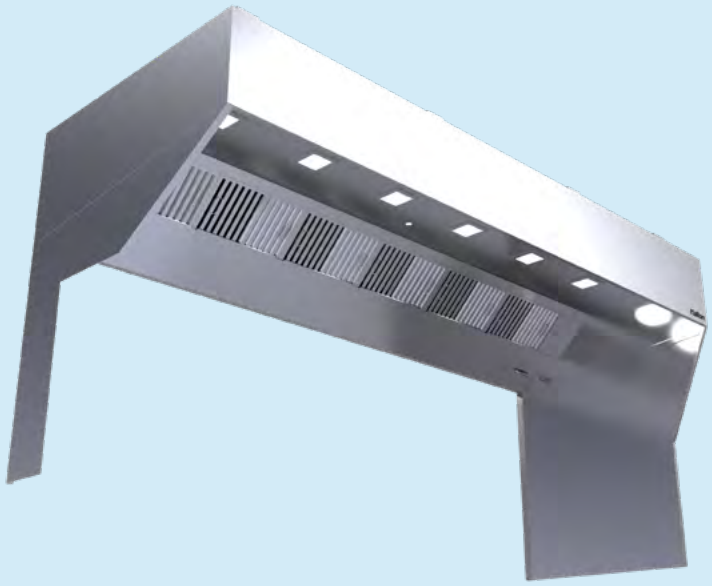
KVM

Capture Jet™ Hybrid Backshelf Hood

Form#: SS008_KVM
Date: 08-2022 - Rev 3



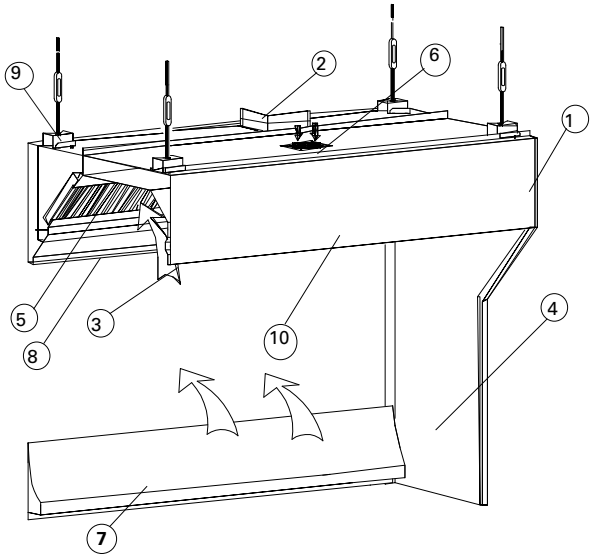
The KVM hybrid backshelf model of Capture Jet™ hood is a highly efficient kitchen ventilation hood that removes contaminated air and excess heat emitted by cooking equipment, helping to provide a comfortable and clean environment.

The KVM hood uses the advanced Halton Capture Jet™ technology to improve the capture and containment of the airflows generated by the cooking equipment.

Overall exhaust airflow rates can be reduced up to 30% compared to traditional hood models. The Capture Jet™ technology is based on the high entrainment efficiency of a compact, high-velocity capture air jet. The capture air jets efficiently induce ambient air at the critical front face area of the hood, minimizing the spillage of the contaminated air and maintaining good air quality in the chef's work area.

- Improved indoor air quality with reduced energy use. Halton Capture Jet™ reduces the exhaust airflow rates required and improves the capture and containment efficiency of the hood.
- High efficiency grease filtration using UL and NSF classified Halton KSA multi-cyclone filters with a particulate extraction efficiency of 92% on particles with a diameter of 8 microns per ASTM F2519.
- T.A.B.™ (testing and balancing) ports, which allow accurate and effective commissioning.
- Horizontal front overhang is 0" with a minimum depth of 42" (1067mm)
- Halton HCL Culinary Lights provide the best visual comfort while contributing to improved safety and energy savings.
- Optional LED lights and LED dimming is available for Capture Jet hoods. Dimming is control by a knob on the switch panel or through Halton HMI Touch Screen.
- Stainless steel, welded design.

