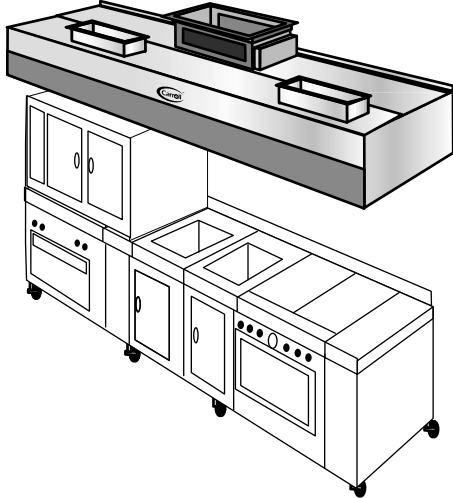




ITEM NO. _____

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Traditional Series Dry Filter Ventilator

- Model DF-C-S
- Model NDF-C-S

PRODUCT SPECIFICATIONS

Furnish Carroll Ventilator Model DF-C-S _____ (ventilator with fire damper) or NDF-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 conventional filter-type hood with a continuous array of baffle-type U.L. Classified filters along the entire ventilator length. Ventilator is to include a semi-concealed pitched gutter which slopes to a removable grease cup located at either extreme end.

Ventilator shall include means for hanging or otherwise supporting. The fire damper (on DF ventilators only) shall be 212°F fuse link or thermostatically activated, with damper closure set to occur at 200°F.

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.

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

APPLICATION

Wall mounted canopy style ventilator for use over all types of equipment. Suitable for interior ceiling heights less than 9'-0" by recessing into false ceiling.

DESCRIPTION

The Traditional Series is a non water-wash conventional filter hood which is U.L. Listed under the category "Exhaust Hood with Exhaust Damper," for the DF-C-S models or "Exhaust Hood without Exhaust Damper," for the NDF-C-S models. Units are offered in custom depths. All models include a full array of U.L. Classified baffle-type grease removing filters, and a grease-collecting gutter sloped to a removable grease cup at either end. On the DF-C-S model, a spring-loaded, fuse-link fire damper is located at the dust collar. A thermostatically-activated damper is optionally available.

OPERATION

When properly operated and maintained, effective grease removal will be obtained. The liquified grease is drained off into a container for removal. Any "DF" Series model can be totally integrated with any of the other "DF" Series models.

AIR SUPPLY OPTIONS

"SR" & "SP" Style - Register or Perforated Front Panel Discharge

Facing panel openings can typically supply 80% or more of required make-up air. Recommended supply air temperature range is 60° to 65°F or higher.

"SV" Style - Vertical Downward 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 - Horizontal 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 (such as the end of each cooking day), the filters are to be removed and cleaned. They can be either washed in a dishwasher, hand washed, or soaked and rinsed.

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
- Utility Distribution Systems
- Air Purification Units

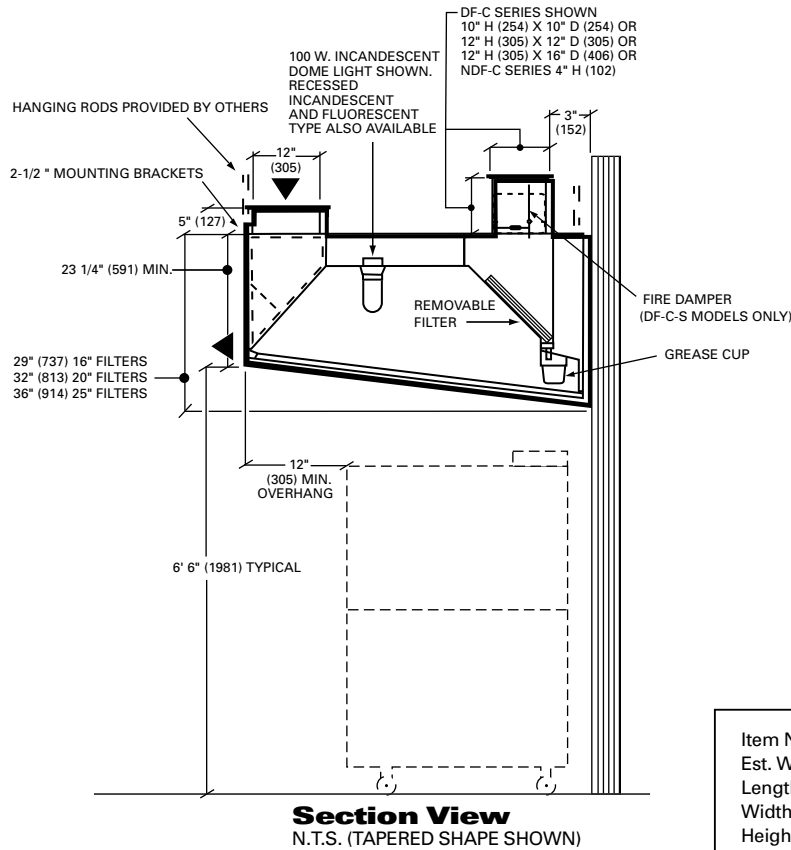


Model DF-C-S _____ (With Fire Damper)

