



# REV-LOW Water Wash Hood

## Hot Water Wash

### HD-B-F

**Box Canopy  
Dead Weight Fire  
Damper**

#### General Description

The REV-LOW hood is used on all single row cooking equipment lineups, wall mounted. The unit is ceiling hung with a recommended mounting height of 6'-6" (1981 mm) from the lower edge of the canopy to the floor. The ventilator is installed with the core extractor section over the cook's head. The hood is finished with a number 4 finish on exposed sides. The REV-LOW hood is available with fluorescent or incandescent lights wired to a J-box.

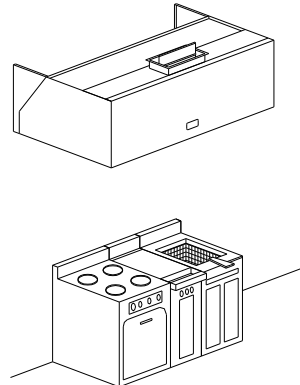
#### Efficiency

The hood is equipped with a high efficiency type "H" grease extractor. The high efficiency is achieved by applying maximum centrifugal force to the grease, dirt and lint particles through multiple, and abrupt, high velocity exhaust air direction changes.

The extractor design incorporates a VORTEX collection chamber, where the exhaust air accelerates 270 degrees around the VORTEX BAFFLES and a secondary VARIFLOW BAFFLE for adjustable exhaust airflow. The VORTEX BAFFLE also acts as a "Sump" to prevent deposited grease from re-entering the exhaust air stream.

#### Cleaning

The extractor is washed daily in conjunction with a water wash control panel. At the end of each cooking day the exhaust fan is switched off (either manually or automatically) and a water/detergent mixture scrubs the interior of the grease extractor clean.

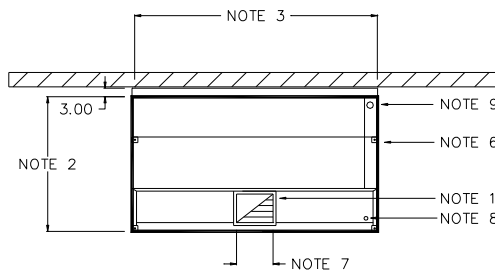


The extractor includes a wash manifold with nozzles spaced evenly along each length. The manifold design provides excellent cleaning with minimum hot water usage. To select a water wash control panel refer to a *Spring Air Systems Water Wash Control Panel Specification Sheet*.

#### Exhaust and Supply

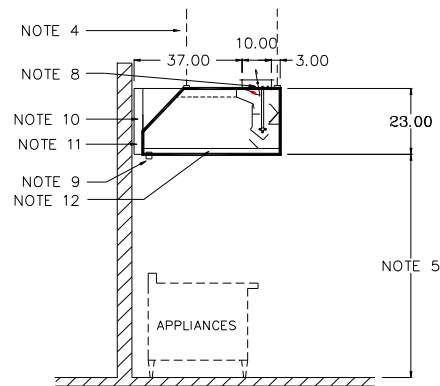
The REV-LOW hood exhaust calculations are outlined in the REV-LOW Engineering Manual. The complete kitchen ventilation system must be balanced, such that a minimum of 80% continuous heated makeup air is provided through a dedicated makeup air system or the kitchen A/C units. It is good engineering practice to provide this heated fresh air into the kitchen space. The heated fresh air should not exceed 90 percent of the total exhaust volume.

### Model HD-B-F



PLAN VIEW

- NOTES:
1. EXHAUST DUCT COLLAR WITH 1 INCH PERIMETER FLANGE.
  2. MINIMUM WIDTH 47" OR 18" OVERHANG FROM APPLIANCES.
  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. 3/4" HOT WATER INLET STUBBED OUT THE TOP ON EITHER END.
  9. 2" DRAIN OUTLET STUBBED OUT THE BOTTOM ON EITHER END.
  10. VARIFLOW BAFFLES.
  11. OPTIONAL 3" AIR SPACE FOR LIMITED COMBUSTIBLE CONSTRUCTION.
  12. S/S DRAIN CHASE TO BACK OF HOOD.



