

Filter Hood

FD-B with MR

Box Canopy Hood With Rear Make Up Air Exhaust Fire Damper

General Description

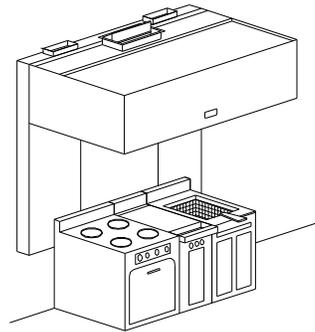
The filter hood is used on all cooking equipment. The hood is ceiling hung with a recommended mounting height of 6'6" (1981 mm) from the finished floor. The hood is finished in a No. 4 stainless steel finish on all exposed sides. The box canopy can be tapered to 10" (254 mm) at the front. The filter hood is available with fluorescent or incandescent lights. The fresh air is introduced down the back of the hood and discharges through perforated stainless steel panels behind the cooking appliances.

Efficiency

The hood is equipped with high efficiency UL/ULC listed baffle grease filters. The exhaust air accelerates through multiple turns within the baffle filter. Centrifugal forces causes grease dirt and lint to deposit on the baffles. The liquefied grease drains down the baffles, along the grease trough, and into a grease cup.

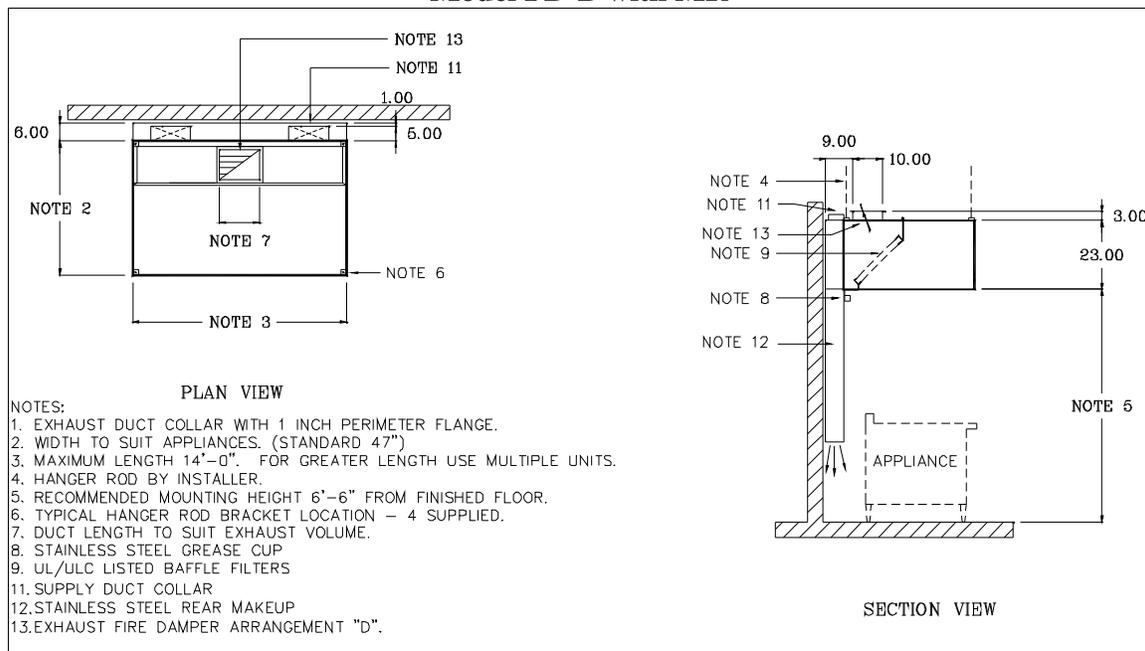
Exhaust and Supply

The total exhaust required to properly ventilate a commercial kitchen is directly related to the type of cooking equipment under the filter hood. An exhaust



flow rate between 150 and 400 CFM/ft (233 and 620 l/s/m) is satisfactory for most applications. Introducing supply air back into the kitchen is good engineering practice. An adequate supply of fresh air eliminates cold drafts, and hot spots, enhances the capture capability of the filter hood and results in a more comfortable kitchen environment. A supply air volume up to 60% of the total exhaust is recommended. The fresh air should be tempered to between 45 and 75F (13 to 24C)

