Adaptive Hood Systems

The Ventilation Solution for Food Halls

Providing the greatest design and infrastructure flexibility for the changing ventilation landscape of Food Halls.

Enabling Wellbeing

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The Ventilation Solution for Food Halls
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The popularity of Food Halls has created a significant challenge for property developers and designers. The nature of the Food Hall infrastructure is to design for the unknown in many instances. Although the overall concept is known, the needs of individual vendors may not be. The turnover of individual vendors is generally higher, increasing the necessity for a system that adapts quickly and seamlessly.

Developers are not only challenged to deliver energy-efficient designs but may have to address environmental and social issues as well. Corporate governance is front of mind for many potential customers.

The challenges for Food Hall Ventilation Systems

- Facility infrastructure flexibility.
- Repurposing of existing facilities such as abandoned industrial sites and vacated Malls.
- Vendor Operational flexibility.
- Comfort and energy efficient design.

Halton's Adaptive Hood System addresses some of the key concerns for Food Hall development while addressing energy efficiency, environmental factors and fire safety.

Facility Infrastructure Flexibility

Mitigation of Risk

Comfort and Energy Efficiency

Vendor Operational Flexibility

Key concerns for Food Hall developments

Facility infrastructure flexibility

- The system can be configured for maximum flexibility even before the vendors are known.
- Unoccupied vendor spaces can be added to the system over time without interfering with operating vendors.
- Fewer exhaust fans and make-up air units required.
- The master control system monitors the entire exhaust system locally and remotely.
- Able to quickly change ventilation settings with changing vendors.
- Operator defined alerts for system maintenance and upkeep.
- Control over the equipment installed – assurance of a high-efficiency, coordinated and compatible system.
- A central pollution control system (when necessary) that multiple tenants can connect to, but operate independently.
- Remotely manage/view your system on any cell, tablet or PC.

Vendor Operational Flexibility

- Allocate necessary exhaust levels per vendor.
- Maintain space air balance based on their operational requirements.
- Allow vendors to operate independently while being connected to a common system.

Mitigation of Risk

- Grease deposition sensors to monitor ductwork for proper maintenance cycles ensuring fuel source of most common fires is removed, mitigating fire risk.
- Local or remote monitoring of system health.
- An array of odor mitigation technology, including “Odor Critical” systems is available.
- Odor sensors in the pollution control system to monitor its effectiveness.

Comfort and Energy Efficiency

- High Efficiency hoods to minimize exhaust flow rates and save energy.
- Lower exhaust results in smaller fans and duct.
- Lower exhaust reduces outdoor air which improves comfort.

Halton's Adaptive Hood Systems have a high degree of design flexibility to suit virtually any Food Hall design.

Typical System Configuration For Food Halls

Base building, Halton KEFB Exhaust Fan or Pollustop Pollution Control System

- **KEF-B** Heavy Duty Grease Management exhaust fan.
- **Pollustop** load-dependent modular design allows for many configurations to suit site conditions.
- Filters residual grease from exhaust hoods and absorbs odor for discharge.
- Virtually unlimited programs available for site-specific sequence of operation and system monitoring.

