KSK
Exhaust Hood for Industrial, Cook-Chill or Challenging Island Applications

Form#: SS134_KSK_Exhaust Hood for Industrial, Cook-Chill or Challenging Island Applications
Date: 02-2026 - Rev2

Main Technologies and options

Capture Jet™ technology
Exhaust reduction in airflow thanks to better capture efficiency.

KSA cyclonic filters
Up to 95% efficient on 10 microns particles.

LED lights
Life expectancy is approximately 50,000 hours.

[Optional] M.A.R.V.E.L. Demand Controlled Kitchen Ventilation
Further increase the energy savings and improve staff's comfort.

The Halton KSK Type I commercial kitchen exhaust hood is engineered for Industrial Cooking, Cook-Chill production, or challenging island applications where continuous heat, moisture, and mixed-duty cooking processes demand advanced ventilation performance. Designed to capture and remove grease-laden vapors, smoke, heat, and steam generated by high-intensity cooking such as frying, grilling, broiling, and boiling, the KSK is ideally suited for mixed-duty cooking lines with high-volume steam loads, including large steam kettles and tilting skillets. It is specifically engineered for environments where performance, hygiene, and operator safety are critical.

The KSK hood is also engineered with the flexibility to accommodate a suspended hoist rail, tailored specifically for cook-chill and industrial workflows. When included, this feature facilitates safe lifting of heavy baskets and containers within the capture zone, improving operator comfort and workflow efficiency in high-temperature, high-humidity conditions—especially in island configurations where containment is more challenging.

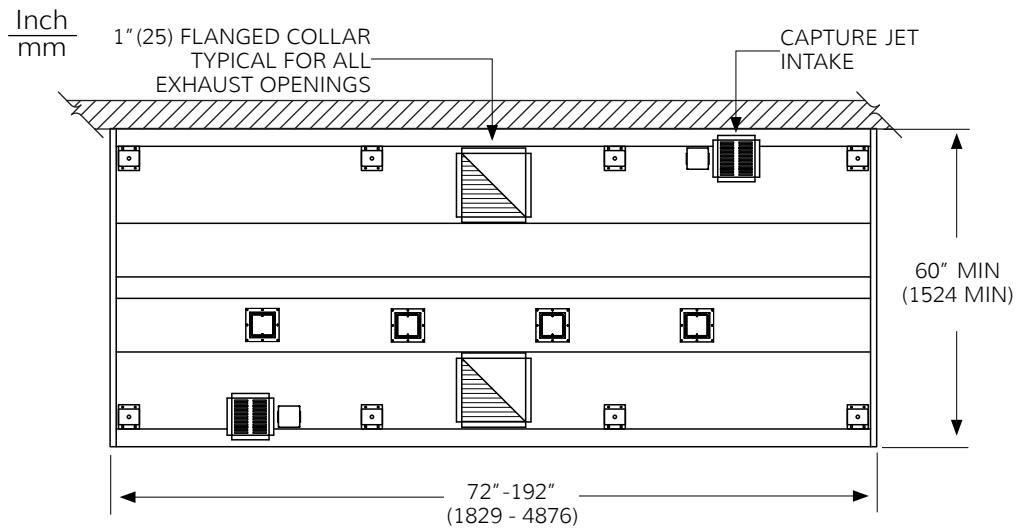
Equipped with Halton's advanced Capture Jet™ technology, the KSK enhances effluent containment and reduces overall exhaust airflow requirements by up to 40% compared to conventional kitchen hoods. This results in improved energy efficiency, reduced operating costs, and optimized ventilation performance across industrial, cook-chill, and island-based production environments.

NOTE: Factory must be advised of any special requirements of the Authority Having Jurisdiction at time of quote.

Features & Benefits

- High efficiency grease filtration using UL and NSF classified Halton KSA multi-cyclone filters for removal of up to 95% of particles with a size of 10 microns per ASTM F2519.
- T.A.B.™ (testing and balancing) ports, which allow accurate and effective commissioning.
- Available for island or wall-mounted applications, supporting flexible layout and design requirements.
- Designed to help eliminate water dripping from the edges and ceiling of standard canopy hoods when used with heavy steam producing equipment.
- Engineered to accommodate a suspended hoist rail, the Type 1 hood enables ergonomic lifting within the capture zone—enhancing operator comfort and streamlining workflow in cook-chill environments.
- Standard LED lights. Life expectancy is approximately 50,000 hours, which is 50 times longer than typical incandescent 100W bulbs
- [Optional] IMC interlock temperature sensor to ensure your kitchen exhaust fan automatically operates whenever cooking generates heat.
- [Optional] M.A.R.V.E.L. Demand Controlled Kitchen Ventilation - Optimizes exhaust and supply airflows in real time, reducing energy consumption while maintaining safe and comfortable kitchen conditions.

