

# DYNAFLOW HOOD FD-B-MB-I

*Dynaflow*  
**UL listed for 87"  
mounting height**

## Single Row Island Box Canopy, Exhaust Fire Damper

### General Description

The hood is a Type 1 listed for use with all temperature ranges on single row, island cooking equipment lineups. The unit is ceiling hung with a maximum mounting height of 87" (2209 mm) from the lower edge of the canopy to the floor. The box canopy can be tapered to 11" (279 mm) at the front. The hood is finished with a number 4 finish on exposed sides. The *Dynaflow* hood is available with fluorescent, incandescent or recessed incandescent lights wired to a J-box. The sketch on the right shows *Dynaflow* Side Flows.

### Efficiency

The *Dynaflow* hood is equipped with UL/ULC listed baffle grease filters or cartridges. Five extraction methods are available with *Dynaflow*.

*VE* – Value Engineered – standard grease extraction efficiency Stainless steel baffles.

*CA* – Medium grease extraction efficiency cartridges with adjustable flow baffles.

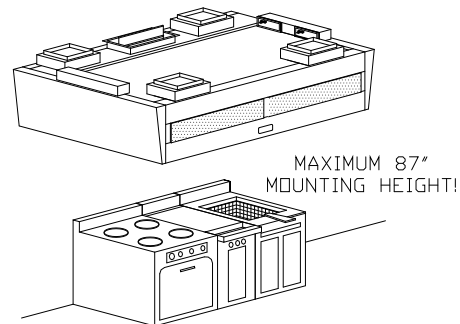
*HE* – High grease extraction Efficiency Cascade baffles for Enviro applications and reducing grease discharge from buildings.

*EC* – Easy Clean Teflon – standard grease extraction efficiency baffles for hot, heavy grease laden appliances.

*SA* – Spark Arrestor – standard grease extraction efficiency, for solid fuel appliances.

### Exhaust and Supply

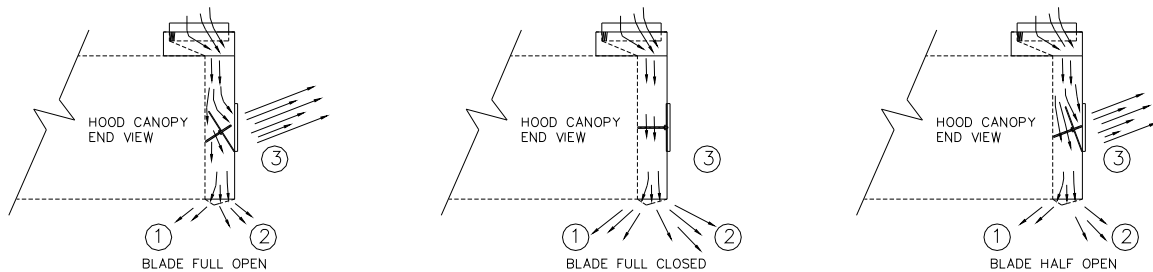
The *Dynaflow* design provides the complete commercial kitchen ventilation package. The *Dynaflow* hood exhaust calculations are based on the appliance below the hood.



Heated and/or cooled fresh air ducting is connected to the two supply duct collars on the top, front of the hood. The fresh air flows into these connections through the supply fire damper and to the *Dynaflow* chamber. Fresh is directed to three locations within the perimeter of the cooking appliances.

1. Fresh air is discharge down through a S/S perforated plate toward the kitchen appliances to reduce the net exhaust flow required for the total appliance lineup.
2. Fresh air is discharge down through a S/S perforated plate toward the cook to provide ambient cooling for the cooks operating under the hood.
3. The fresh air is directed through a s/s perforated plant out the front of the hood over the cooks head to provide the exact amount of air to balance the kitchen and ensure proper exhaust operation along the length of the hood.

