

KEFB – Belt Drive Roof Top Commercial Kitchen Exhaust Fan (ETL)



Overview

Halton Model KEFB belt drive restaurant exhaust fan is a commercial kitchen roof exhaust fan designed to effectively contain grease and rainwater, mitigating contamination of the roof and the environment.

This effective grease management system also meets the new requirements of many municipalities for stormwater control in commercial kitchens. The system is designed for an easy connection to the building grease interceptor (trap). The grease management system returns collected grease from filters, duct, and fan to the grease interceptor where it can be collected for proper disposal or recycling. Since 1996 hundreds of heavy commercial kitchen installations have proven the cost-saving dependability and efficiency of the Model KEFB.

Institutional: The standard sealed construction belt drive KEFB with VFD controls and energy-saving backdraft damper provide an energy-efficient and reliable system that is extremely easy to maintain.

Heavy Grease: The liquid-tight welded KEFB designs is ideal for heavy grease applications.

The KEFB is designed specifically for compatibility with [M.A.R.V.E.L.](#) variable volume control platform and Capture Jet series of hoods.

Installations with Special Environmental Requirements: All KEF exhaust fans can be fitted with discharge extensions to clear roof parapets or other obstructions and eliminate re-entrainment of the exhaust plume.

Listed to the following standards:

- UL 705:2017 Ed.7+R:13Feb2018 Power Ventilators including Supplement SC Power Roof Ventilators for Restaurant Exhaust Appliances [formerly UL Subject 762)
- ULC S645:1993 Ed.1 Standard For Power Roof Ventilators For Commercial And Institutional Kitchen Exhaust Systems
- CSA C22.2#113:2018 Ed.11 Fans And Ventilators



[View Halton's Roof Top Commercial Kitchen Exhaust Fan Brochure](#)

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Features and Benefits

- Size ranges from 11" through 22" wheels
- Performance up to 10,000 CFM at 4.0" SP
- Testing and Balancing Ports (TAB) for ease of commissioning
- All stainless steel construction
- Extra belt inside motor cabinet
- Gravity backdraft damper
- Energy-efficient single width, single inlet welded aluminum plenum fan
- External grease collection device
- Conventional exhaust duct termination at top of curb
- Real-time airflow measurement for seamless integration with the Halton [M.A.R.V.E.L. system](#)
- Heavy-duty latches and hinges standard
- Optional roof curb available

Specification

Provide Halton Exhaust Fan Model _____, as shown on the plans and in accordance with the following specifications.

The roof exhaust fan shall be a high-velocity upblast belt type. The fan wheel shall be a single width, single inlet plenum fan of welded aluminum, and shall include a wheel cone matched to the

inlet cone for precise balancing. Wheels shall be statically and dynamically balanced. The fan housing shall be constructed of 18 gauge 304 stainless steel, #2B finish, and continuously welded transition and fan housing.

Provide hinged top discharge outlet for easy access for cleaning fan wheel and wheel housing. Provide hinged access to exhaust elbow. No hinged base allowed, fan to be permanently sealed to duct termination. Provide gravity type backdraft damper

Hinged access to motor compartment for convenient access to motor and belt. Motors shall be heavy-duty ball bearing type, matched to the fan load, and furnished at the specified voltage, phase, and enclosure. Motor and Drives shall be out of the airstream. Include spare belt inside motor cabinet. Motor shall have a separate access door and come complete with a belt tensioner and spare belt. Drive frame assemblies shall be constructed of heavy gauge steel.

Precision ground and polished fan shafts shall be mounted in permanently sealed, lubricated pillow block ball bearings. Bearings shall be selected for a minimum of (L10) life in excess of 100,000 hours at maximum cataloged operating speed. Drives shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to the wheel and motor shaft.

VFD with non M.A.R.V.E.L., remote mounted as standard. NEMA rated box on fan (optional)

Standard pressure transducer standard with MARVEL control system. Non MARVEL pressure transducer output (Optional),

Optional Emergency repair kit includes inlet cone, shaft, bearing, keys, (motor optional)

A disconnect switch shall be factory installed and wired from the fan motor to a junction box installed with the motor compartment. A conduit chase shall be provided through the curb cap to the motor compartment for ease of electrical wiring.

Provide fan with integral Testing and Balancing ports for ease of commissioning.

Each fan shall bear a permanently affixed manufacturer's nameplate containing the model number and individual serial number for future identification.

Fan shall be listed to the following standards:

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