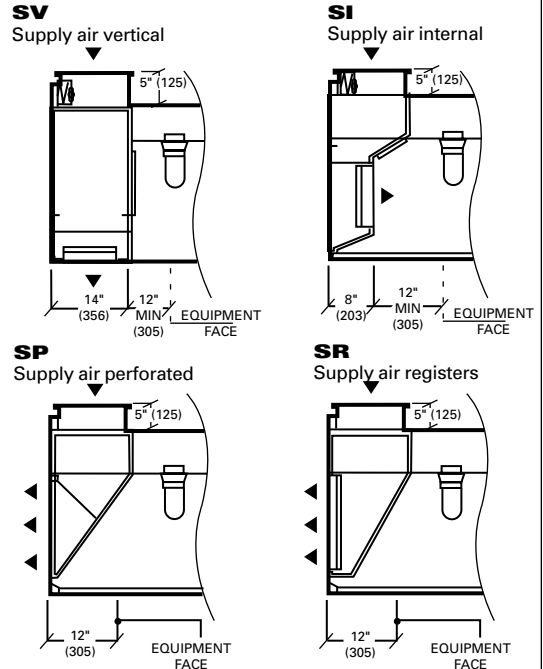
Model NDF-C-S _____ (Without Fire Damper)



To complete the model number, insert the supply air option and desired depth of the unit in inches
 Example: "DF-C-SP-54" (See typical "Section View" below.)



Supply Air Options



Item No: _____ Exhaust - CFM: _____
 Est. Wt.: _____ Duct Size: _____
 Length: _____ S. P.: _____
 Width: _____ Supply - CFM: _____
 Height: _____ Duct Size: _____
 S. P.: _____

NOTE: Dimensions in parenthesis () are millimeters.

Engineering Data

EQUIPMENT TYPE

LIGHT LOAD.....Steamers, kettles (under 20 gallons), open burner ranges, griddles, electric fryers

MEDIUM LOADHot top ranges, woks, upright broilers

HEAVY LOADGas broilers consuming maximum of 25% of medium duty equip. line

EXTRA HEAVY LOADEntire cooking line made up of gas broilers or equivalent

SUPPLY AIR

Indicated supply quantities based on 80% of exhaust quantities. For "SI" style of supply air, quantity will depend on cooking line; don't use over broilers.

STATIC PRESSURE

Static pressure drops across ventilator exhaust:
 Model NDF:.....0.75" W.G. at the duct collar
 Model DF:1.00" W.G. at the duct collar

Static pressure drops across ventilator supply:
 Models DF and NDF:0.15" W.G. at the duct collar

AIR COLLARS

Exhaust: Based on 1800 FPM
 Supply: Based on 1000 FPM

VENTILATOR HANGING WEIGHTS

Ventilator Depth	42" (1067)	48" (1219)	54" (1372)	60" (1524)
Wt./linear ft. lbs.	60	65	75	80
Wt./linear m. kg.	89	97	112	119