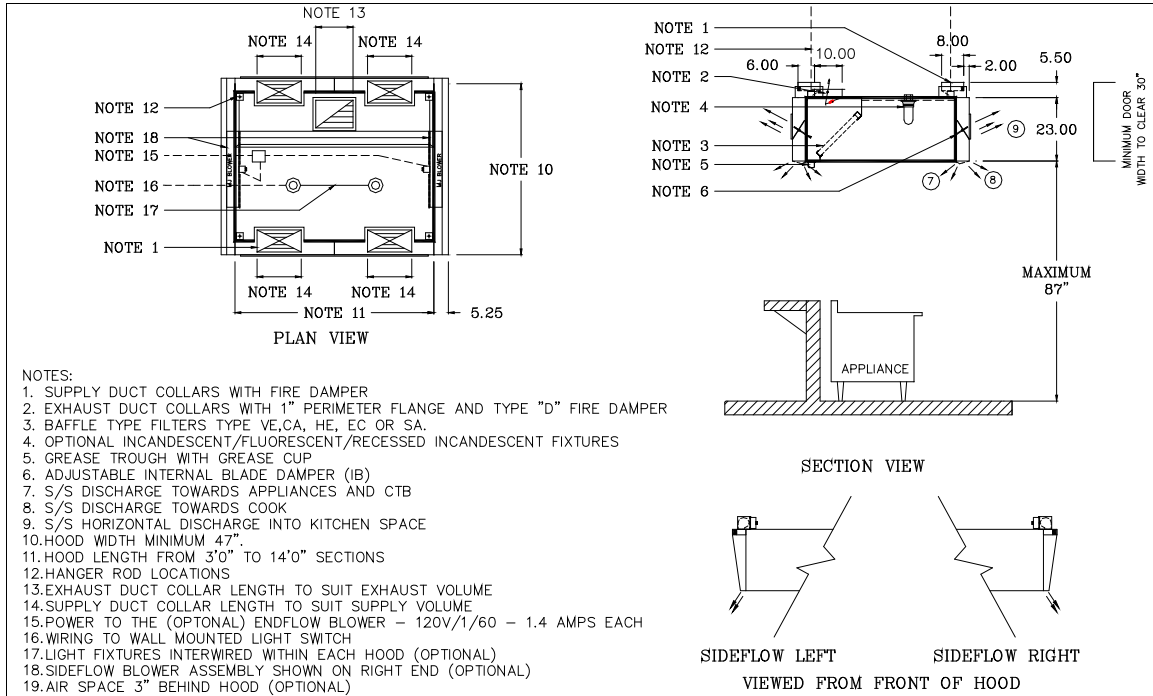
### *Dynaflow* Adjustable Blade



An internal blade is easily adjusted to provide more or less air directed towards to the cook or horizontally into the kitchen space. The complete kitchen ventilation system will always be balanced. The blade is adjustable every 24" (610mm) along the front of the *Dynaflow* hood to match the appliances beneath. For example a charbroiler will require

more fresh air directed down towards appliance at position 1 and more fresh air direct towards the cook at position two. The blade is field adjustable to suit any appliances even if they are moved after installation. A Spring Air service technician sets the blade to match the appliances and provides a full commissioning report for each kitchen.

## Model FDBMBI



### Spring Air Systems Model No. FD-B-MB-I Hood Specification

The *Dynaflow* hood shall be a Spring Air Systems model no. FD-B-MB-I, single row island, box canopy, baffle extractor hood, with exhaust fire damper, "MB" Dynaflow air plenum, UL/ULC listed, NSF certified and built in accordance with the NFPA-96.

The baffle extractors shall be one of the following:

1. VE - Stainless steel baffles.
2. CA - Cartridges with adjustable flow baffles.
3. HE - High Efficiency Cascade
4. EC - Easy Clean Teflon baffles
5. SA - Spark Arrestor for sold fuel appliances.

The unit casing shall be a minimum 18 GA. stainless steel, with No. 4 finish on all four exposed surfaces. The hood shall include UL/ULC listed 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 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.

Front and back Dynaflow plenums provide all the fresh air required for the commercial kitchen. Each Dynaflow plenum directs the fresh air to three (3) regions within the boundaries of the appliances. Each region includes an aerodynamically designed s/s perforated discharge panel.

The first (1) region discharges through a full length s/s panel located at the bottom of the Dynaflow plenum. Fresh air is directed through the Comfort Tuning Blade (CTB) towards the appliances providing maximum exhaust air reduction. The second (2) Region discharges through a full length s/s angular panel located at the bottom front of the Dynaflow

plenum. The fresh air is directed towards the chef to provide a more comfortable work environment in front of the hood. The third (3) region provides horizontal discharge of fresh air through a s/s perforated panel out the front of the hood into the kitchen. The third region provides the exact amount of fresh air to balance the kitchen and ensure optimum capture. The s/s front discharge shall include multiple s/s perforated panels every 24" (610mm) long across the front face of the hood. A manually operated Internal Blade (IB) damper shall be located behind each front s/s discharge panel. The CTB and IB dampers are field adjustable through the lower s/s discharge panel. The hood shall have \_\_\_\_\_ incandescent/fluorescent/recessed incandescent lights evenly spaced along the length of the hood.

- Optional Sideflow right blower
- Optional Sideflow left blower

### Engineering Data

Item Number: \_\_\_\_\_

Model Number: FDBMBI \_\_\_\_\_

Number of Sections: \_\_\_\_\_

Hood Length: \_\_\_\_\_

Hood Width: \_\_\_\_\_

Lights: \_\_\_\_\_

Exhaust Volume: \_\_\_\_\_

No. of Exhaust Duct Collars: \_\_\_\_\_

Size of Exhaust Duct Collar: \_\_\_\_\_

Exhaust Static Pressure: \_\_\_\_\_

Supply Volume: \_\_\_\_\_

Supply No. of Duct Collars: \_\_\_\_\_

Supply Size of Duct Collar: \_\_\_\_\_

Supply Static Pressure: \_\_\_\_\_

SideFlow LEFT: \_\_\_\_\_

SideFlow RIGHT: \_\_\_\_\_

FDBMBI