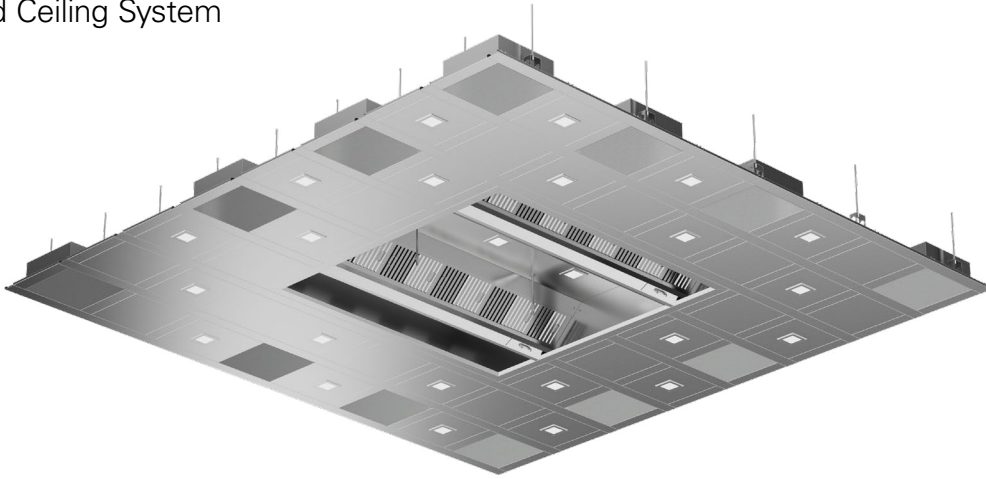
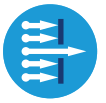


VCS

Ventilated Ceiling System



Main Technologies and options



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



HCL Culinary lights
provide the best visual comfort while contributing to improved safety and energy savings.



Integrated Supply Air
Better comfort and capture efficiency.

Recommended combinations



M.A.R.V.E.L. Demand Control Kitchen Ventilation (DCKV):
Real time airflow reduction in ventilation volumes.

- Custom design to meet the requirements of most commercial kitchens
- Designed for each specific project.
- Aesthetically pleasing.
- Simple and easy to clean and maintain.
- Incorporates Halton's KSA extractors for easy removal and maintenance
- HCL lights with a lifetime of approximately 50,000 hours.
- Unobstructed sight lines
- The ceiling may be mounted from 96" to 120" AFF