AIR-SIDE TECHNICAL DATA

LENGTH	LIGHT LOAD 250 CFM/LIN. FT.			SUPPLY BASED ON 80% OF EXHAUST			MEDIUM LOAD 300 CFM/LIN. FT.			SUPPLY BASED ON 80% OF EXHAUST			HEAVY LOAD 350 CFM/LIN. FT.			SUPPLY BASED ON 80% OF EXHAUST			EXTRA HEAVY LOAD 400 CFM/LIN. FT.			SUPPLY BASED ON 80% OF EXHAUST			
	CFM	DUCT COLLAR 10" X	NO. OF DUCTS	CFM PER DUCT	DUCT COLLAR 12" X	CFM	DUCT COLLAR 12" X	NO. OF DUCTS	CFM PER DUCT	DUCT COLLAR 12" X	CFM	DUCT COLLAR 12" X	NO. OF DUCTS	CFM PER DUCT	DUCT COLLAR 16" X	CFM	DUCT COLLAR 16" X	NO. OF DUCTS	CFM PER DUCT	DUCT COLLAR 12" X	CFM	DUCT COLLAR 12" X	NO. OF DUCTS	CFM PER DUCT	DUCT COLLAR 12" X
3'-0"	750	6"	1	600	11"	900	6"	1	720	15"	1050	6"	1	840	15"	1200	6"	1	960	15"	1200	6"	1	960	15"
3'-6"	875	7"	1	700	15"	1050	7"	1	840	15"	1225	6"	1	980	15"	1400	7"	1	1120	19"	1400	7"	1	1120	19"
4'-0"	1000	8"	1	800	15"	1200	8"	1	960	15"	1400	7"	1	1120	19"	1600	8"	1	1280	19"	1600	8"	1	1280	19"
4'-6"	1125	9"	1	900	15"	1350	9"	1	1080	19"	1575	8"	1	1260	19"	1800	9"	1	1440	24"	1800	9"	1	1440	24"
5'-0"	1250	10"	1	1000	15"	1500	10"	1	1200	19"	1750	9"	1	1400	24"	2000	10"	1	1600	24"	2000	10"	1	1600	24"
5'-6"	1375	11"	1	1100	19"	1650	11"	1	1320	19"	1925	10"	1	1540	24"	2200	11"	1	1760	28"	2200	11"	1	1760	28"
6'-0"	1500	12"	1	1200	19"	1800	12"	1	1440	24"	2100	11"	1	1680	28"	2400	12"	1	1920	28"	2400	12"	1	1920	28"
6'-6"	1625	13"	1	1300	19"	1950	13"	1	1560	24"	2275	11"	1	1820	28"	2600	13"	1	2080	33"	2600	13"	1	2080	33"
7'-0"	1750	14"	1	1400	24"	2100	14"	1	1680	28"	2450	12"	1	1960	28"	2800	14"	1	2240	33"	2800	14"	1	2240	33"
7'-6"	1875	15"	1	1500	24"	2250	15"	1	1800	28"	2625	13"	1	2100	33"	3000	15"	1	2400	37"	3000	15"	1	2400	37"
8'-0"	2000	16"	1	1600	24"	2400	16"	1	1920	28"	2800	14"	1	2240	33"	3200	16"	1	2560	37"	3200	16"	1	2560	37"
8'-6"	2125	17"	1	1700	28"	2550	17"	1	2040	33"	2975	15"	1	2380	33"	3400	17"	1	2720	37"	3400	17"	1	2720	37"
9'-0"	2250	18"	2	900	15"	2700	18"	2	1080	19"	3150	16"	2	1260	19"	3600	18"	2	1440	24"	3600	18"	2	1440	24"
9'-6"	2375	19"	2	950	15"	2850	19"	2	1140	19"	3325	17"	2	1330	19"	3800	19"	2	1520	24"	3800	19"	2	1520	24"
10'-0"	2500	20"	2	1000	15"	3000	20"	2	1200	19"	3500	17"	2	1400	24"	4000	20"	2	1600	24"	4000	20"	2	1600	24"
10'-6"	2625	21"	2	1050	19"	3150	21"	2	1260	19"	3675	18"	2	1470	24"	4200	21"	2	1680	28"	4200	21"	2	1680	28"
11'-0"	2750	22"	2	1100	19"	3300	22"	2	1320	19"	3850	19"	2	1540	24"	4400	22"	2	1760	28"	4400	22"	2	1760	28"
11'-6"	2875	23"	2	1150	19"	3450	23"	2	1380	24"	4025	20"	2	1610	24"	4600	23"	2	1840	28"	4600	23"	2	1840	28"
12'-0"	3000	24"	2	1200	19"	3600	24"	2	1440	24"	4200	21"	2	1680	28"	4800	24"	2	1920	28"	4800	24"	2	1920	28"
12'-6"	3125	25"	2	1250	19"	3750	25"	2	1500	24"	4375	22"	2	1750	28"	5000	25"	2	2000	28"	5000	25"	2	2000	28"
13'-0"	3250	26"	2	1300	19"	3900	26"	2	1560	24"	4550	23"	2	1820	28"	5200	26"	2	2080	33"	5200	26"	2	2080	33"
13'-6"	3375	27"	2	1350	24"	4050	27"	2	1620	24"	4725	24"	2	1890	28"	5400	27"	2	2160	33"	5400	27"	2	2160	33"
14'-0"	3500	28"	2	1400	24"	4200	28"	2	1680	28"	4900	25"	2	1960	28"	5600	28"	2	2240	33"	5600	28"	2	2240	33"
14'-6"	3625	29"	2	1450	24"	4350	29"	2	1740	28"	5075	25"	2	2030	33"	5800	29"	2	2320	33"	5800	29"	2	2320	33"
15'-0"	3750	30"	2	1500	24"	4500	30"	2	1800	28"	5250	26"	2	2100	33"	6000	30"	2	2400	37"	6000	30"	2	2400	37"
15'-6"	3875	31"	2	1550	24"	4650	32"	2	1860	28"	5425	27"	2	2170	33"	6200	31"	2	2480	37"	6200	31"	2	2480	37"
16'-0"	4000	32"	2	1600	24"	4800	32"	2	1920	28"	5600	28"	2	2240	33"	6400	32"	2	2560	37"	6400	32"	2	2560	37"

*Maximum unit length 16'-0" (4877). Check to ensure that there is adequate access into building and kitchen area.

ELECTRICAL

An optional Carroll stop/start switch, Model CS200, is provided for each exhaust fan. Refer to Model CS200 spec. sheet for specifications and electrical details. If specified, lights shall be on a separate circuit, 120 Volt.