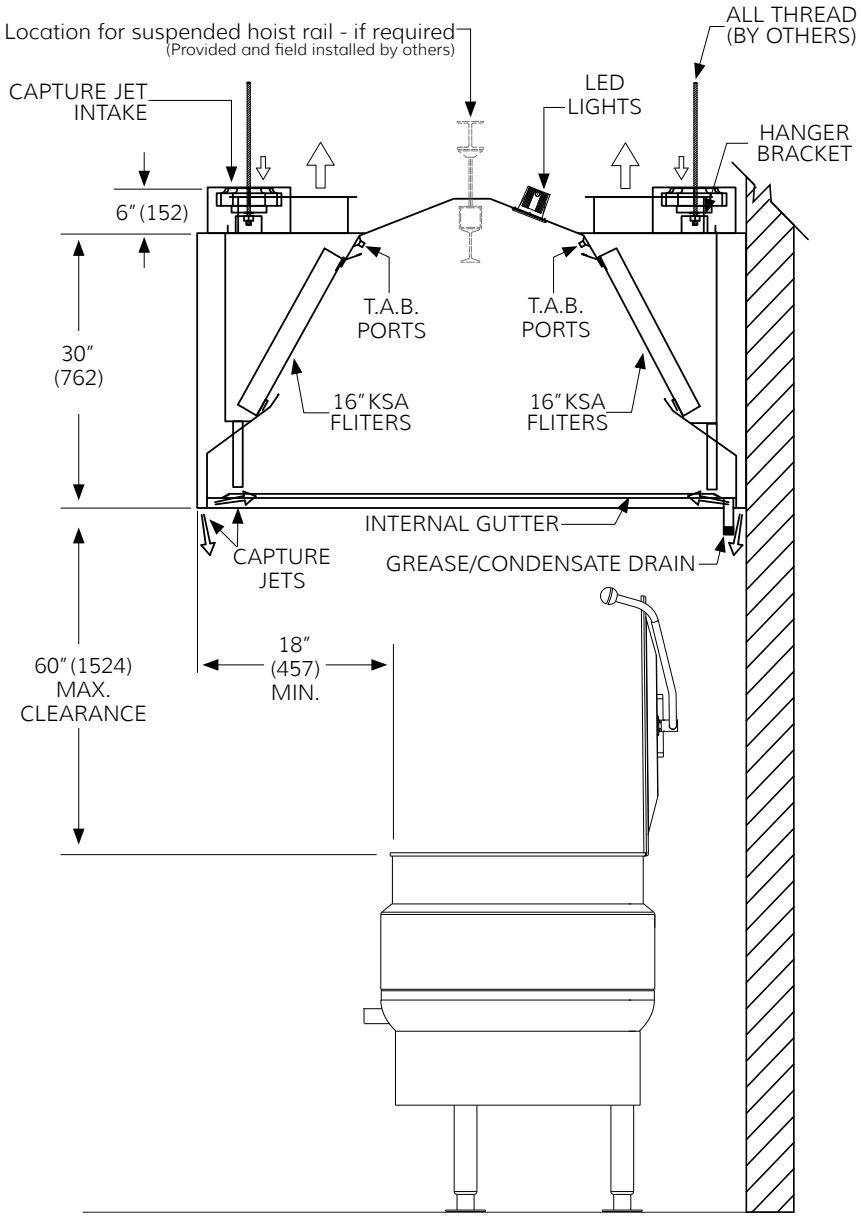
DIMENSIONS FOR INDUSTRIAL COOKING OR COOK-CHILL PRODUCTION



KSK	Inches
Length	72" -192" (1829-4876)
Depth	MIN. 60" (1524)
Height	30" (762)

Options

- IMC Interlock Temperature Sensor
- Closure Panels - for canopies below ceiling level
- Backsplash
- Side Skirts
- Hood Mounted Fire Cabinet
- KFR - Filter Removal Tool
- MEP - Master Electrical Panels
- Face or Remote Mounted Switch Panels
- Factory Pre-piped Fire Protection
- M.A.R.V.E.L. Demand Controlled Kitchen Ventilation