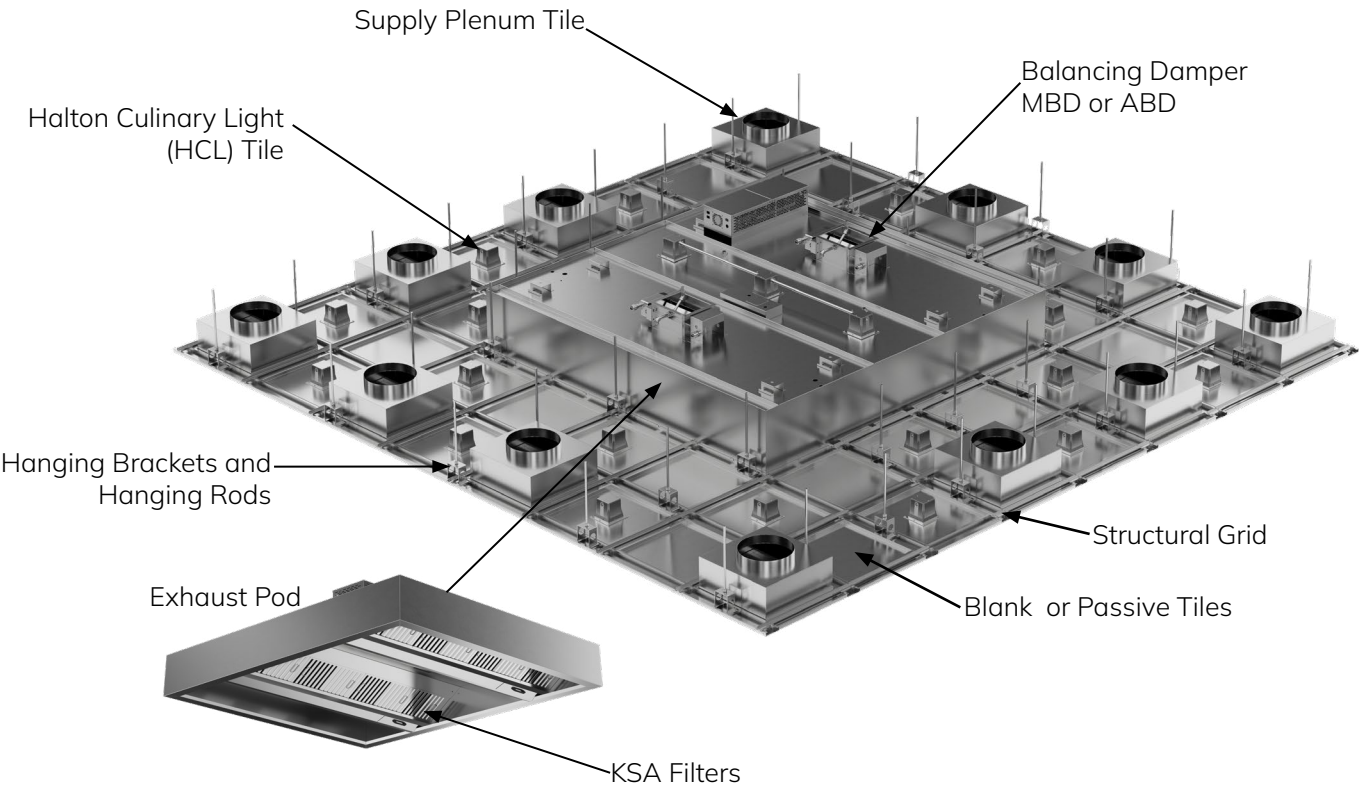
Application

Ventilated Ceiling System is recommended for light to medium type cooking. Ideal for:

- Prestige architectural projects
- Display cooking
- Culinary schools
- Correctional facilities
- Cook-chill operations

Modifications & Options

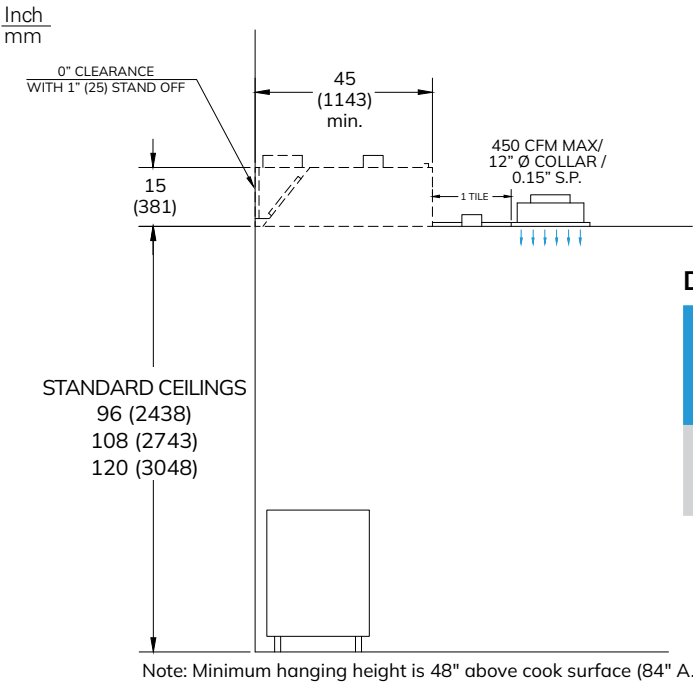
- Available in select powder coated colors. (Consult factory)
- An integral fire suppression system that's UL/ULC listed as recognized components for Ventilated Ceiling System and is designed to meet the requirements of UL300, installed in accordance to NFPA13 to meet required protection of appliance, exhaust plenums, and ducts. All exposed piping is chrome finished. The system includes all safety locks, pull stations and gas valve(s) as per local fire codes and jurisdictions.
- Fire system appliance drops can be from overhead or low proximity designed to be incorporated with the appliance line up.
- M.A.R.V.E.L. Demand Ventilation Control System is compatible for use with the ventilated ceiling system.



Layout Configurations

Note: Ceiling may be hung from 96"(2438mm) to 120"(3048mm) A.F.F.