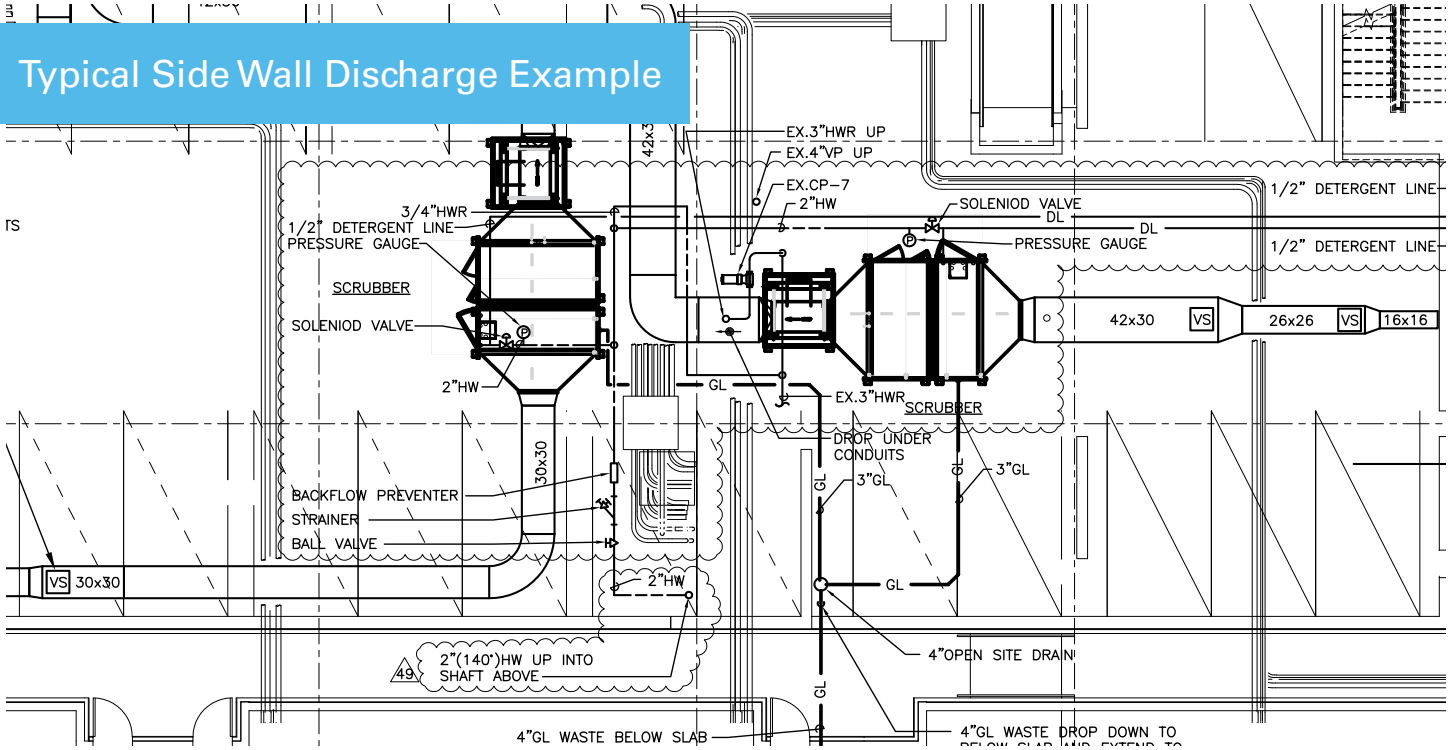
Vendor Space Kitchen Ventilation System

- **Capture Jet™** High-Efficiency exhaust hood. Can be connected to a common exhaust duct.
  - Optional Ultra Violet light module in the hood system breaks grease down and creates ozone contributing to odor mitigation.
  - Protection of building roof membrane – high velocity fan and/or UV **Capture Ray** hoods reduces grease deposition on the roof membrane.
- Vendor space touch screen to monitor system status.
- Balance make up air per tenant from individual units or from a central system.

M.A.R.V.E.L. Demand Control Ventilation

- Adaptive Hood System controls integrator.
- Master with the base building system.
- Manages overall exhaust and system monitoring.
- Individual Vendor status HMI.
- Signal for makeup air within a vendor or common space.

Typical Side Wall Discharge Example



From the design concept, Halton is prepared to meet with your design team, contractors and tenants to review the system and its capabilities.

ABOUT US

Halton Group is the global technology leader in indoor air solutions for demanding spaces. The company develops and provides solutions for commercial and public premises, healthcare institutions and laboratories, professional kitchens and restaurants as well as energy production environments and marine vessels. Halton's mission is to provide its end-users with safe, comfortable, and productive indoor environments that are energy-efficient and comply with sustainable principles.

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