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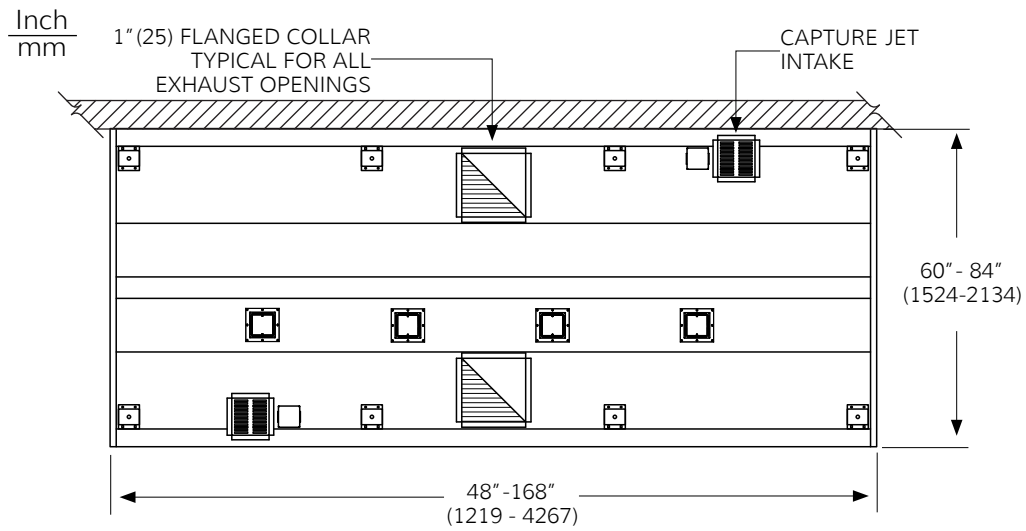
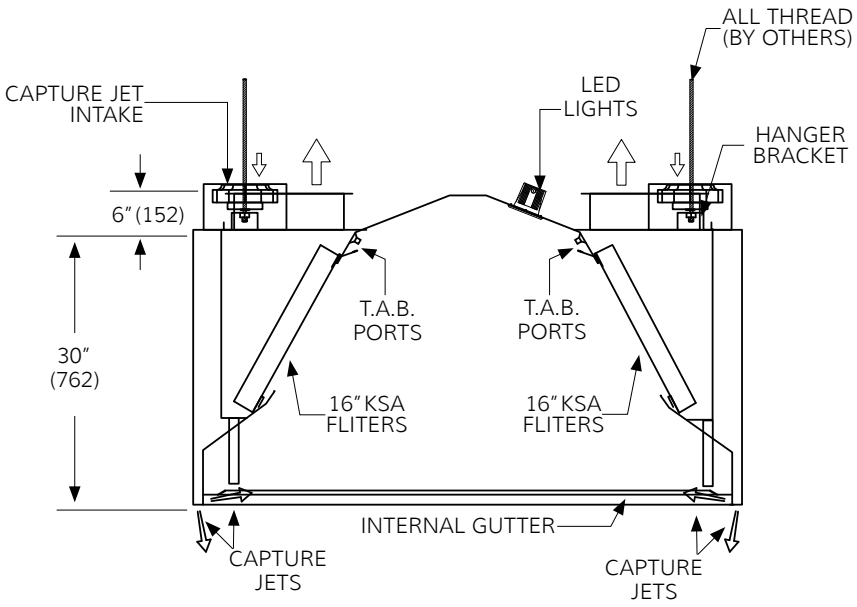
DIMENSIONS FOR CHALLENGING ISLAND APPLICATIONS

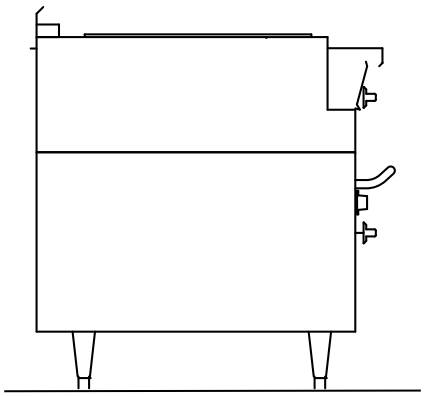




KSK	Inches
Length	48" -168" (1219-4267)
Depth	MIN. 60" -84" (1524-2134)
Height	30" (762)

Options

- IMC Interlock Temperature Sensor
- Closure Panels - for canopies below ceiling level
- Backsplash
- Side Skirts
- Hood Mounted Fire Cabinet
- KFR - Filter Removal Tool
- MEP - Master Electrical Panels
- Face or Remote Mounted Switch Panels
- Factory Pre-piped Fire Protection
- M.A.R.V.E.L. Demand Controlled Kitchen Ventilation



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General
Kitchen hood inner liner shall be constructed from 18 gauge steel where exposed. The kitchen hoods shall be supplied complete with outer casing/ main body, inner liner, exhaust collar, pressure measurement T.A.B. ports. Outer casing panels shall be constructed of stainless steel with a brushed satin finish. The unique hood profile shall result in condensing water vapor being directed toward the sides of the hood and into an integral perimeter gutter system.