Row of Appliances Against a Wall
Using Wall Exhaust Pod
Length of pod 72"(1828mm) to 120"(3048mm)



Design Criteria for Appliance Against a Wall

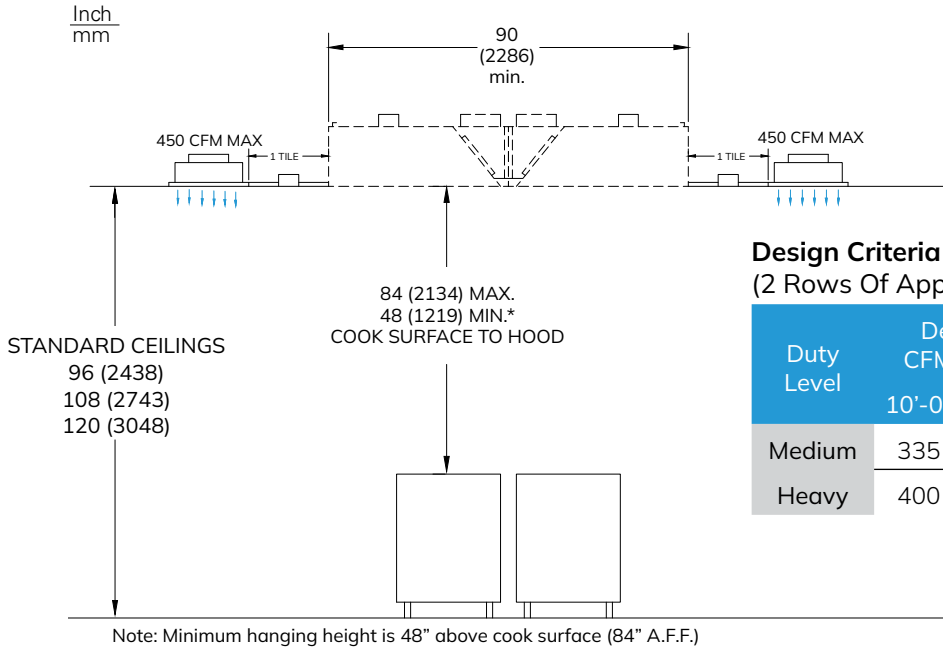
Duty Level	Design Airflow CFM/FT by Height			Min. Side Overhang	Min. Front Overhang
	10'-0"	9'-0"	8'-0"		
Medium	250	210	180	6" (152)	6" (152)
Heavy	300	250	210	20" (508)	12" (305)

Layout Configurations

Note: Ceiling may be hung from 96" (2438mm) to 120" (3048mm) A.F.F.

Two Rows Back To Back Island of Appliances Layout Using Wall Exhaust Pod

Length of pod 72" (1828mm) to 120" (3048mm)



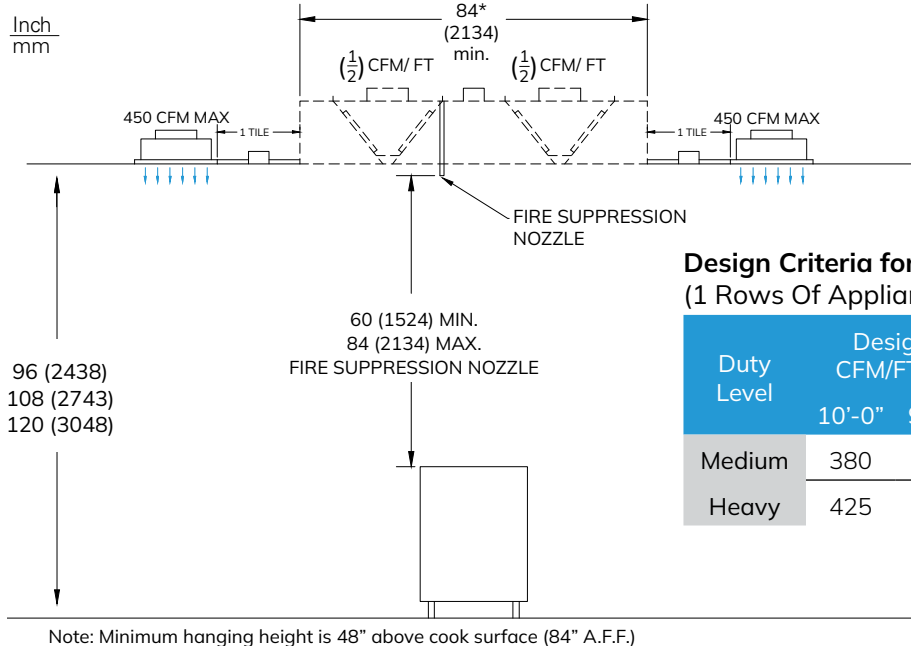
Design Criteria for Back To Back Appliance Layout (2 Rows Of Appliances) (CFM Per Side)