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



Part	Description
1	18 Ga. Stainless steel
2	Exhaust duct collar
3	Capture Jet air
4	Side Skirts
5	KSA grease filters
6	Integrated Capture Jet fan intake
7	Rear Seal (optional)
8	Grease collection cup
9	Hanger bracket

Construction

The KVM hood combines Capture Jet™ technology, light fixtures, airflow measurement T.A.B. ports and KSA grease filters. The hood shall bear ETL or UL label. The ETL/UL listed range hood without exhaust fire damper per standard 710 and be fabricated in compliance with NFPA-96, and shall bear the NSF seal of approval.

The exposed parts are manufactured from 18 ga. stainless steel. The hood ends have double side wall construction. A concealed collection cup is fitted into the grease drain channel for easy removal of the grease and dirt extracted by the KSA multi-cyclone filters.

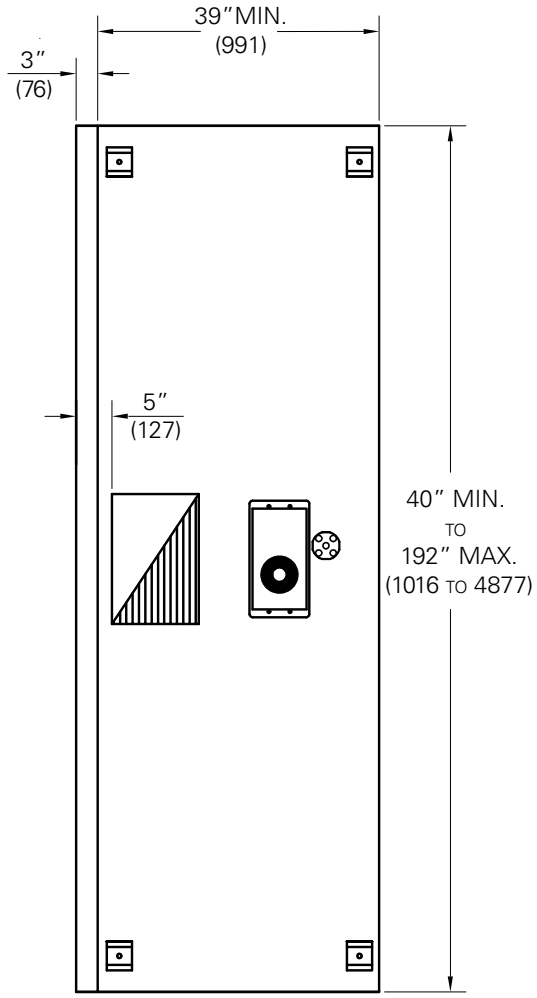
Dimensions

Wall Model	Inches
Length	40...192
Width	42...72 (including 3" standoff)
Height (rear height including side skirts)	58".. 64"