Perimeter gutter to have drain connection suitable to be plumbed to grease trap type drain. Each joint shall be welded and liquid tight, avoiding harmful dripping of condensation.

All exposed welds are ground and polished to the original finish of metal. Canopy ends shall be double sided wall construction.

Exhaust
The exhaust airflow will be based on the convective heat generated by the appliances underneath each hood system. Submittals shall contain required exhaust airflow calculations based on the input power of the appliance served.

Capture Jet™ Technology
The hood shall be designed with Capture Jet™ technology to reduce the exhaust airflow rate required, and to improve the capture and containment efficiency of the hood, while reducing energy consumption. Slot or grille type discharge shall not be used. The Capture Jet™ fan shall be internally mounted with a speed control and will not require a fire damper or electronic shut down in fire mode.

T.A.B. Ports
The airflows through the extractors and the Capture Jet™ air chamber are to be determined through the integral T.A.B. (Testing and Balancing) ports mounted in the hood. The airflows are to be determined by the pressure vs. airflow curves supplied by Halton.

Grease Filters
The hood shall be equipped with KSA multi- cyclone stainless steel grease extractors. The KSA filters shall be UL classified. The grease extraction efficiency is 93% on particles with a diameter of 5 microns and 98% on particles with a diameter of 15 microns or larger as tested by an independent testing laboratory. The pressure loss over the extractor shall not exceed 0.50" of w.c at flow rates approved by U.L. for heavy load cooking. Sound levels shall not exceed an NC rating of 55. Baffle or slot type extractors shall not be used.

Control Panel
The master electrical panel consisting of one starter per motor with overload protection will be supplied, control panel to be hood or remote mounted (for constant volume systems). Halton SafeGuard with M.A.R.V.E.L. controlled systems come with an HMI touch screen to monitor variable volume operation and incorporate the use of V.F.D.'s to control fan operation.

HCL Halton Culinary Lights
Each hood shall be equipped with Halton Culinary LED Lights (HCL). Constructed from stainless steel frame and Aluminum housing, the light fitting comprises flush mounted broad beam spots with a diffusion angle of at least 80°. Each light is comprised of a patented mixing chamber and a specific reflector. Both shall provide a good balance between direct and diffuse light components without dazzling the staff to mitigate eye fatigue. The shielding angle shall exceed DIN 12464-1 requirement and be at least 30°. The illuminance on the working surfaces shall be code required 50-foot candles at the cooking surface with a CRI Color Rendering Index greater than 80. The wattage per fixture will be 14W. The LED's lifetime shall be 50,000 hours. The internal power supplies shall have at least the same lifetime. They shall enable switching on/off or dimming the light (0-100%) with one or several switches.

Fire Suppression System
The kitchen hood fire extinguishing system shall protect the kitchen hood from grease fires by a completely automatic fire control system, which consists of wet chemical. The fire detection system shall be capable of detecting fire in the hood, duct, or surface equipment and shall automatically discharge liquid extinguishing agent into the plenum chamber, exhaust duct collar, and cooking appliance areas to ensure against re-ignition or re-flash. System components shall include a spring-loaded fusible link detector, wall mounted emergency pull stations, wall mounted actuator and cabinet, and a mechanical or electric gas valve installed in the gas line serving the cooking equipment. System installation shall be made by an authorized representative of the system manufacturer and conform to U.L. 300 requirements and local codes.

[Optional] IMC Interlock Temperature Sensor
Provide and install a temperature-sensing exhaust fan interlock in compliance with the International Mechanical Code (IMC) requirements for commercial kitchen ventilation systems. The sensor shall be installed in the hood plenum or exhaust duct and shall automatically activate the exhaust fan when cooking appliance operation generates heat above the factory-set threshold. The sensor shall be factory-calibrated, UL-listed, and compatible with the hood control system. The unit shall have a corrosion-resistant housing, be rated for high-temperature environments, and be serviceable without removal from the hood.

[Optional] M.A.R.V.E.L. (Demand Controlled Kitchen Ventilation)
KSK exhaust hood when used in combination with M.A.R.V.E.L. Demand Controlled Kitchen Ventilation shall optimize energy performance of the system by independently modulating the hood exhaust based on cooking activity. The system shall utilize temperature and/or thermal imaging sensors mounted in the hood(s) to continuously monitor cooking activity and adjust exhaust and supply air volumes accordingly. Controls shall modulate fan speeds through variable frequency drives (VFDs) or an EC equipped fan to maintain proper capture and containment while minimizing energy use. The system shall interface with the building management system (BMS) and provide data logging for performance verification. The reduction in fan energy as well as operating cost during non-peak or idle appliance use provides capture and containment of the heat load also ensures a comfortable work environment.

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