SECTION VIEW

Ventilator Length (ft)	Exhaust Flow Rate (EFR*)						Hot Water usgpm @ 40 psi
	Exhaust Flow Rate 100 CFM/ft		Exhaust Flow Rate 150 CFM/ft		Exhaust Flow Rate 200 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	300	2.5	450	4	600	5	2.6
3.5	350	3.0	525	4.5	700	6	3.3
4.0	400	3.5	600	6	800	7.5	4.0
4.5	450	4.0	675	6	900	8	4.6
5.0	500	4.5	750	7	1000	9.5	5.3
5.5	550	5.0	825	7	1100	10.5	5.3
6.0	600	5.5	900	8	1200	11.5	5.9
6.5	650	6.0	975	9	1300	13	6.6
7.0	700	6.5	1050	9	1400	13.5	6.6
7.5	750	7.0	1125	10.5	1500	14	7.3
8.0	800	7.5	1200	11.5	1600	15	7.9
8.5	850	8.0	1275	12	1700	16	8.6
9.0	900	8.5	1350	12.5	1800	17	8.6
9.5	950	9.0	1425	13	1900	18	9.2
10.0	1000	9.5	1500	14	2000	19	9.9
10.5	1050	10.0	1575	15	2100	20	10.6
11.0	1100	10.5	1650	15.5	2200	21	10.6
11.5	1150	11.0	1725	16.5	2300	22	11.2
12.0	1200	11.5	1800	17	2400	23	11.9
12.5	1250	12.0	1875	18	2500	24	12.5
13.0	1300	12.5	1950	18.5	2600	24.5	12.5
13.5	1350	13.0	2025	19	2700	25.5	13.2
14.0	1400	13.0	2100	20	2800	26	13.9

\* Refer to the REV-LOW Engineering Manual for Exhaust Volumes and Flow-Rates not shown above.

Exhaust Flow Rate		Static Pressure at Duct Collar	
CFM/ft	l/s/m	in W.C.	kpa
100 - 450	155 - 700	1.5	0.375

**Notes:**

- Hot water inlet connection 3/4" (19 mm) for all ventilators.
- Drain connection: Up to 25 ft (7620 mm) - 2.0" (51mm). This refers to multiple length with factory prepiped drain.
- Water wash ventilator is used in conjunction with a Spring Air Systems Water Wash Control panel.
- Exhaust duct can be located anywhere along length of ventilator, discharge out the top, back or front.
- Hot water pressure required is 40 to 70 psi (276 TO 482 kPa).

The chambers, baffles, stainless steel water wash manifold and the fire damper blades, bushing and edge seals shall be fully accessible through front removable doors within the hood canopy.

The drain trough shall be constructed of stainless steel with a 2" (52 mm) stainless steel drain stub with a 1/4" (8 mm) lip to provide a continuous blanket of water across the length of the drain trough.

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.

**Spring Air Systems Model No. HD-B-F Hood Specification**

The REV-LOW water wash hood shall be a Spring Air Systems model no. HD-B-F, box canopy, high efficiency, hot water wash hood, ULC/UL listed, and built in accordance with the NFPA-96.

The unit casing shall be a minimum 18 GA. stainless steel on all exposed surfaces.

The ventilator shall have a full-length high velocity slot, a centrifugal vortex chamber, and a VARIFLOW baffle. The vortex chamber shall provide a full 270-degree turn. The VARIFLOW baffles are field adjustable without special tools to provide the minimum exhaust volume.

**Engineering Data**

- Item Number: \_\_\_\_\_
- Model Number: HD-B-F \_\_\_\_\_
- Number of Sections: \_\_\_\_\_
- Hood Length: \_\_\_\_\_
- Hood Width: \_\_\_\_\_
- Hot Water Flow (40 psi): \_\_\_\_\_
- Exhaust Volume: \_\_\_\_\_
- No. of Duct Collars: \_\_\_\_\_
- Size of Duct Collar: \_\_\_\_\_
- Static Pressure: \_\_\_\_\_