

Island Filter Hood

FD-DB

Double Box Canopy, With Exhaust Fire Damper

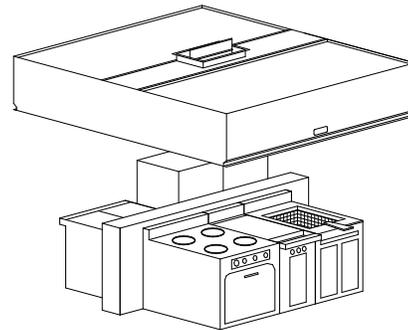
General Description

The island filter hood is used on all cooking equipment in a double row island arrangement. The hood is ceiling hung with a recommended mounting height of 6'6" (1981 mm) from the finished floor. The hood has a full length "V" bank filter arrangement centered in the canopy width. The baffle filters on each side of the "V" can be sized for unequal exhaust air volumes. The hood is finished in a No. 4 stainless steel finish on all exposed sides. The double box canopy can be tapered to 12" (305 mm) at the front. The filter hood is available with fluorescent or incandescent lights.

Efficiency

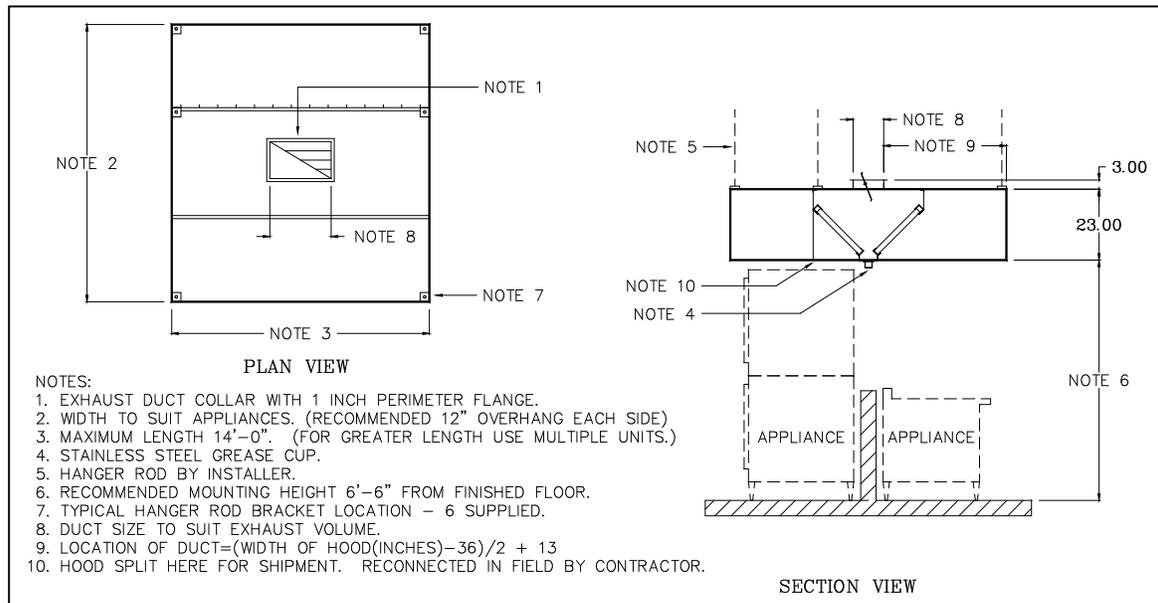
The hood is equipped with high efficiency UL/ULC listed baffle grease filters. The exhaust air accelerates through multiple turns within the baffle filter. Centrifugal forces causes grease dirt and lint to deposit on the baffles. The liquefied grease drains down the baffles, along the grease trough, 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 ventilator. An exhaust flow rate between 300 and 700 CFM/ft (465 and 1085 l/s/m) is satisfactory for most applications. For detailed calculations refer to the *Spring Air Systems Ventilator Engineering Manual*.

Model FD-DB



Engineering Data

Ventilator Length (ft)	Exhaust Flow Rate (*EFR)					
	Exhaust @ 400 CFM/ft		Exhaust @ 500CFM/ft		Exhaust @ 600 CFM/ft	
	Exhaust Volume CFM	Exhaust Duct W=10 (L)	Exhaust Volume CFM	Exhaust Duct W=10 (L)	Exhaust Volume CFM	Exhaust Duct W=10 (L)
3.0	1200	11	1500	13.5	1800	16
3.5	1400	12.5	1750	16	2100	18
4.0	1600	14.5	2000	18	2400	21.5
4.5	1800	16	2250	20	2700	23.5
5.0	2000	18	2500	22.5	3000	27
5.5	2200	20	2750	25	3300	29
6.0	2400	21.5	3000	27	3600	31.5
6.5	2600	23.5	3250	29	3900	35
7.0	2800	25	3500	31.5	4200	37
7.5	3000	27	3750	34	4500	40.5
8.0	3200	29	4000	36	4800	14 x 38.5
8.5	3400	30.5	4250	38	5100	14 x 32
9.0	3600	32.5	4500	40.5	5400	14 x 34.5
9.5	3800	34	4750	14 x 30.5	5700	14 x 36
10.0	4000	36	5000	14 x 32	6000	14 x 38.5
10.5	4200	38	5250	14 x 33.5	6300	14 x 40
11.0	4400	39	5500	14 x 35.5	6600	14 x 36.5
11.5	4600	14 x 29.5	5750	14 x 37	6900	16 x 38.5
12.0	4800	14 x 30.5	6000	14 x 38.5	7200	16 x 40
12.5	5000	14 x 32	6250	14 x 40	7500	16 x 42
13.0	5200	14 x 33.5	6500	16 x 36.5	7800	2 @ 10 X 35
13.5	5400	14 x 34.5	6750	16 x 38	8100	2 @ 10 X 36
14.0	5600	14 x 36	7000	16 x 39.5	8400	2 @ 10 X 37

* 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.)
400	0.55
500	0.65
600	0.76

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-DB Hood Specification

The filter hood shall be a Spring Air Systems model no. FD-DB, double box canopy, high efficiency, filter hood, 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 unit casing shall be a minimum 18 GA. stainless steel on all exposed surfaces. The exhaust fire damper shall be an arrangement "D", butterfly type, constructed of stainless steel with blade and edge seals. The fire damper shall be activated by a fusible link and dead weight arrangement.

The hood shall have incandescent/fluorescent lights evenly spaced along the length of the hood.

Engineering Data

Item Number: _____
 Model Number: FD-DB _____
 Number of Sections: _____
 Hood Length: _____
 Hood Width: _____
 Exhaust Volume: _____
 No. of Duct Collars: _____
 Size of Duct Collar: _____
 Static Pressure: _____

FDDB