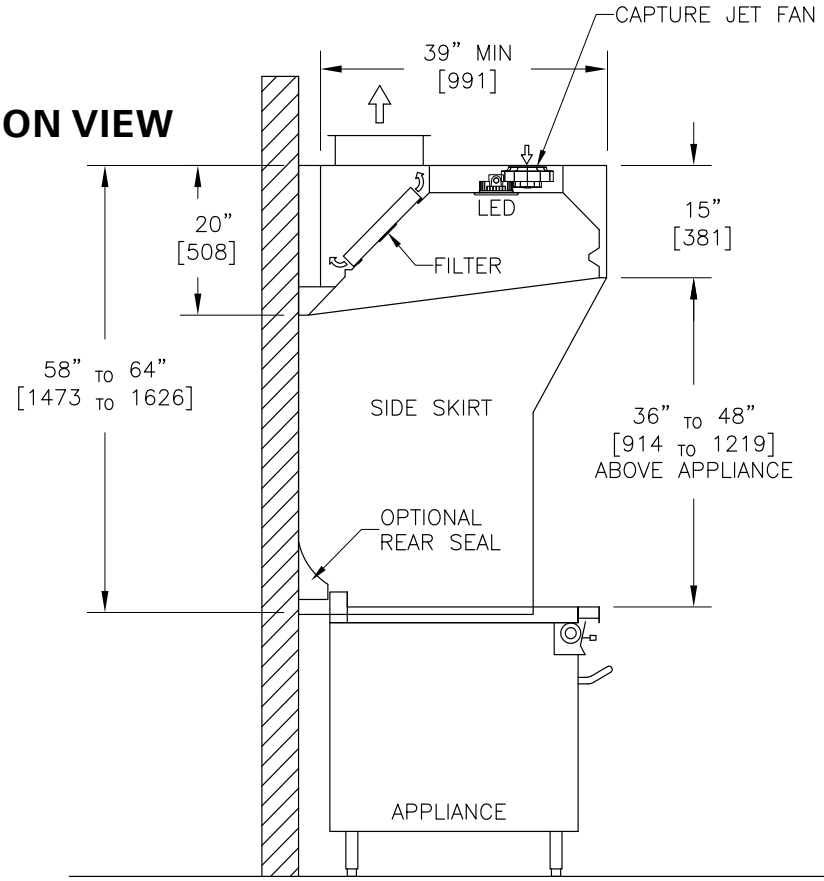
Modification/Options

- Switch Panel
- Rear Seal
- Fire Protection
- Backsplash
- LED Lighting and LED Dimmable Lighting
- Ceiling Closure Panels
- Capture Jet Intake Location (Top)
- Powder Coating in a Variety of Colors
- Automated Balancing Damper option with M.A.R.V.E.L. II demand controls
- Custom/Design Stainless Steel Exterior Textures and Finishes
- M.A.R.V.E.L. Demand Control w/ VFD by Halton

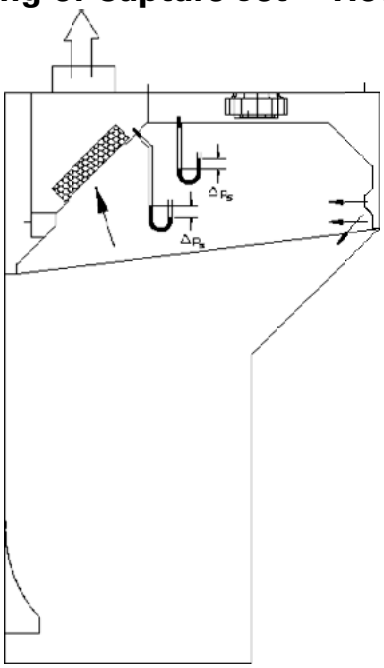
PLAN VIEW



LEFT SECTION VIEW



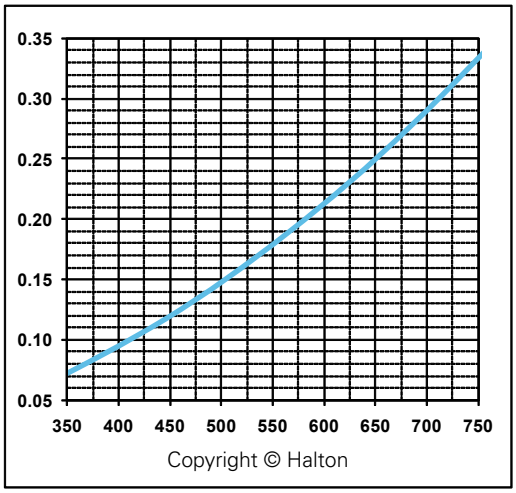
Balancing of Capture Jet™ Hoods



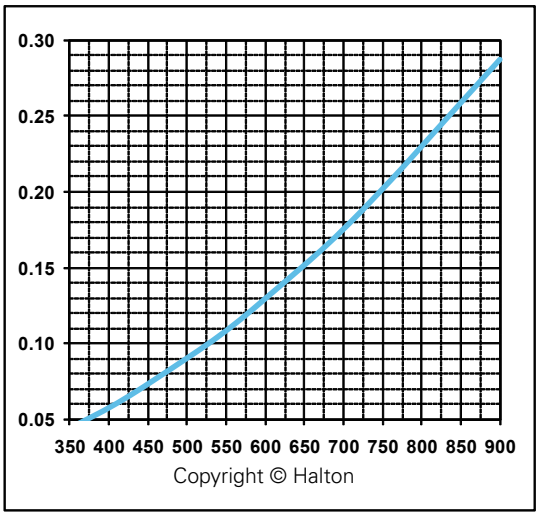
The capture jet and exhaust air flows are easily and accurately determined by measuring the pressure difference from the T.A.B. ports mounted in each plenum. Corresponding air flows can be read from the diagrams provided.

