Spring Air
Engineering Energy Savings

Heated Make-Up Air Filter Hood

FN-B-MG

Box Canopy Hood

Makeup air

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.

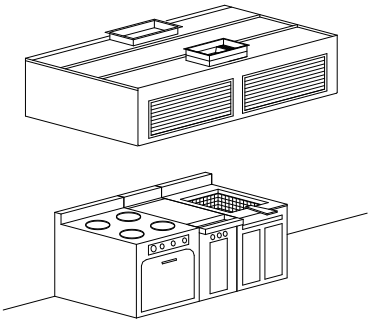
The tempered makeup air is discharged through two way adjustable extruded aluminum grilles.

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 to properly ventilate commercial kitchen is directly related to the type of cooking equipment under the filter hood. An exhaust flow rate of between 150 to 400 CFM/ft. (233 to 620 l/s/m) is satisfactory for most installations. Directing the make-up air through the front of the hood provides the correct air quantity and excellent distribution within the kitchen

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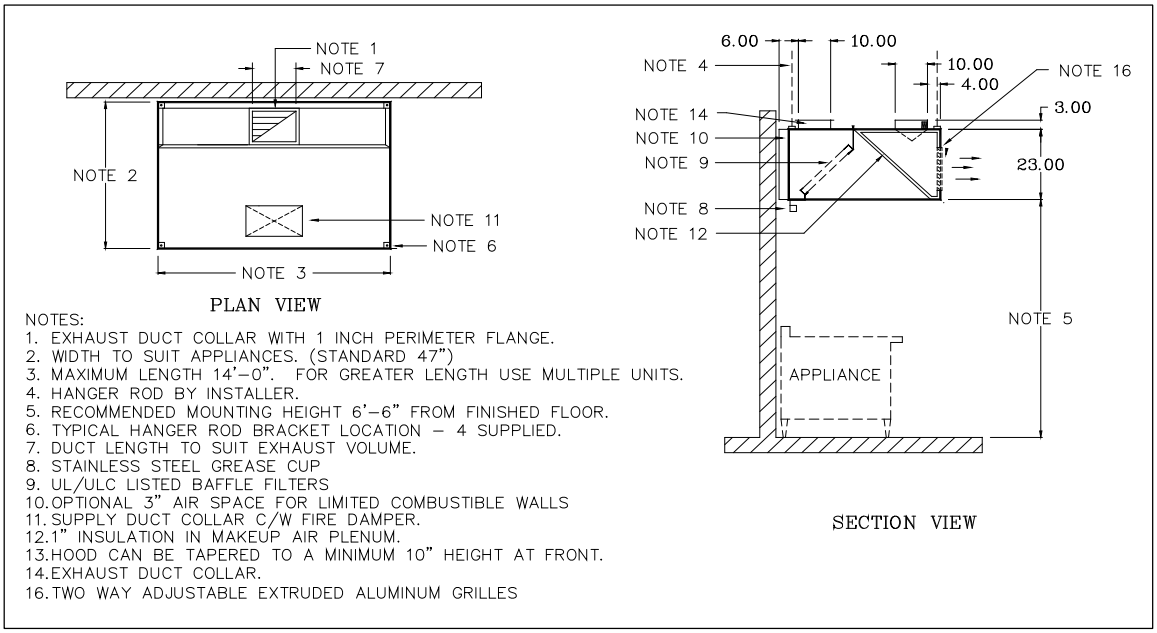
Model FN-B-MG



NOTES:
1. EXHAUST DUCT COLLAR WITH 1 INCH PERIMETER FLANGE.
2. WIDTH TO SUIT APPLIANCES. (STANDARD 47")
3. MAXIMUM LENGTH 14'–0". FOR GREATER LENGTH USE MULTIPLE UNITS.
4. HANGER ROD BY INSTALLER.
5. RECOMMENDED MOUNTING HEIGHT 6'–6" FROM FINISHED FLOOR.
6. TYPICAL HANGER ROD BRACKET LOCATION – 4 SUPPLIED.
7. DUCT LENGTH TO SUIT EXHAUST VOLUME.
8. STAINLESS STEEL GREASE CUP
9. UL/ULC LISTED BAFFLE FILTERS
10. OPTIONAL 3" AIR SPACE FOR LIMITED COMBUSTIBLE WALLS
11. SUPPLY DUCT COLLAR C/W FIRE DAMPER.
12. 1" INSULATION IN MAKEUP AIR PLENUM.
13. HOOD CAN BE TAPERED TO A MINIMUM 10" HEIGHT AT FRONT.
14. EXHAUST DUCT COLLAR.
16. TWO WAY ADJUSTABLE EXTRUDED ALUMINUM GRILLES

