

# Heated make-up Air Filter Hood

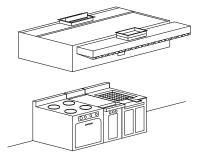
# **FD-B** with **MZ**

## **Box Canopy Hood** New MZ two way adjustable fresh air With Exhaust Fire Damper

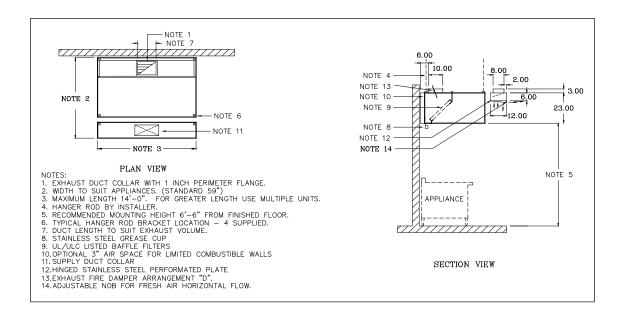
#### **General Description**

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 MZ plenum is shipped loose. The tempered makeup air is discharged down or horizontal, through perforated stainless steel panel located forward of the filter hood. **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 force 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 down, from the front of the hood provides continuous air movement, directed towards the cook.



Model FD-B-MZ



|                   |      |                               |           |                        | Inginee | ring Da           | lla                           |           |                        |       |           |
|-------------------|------|-------------------------------|-----------|------------------------|---------|-------------------|-------------------------------|-----------|------------------------|-------|-----------|
| Exhaust Flow Rate |      |                               |           |                        |         | Exhaust Flow Rate |                               |           |                        |       |           |
| VENTILATOR        |      | (EFR) 300 CFM/ft. (465 l/s/m) |           |                        |         |                   | (EFR) 350 CFM/ft. (544 l/s/m) |           |                        |       |           |
| LENGTH            |      | Exhaust                       |           | Supply Based on 80% of |         |                   | Exhaust                       |           | Supply Based on 80% of |       |           |
|                   |      |                               |           | Exhaust                |         |                   |                               |           | Exhaust                |       |           |
|                   |      |                               | Duct Size |                        | No.     | Duct Size         |                               | Duct Size |                        | No.   | Duct Size |
| ft.               | mm   | CFM                           | L (in.)   | CFM                    | Ducts   | L (in.)           | CFM                           | LxW       | CFM                    | Ducts | L(in.)    |
|                   |      |                               | W=10      |                        |         | W=8               |                               | (in.)     |                        |       | W=8       |
| 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        |

### **Engineering Data**

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

| Exhaust Flow Rate<br>CFM/ft | Exhaust Static Pressure<br>(in W.C.) |
|-----------------------------|--------------------------------------|
| 300                         | 0.55                                 |
| 350                         | 0.65                                 |
| 400                         | 0.76                                 |
| Supply Air Rate             | Supply static Pressure<br>("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-MZ Hood Specification

The filter hood shall be a Spring Air Systems model no. FD-B-MZ, box canopy, high efficiency, filter hood, with MZ make up air plenum, stainless steel adjustable perforated front, down and horizontal 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 activated by a fusible link and dead weight arrangement.

The make-up air plenum shall be ceiling mounted with adjustable fresh air flow down or horizontal from the plenum. No special tools required are required for adjustment. The hood shall have \_\_\_\_\_ fluorescent/incandescent light evenly spaced along the length of the hood.

#### **Engineering Data**

Item Number Model Number FD-B-MZ 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 FDBMZ



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