Duty Level	Design Airflow CFM/FT by Height			Min. Side Overhang	Min. Front Overhang
	10'-0"	9'-0"	8'-0"		
Medium	335	280	240	12" (305)	12" (305)
Heavy	400	335	280	20" (508)	12" (305)

One Row of Island Appliance Layout Using Double V-Bank Island Exhaust Pod

Note: Ceiling may be hung from 96" (2438mm) to 120" (3048mm) A.F.F.

(*Note: A fixed depth of 84" is required in order to fit inside a truck)



Design Criteria for Island Appliance Layout (1 Rows Of Appliances)

Duty Level	Design Airflow CFM/FT by Height			Min. Side Overhang	Min. Front Overhang
	10'-0"	9'-0"	8'-0"		
Medium	380	325	280	12" (305)	12" (305)
Heavy	425	360	310	20" (508)	12" (305)

Suggested Specifications

The kitchen and cooking areas shall be ventilated by means of a Halton Ventilated Ceiling System (VCS). The system shall be custom-designed for the project and shall be supplied and installed in full accordance with the manufacturer's drawings, which form an integral part of this specification. The VCS shall include a structural ceiling grid complete with hanger brackets, fabricated from 300-series stainless steel, and installed as shown on the manufacturer's coordinated layout.

The system shall incorporate exhaust pods equipped with high-efficiency Halton KSA filters in lengths identified on the drawings, typically ranging from 6 to 10 feet (72" to 120"). Exhaust pods shall be constructed of fully welded, liquid-tight steel to ensure proper capture and containment of vapors exhausted through the KSA extractors. Manual balancing dampers (MBD) shall be provided where specified. All exhaust pods shall be installed at heights ranging from 8 to 10 feet (96" to 120") above the finished floor, with quantity and placement determined by the manufacturer's engineered design.

The VCS shall include a standard supply plenum that delivers makeup air through perforated stainless-steel supply tiles. Each supply tile shall provide approximately 450 CFM of supply air. Supply plenums shall be furnished with a supply collar and a detachable face to facilitate cleaning and maintenance. The size and quantity of supply plenums shall be as indicated on the plans.

Blank or passive cassettes, fabricated from stainless steel, shall be provided where required for non-ventilated ceiling areas or access points. Their location, quantity, and mounting height shall be coordinated with the manufacturer's drawings. Halton Culinary LED Lights (HCL) fixtures shall be integrated into the exhaust pods and lighting pods. 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. All lighting locations, quantities, and mounting heights shall follow the manufacturer's drawings.

The fire extinguishing system shall protect the kitchen 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 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] M.A.R.V.E.L. Demand-Controlled Kitchen Ventilation (DCKV)

Where specified, the Ventilated Ceiling System shall be equipped with Halton M.A.R.V.E.L. demand-controlled kitchen ventilation technology. M.A.R.V.E.L. shall continuously monitor cooking activity and thermal plume conditions and automatically modulate exhaust and supply airflow rates in real time. The system shall reduce airflow during idle or low-load conditions and increase airflow instantly when cooking activity intensifies, ensuring optimal capture and containment while minimizing energy consumption. M.A.R.V.E.L. shall integrate fully with the VCS exhaust pods and supply plenums and shall communicate with the building management system where required. All sensors, control modules, and wiring shall be furnished and installed in accordance with the manufacturer's drawings and control schematics.

Halton shall provide factory-trained personnel to supervise installation of the Ventilated Ceiling System and to perform system startup and commissioning, including verification of M.A.R.V.E.L. functionality where applicable. The complete system shall be ETL listed and installed in accordance with all applicable mechanical, electrical, and fire-safety codes. Electrical and mechanical requirements shall be verified against the manufacturer's drawings, which must be consulted for all coordination and installation details.

The company has a policy of continuous product development, therefore we reserve the right to modify design and specifications without notice.

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