All T.A.B. readings assume cold conditions. To adjust for an exhaust temperature of 110 °F, multiply the readings by a factor of 0.93.

KVM - 2 Filters



KVM - 2.5 Filters



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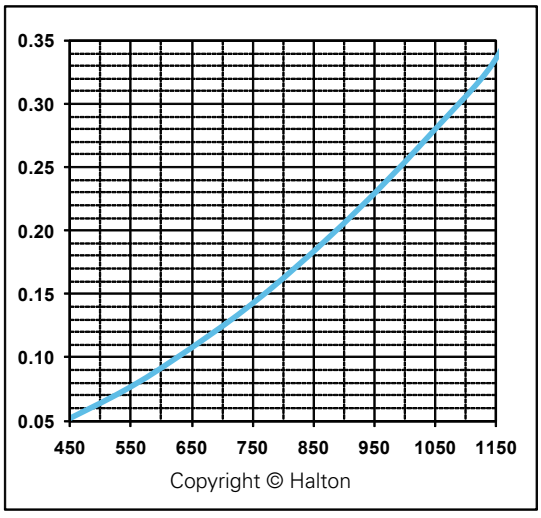

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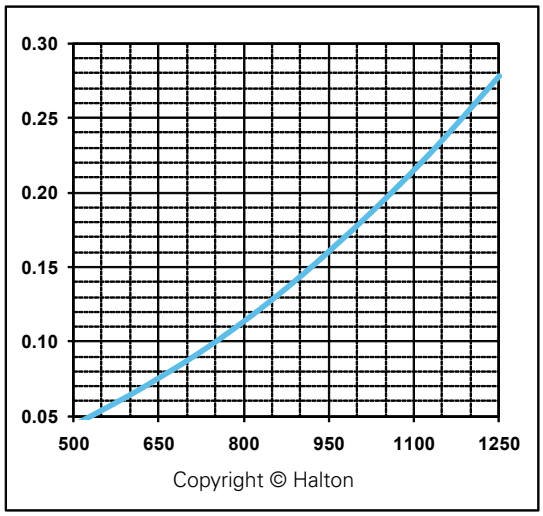
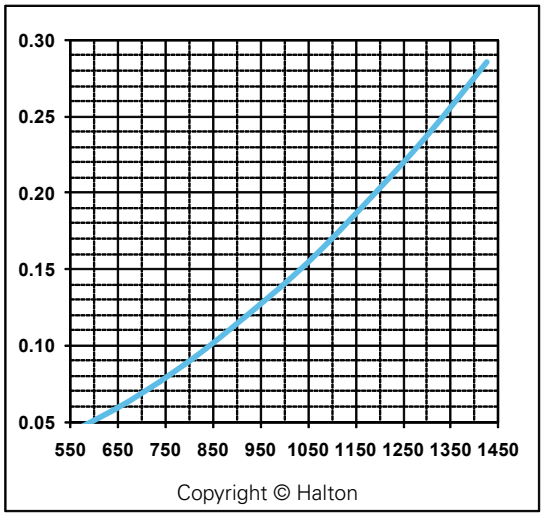