Engineering Data

VENTILATOR LENGTH		Exhaust Flow Rate (EFR) 300 CFM/ft. (465 l/s/m)					Exhaust Flow Rate (EFR) 350 CFM/ft. (544 l/s/m)				
		Exhaust		Supply Based on 80% of Exhaust			Exhaust		Supply Based on 80% of Exhaust		
		Volume	Duct Size	Volume	No.	Duct Size	Volume	Duct Size	Volume	No.	Duct Size
ft.	mm	CFM	L (in.) W=10	CFM	Ducts	L (in.) W=10	CFM	LxW (in.)	CFM	Ducts	L(in.) W=10
3.0	914	900	8	720	1	12	1050	10x9	840	1	14.5
3.5	1067	1050	9	840	1	14.5	1225	10x11	980	1	17
4.0	1219	1200	11	960	1	16	1400	10x12.5	1120	1	18.5
4.5	1372	1350	12.5	1080	1	18.5	1575	10x14.5	1260	1	21
5.0	1524	1500	13.5	1200	1	20.5	1750	10x16	1400	1	24
5.5	1676	1650	14.5	1320	1	22	1925	10x17	1540	1	26.5
6.0	1829	1800	16	1440	1	24.5	2100	10x19	1680	1	29
6.5	1981	1950	18	1560	1	26.5	2275	10x20	1820	1	30.5
7.0	2131	2100	19	1680	1	29	2450	10x22.5	1960	1	33
7.5	2286	2250	20	1800	1	30.5	2625	10x23.5	2100	1	35.5
8.0	2438	2400	21.5	1920	1	32	2800	10x25	2240	2	18.5
8.5	2591	2550	22.5	2040	1	35	2975	10x27	2380	2	20.5
9.0	2743	2700	25	2160	1	36.5	3150	10x28	2520	2	21
9.5	2896	2850	26	2280	2	19.5	3325	10x29	2660	2	23
10.0	3048	3000	27	2400	2	20.5	3500	10x31.5	2800	2	24
10.5	3200	3150	28	2520	2	21	3675	10x32.5	2940	2	24.5
11.0	3353	3300	29	2640	2	22	3850	10x35	3080	2	26.5
11.5	3505	3450	31.5	2760	2	24	4025	10x36	3220	2	27
12.0	3658	3600	32.5	2880	2	24.5	4200	10x38	3360	2	29
12.5	3810	3750	34	3000	2	25.5	4375	10x39	3500	2	29.5
13.0	3962	3900	35	3120	2	26.5	4550	10x40.5	3640	2	30.5
13.5	4115	4050	36	3240	2	27	4725	14x30.5	3780	2	32
14.0	4207	4200	38	3360	2	29	4900	14x31.5	3920	2	33

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

Notes:

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

Exhaust Flow Rate CFM/ft	Exhaust Static Pressure (in W.C.)
300	0.35
350	0.45
400	0.66
Supply Air Rate	**Supply static Pressure ("W.C.)**
All Flow Rates	0.20

Specification

Model No. FN-B-MG: The filter hood shall be a Spring Air Systems model no. FN-B-MG, box canopy, high efficiency, filter hood, with make-up air plenum, two way adjustable extruded aluminum front discharge grilles, 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 make-up air plenum shall be insulated with 1" attenuating foam. The supply duct collars shall each have a fire damper with a 165'F fusible link. The sheet metal contractor shall supply and access door on the duct above the damper for inspection. The hood shall have ___ fluorescent/incandescent light evenly spaced along the length of the hood.

Engineering Data

Item Number _____

Model Number FN-B-MG_____

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:_____

FNBMG