Model FD-B with MR



Engineering Data

VENTILATOR LENGTH		Exhaust Flow Rate (EFR) 300 CFM/ft.					Exhaust Flow Rate (EFR) 350 CFM/ft.				
		Exhaust		Supply Based on 60% of Exhaust			Exhaust		Supply Based on 60% of Exhaust		
		Volume	Duct Size	Volume	No. Ducts	Duct Size	Volume	Duct Size	Volume	No. Ducts	Duct Size
ft.	mm	CFM	L (in.) W=10	CFM		L (in.) W=5	CFM	L (in.) W=10	CFM		L (in.) W=5
3.0	914	900	8	540	2	9	1050	10x9	630	2	14
3.5	1067	1050	9	630	2	11	1225	10x11	735	2	14
4.0	1219	1200	11	720	2	12	1400	10x12.5	840	2	14
4.5	1372	1350	12.5	810	2	14	1575	10x14.5	945	2	16
5.0	1524	1500	13.5	900	2	15	1750	10x16	1050	2	24
5.5	1676	1650	14.5	990	2	17	1925	10x17	1155	2	24
6.0	1829	1800	16	1080	2	18	2100	10x19	1260	2	24
6.5	1981	1950	18	1170	2	20	2275	10x20	1365	2	24
7.0	2131	2100	19	1260	2	22	2450	10x22.5	1470	2	28
7.5	2286	2250	20	1350	2	23	2625	10x23.5	1575	2	26
8.0	2438	2400	21.5	1440	2	24	2800	10x25	1680	2	28
8.5	2591	2550	22.5	1530	2	26	2975	10x27	1785	2	32
9.0	2743	2700	25	1620	2	27	3150	10x28	1890	2	32
9.5	2896	2850	26	1710	2	29	3325	10x29	1995	2	36
10.0	3048	3000	27	1800	2	30	3500	10x31.5	2100	2	36
10.5	3200	3150	28	1890	2	32	3675	10x32.5	2205	2	36
11.0	3353	3300	29	1980	2	33	3850	10x35	2310	2	24
11.5	3505	3450	31.5	2070	2	36	4025	10x36	2415	2	24
12.0	3658	3600	32.5	2160	2	36	4200	10x38	2520	2	24
12.5	3810	3750	34	2250	2	38	4375	10x39	2625	2	24
13.0	3962	3900	35	2340	2	39	4550	10x40.5	2730	2	24
13.5	4115	4050	36	2430	2	41	4725	14x30.5	2835	2	28
14.0	4207	4200	38	2520	2	43	4900	14x31.5	2940	2	28

* Refer to the Ventilator Engineering Manual for Exhaust Volumes and Flow rates not shown above.

Exhaust Flow Rate CFM/ft	Exhaust Static Pressure (in W.C.)
300	0.55
350	0.65
400	0.76
Supply Air Rate	Supply static Pressure ("W.C.)
All Flow Rates	0.20

Notes:

- Exhaust duct can be located anywhere along length of the filter hood.
- For lengths greater than 14' (4270 mm) join multiple sections together.

Spring Air Systems Model No. FD-B with MR Hood Specification

The filter hood shall be a Spring Air Systems model no. FD-B with MR, box canopy, high efficiency, filter hood, with rear make up air plenum, down discharge, UL/ULC listed, and built in accordance with the NFPA-96.

The unit casing shall be a minimum 18 GA. Stainless steel with all exposed sides no. 4 finish. The filter hood shall include UL/ULC listed baffle grease filters mounted in an integral stainless steel rack inclined at 45 degrees. The filter rack shall include a full-length stainless steel grease gutter and grease cup. The fire damper shall be an arrangement "D" butterfly type, constructed of 16 Ga. steel with metal blade and edge seals. The fire damper is activate by a fusible link and dead weight arrangement.

The make up air plenum shall be constructed of stainless steel on all exposed sides and extend 51" below the bottom edge of the hood. The hood shall have _____ fluorescent/incandescent light evenly spaced along the length of the hood.

Engineering Data

Item Number	
Model Number	FD-B with MR _____
Number of Sections	
Hood Length	
Hood Width	
Lights	
Exhaust Volume	
No. Of Duct Collars	
Size of Duct Collars	
Static Pressure	
Supply Volume	
No. Of Duct Collars	
Size Of Duct Collar	
Static Pressure	

FDB with MR