Water Temp. 140° - 180°F



Section View
 N.T.S. (TAPERED SHAPE SHOWN)

NOTE: Dimensions in parenthesis () are millimeters.