KVM - 4 Filters



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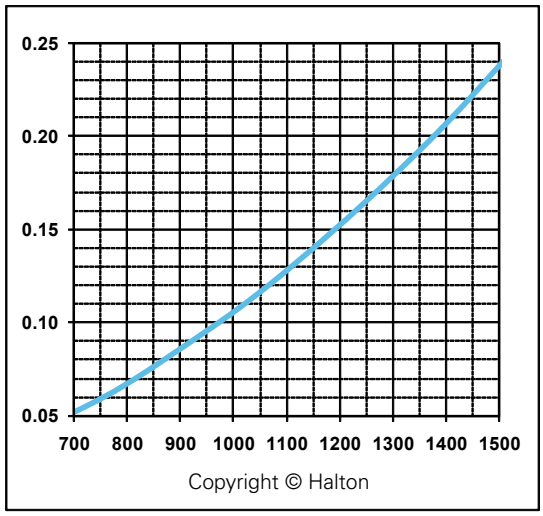
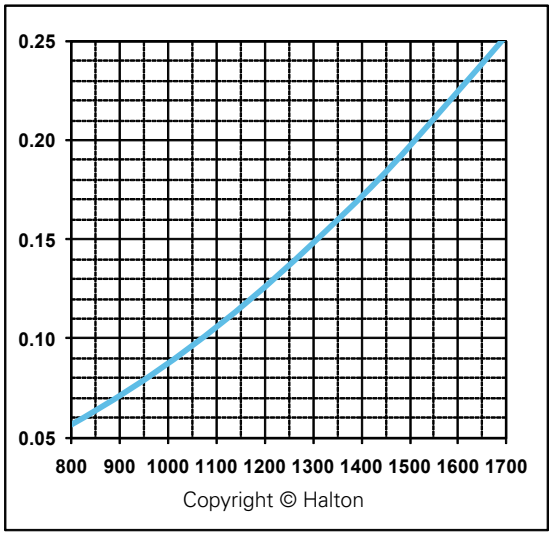


KVM - 5 Filters



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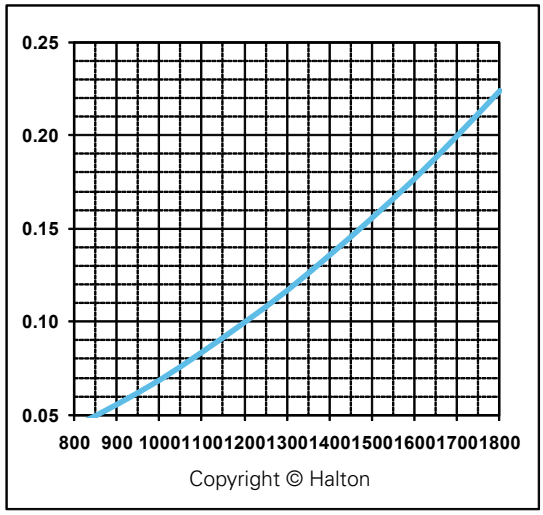
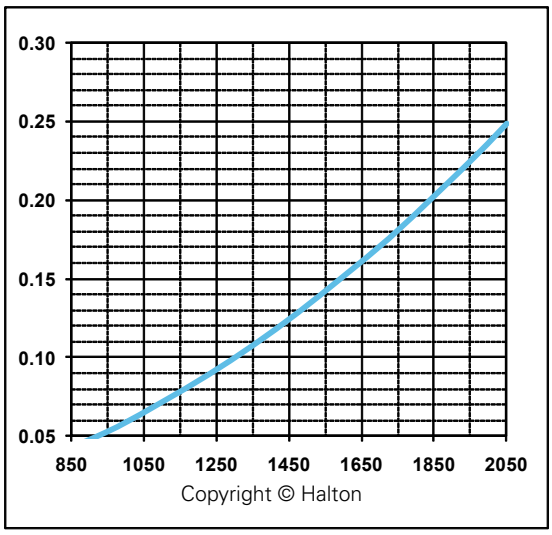


KVM - 6 Filters



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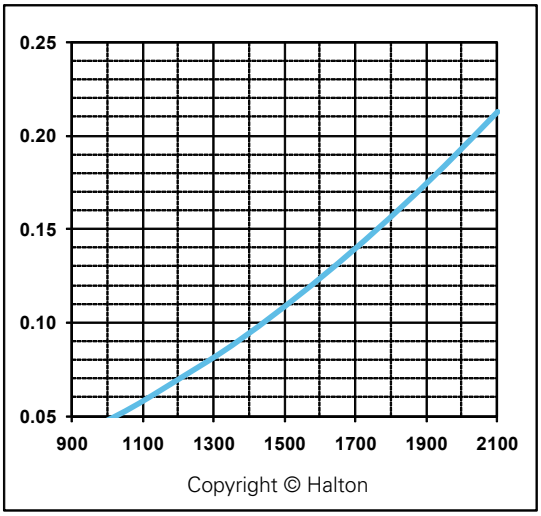
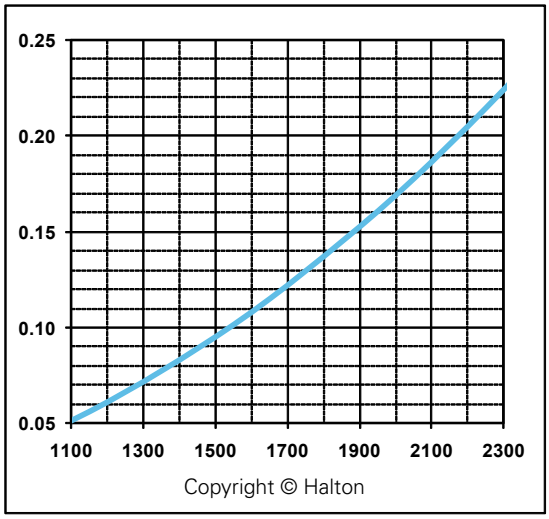


KVM - 7 Filters



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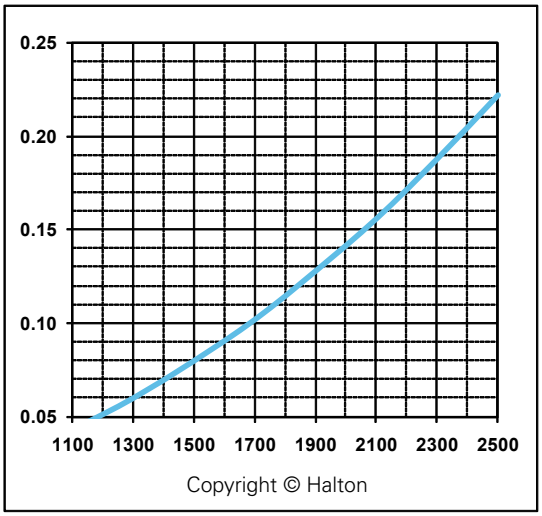

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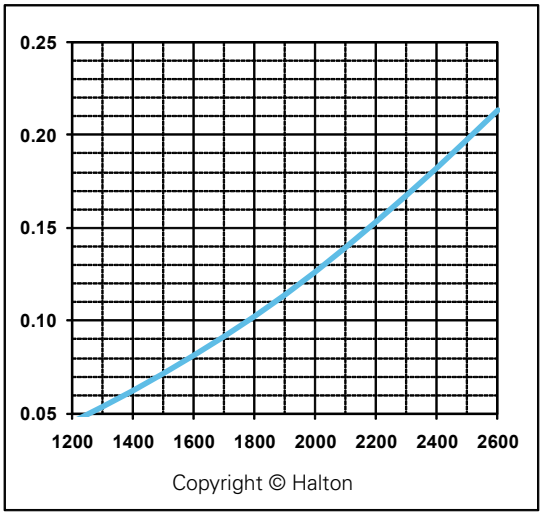

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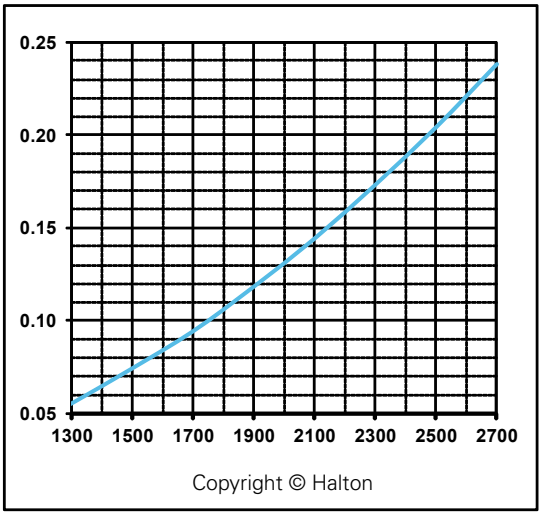
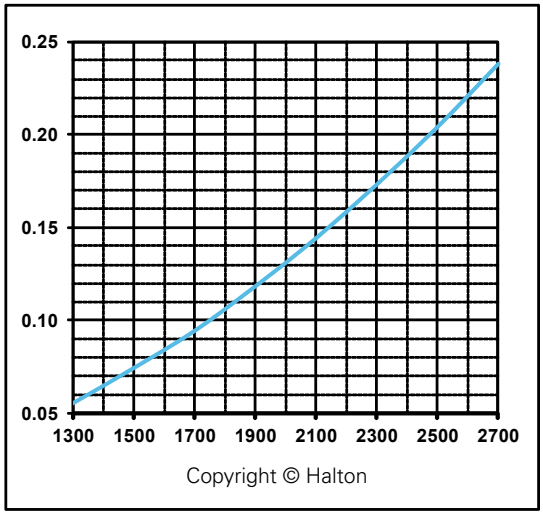


KVM - 9 Filters



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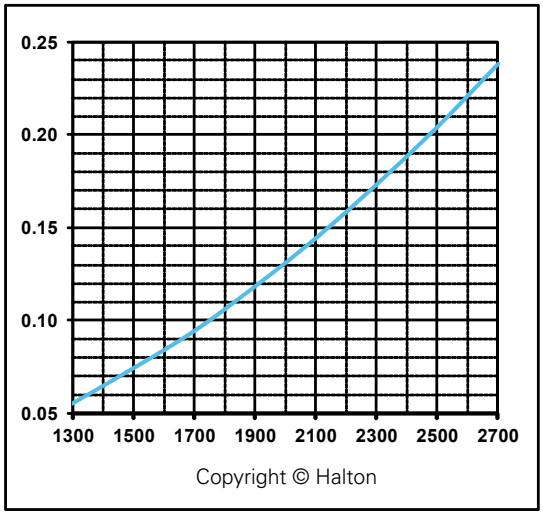

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General

Kitchen hood inner liner shall be constructed from 18 gauge stainless steel where exposed. The kitchen hoods shall be supplied complete with outer casing /main body, inner liner, exhaust duct, pressure measurement T.A.B. ports, Outer casing panels shall be constructed of stainless steel with a brushed satin finish. 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 (no single wall hoods permitted).

Exhaust

The exhaust airflow will be based on the convective heat generated by the appliances underneath each hood system. Submittals shall include convective heat 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. The Capture Jet™ hood shall have an integral fan. The Capture Jet™ air shall be introduced through a special discharge panel and shall not exceed 10% of the calculated exhaust airflow. Slot or grille type discharge shall not be used.

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.

HCL Halton Culinary Lights

Each hood shall be equipped with Halton Culinary LED Lights (HCL). Constructed from stainless steel frame and Aluminum hosing, 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.

[Optional] Light Fixtures

Hood lights shall be U.L. Listed LED fixtures, suitable for grease hoods. 20 Watts per fixture, 50 foot candles at cooking surface. Option: Recessed fluorescent, recessed incandescent or incandescent globe type lighting. The lighting shall be suitable for single phase power supply. Dimmable LED option is available. Standalone Hood based dimming control on the switch panel. When M.A.R.V.E.L. controls are used, all hoods connected to the system can have the light intensity adjusted through the HMI touch screen simultaneously.

Control Panel

The master electrical panel consisting of one starter per motor with overload protection can be supplied (optional). Control panel remote mounted. (For constant volume systems). 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.

Grease Extractors

The hood shall be equipped with KSA multi-cyclone stainless steel grease extractors. The KSA filters shall be NSF and UL classified. The particulate extraction efficiency is 70% on particles with a diameter of 5 microns and 98% on particles with a diameter of 15 microns per ASTM F2519. The pressure loss over the extractor shall not exceed 0.70 inches W.C. at flow rates approved by UL for heavy load cooking. Sound levels shall not exceed an NC rating of 55. Baffle or slot type extractors shall not be used.

Fire Suppression System

The kitchen hood fire extinguishing system shall protect the kitchen hood against 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 automan and cabinet, and a mechanical 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 UL 300 requirements and local codes.

For more information, please contact your nearest Halton agency. To find it: **www.halton.com**

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