Centralized Food Court Ventilation System
Cadexair: The Commercial Kitchen Ventilation Experts

Since 1986, CADEXAIR has specialized in commercial kitchen ventilation systems for penitentiaries, educational institutions, food courts, restaurant and hotel chains, and other establishments.

CADEXAIR is renowned for our team’s expertise, the high quality of our products and the projects we have delivered, and our capacity for innovative solutions that save energy and space, reduce odours, improve durability and offer advanced controls. We also provide preventative maintenance and cleaning services for kitchen exhaust systems.

CADEXAIR’s research and development department collaborates with teams around the world on a daily basis to pursue innovation and increase the energy efficiency of our systems. Communication with our maintenance teams in the field allows us to gather valuable information about the aging of ventilation systems and their components, maintenance best practices, compliance issues and kitchen air quality.

By being actively involved throughout the entire network, CADEXAIR has established a strong local presence in the areas we serve and is ideally positioned to tackle even large-scale, challenging projects with confidence.

Sample Achievements (Food Courts)

- Place Ville Marie’s Biergarten
  Food court with 12 concessions, two purifiers and 14 control panels that are connected.

- Intact Tower

- Rockland Centre

- Place Montreal Trust

- Complexe Desjardins

- Time Out Market Montreal
  Food court with five purifiers, fans, 17 concessions and 22 control boxes.

- Cadillac Fairview Pointe-Claire

- Place Bell

- Carrefour Industrielle Alliance

- CIBC Tower

- Le Central in Carré St-Laurent
  (Montreal-style gourmet dining)
  Food court with 17 concessions, 12 purifiers and 29 boxes that are connected.

- Centre Vidéotron

- Capwood’s Le District Gourmet

- Les Promenades Saint-Bruno
  And many more...

Centralized Ventilation System Diagram

Centralized Food Court System

Hood exhaust systems involve multiple components and have become increasingly complex over the years.

The challenges of saving energy, complying with different standards, implementing fire protection strategies and ensuring access to centralized information require cutting-edge expertise.

Cadexair has repeatedly taken up this challenge, establishing itself as a specialist in this type of system.

Cadexair sets itself apart by designing systems including:

- The use of electrical, addressable electrical fire protection systems and a mix of mechanical and electrical systems
- The creation of controllers enabling food court management via a centralized system or a multi-kitchen system with shared exhaust
- The use of a new control strategy that facilitates air balancing and enables modifications to the hood system without having to completely balance the entire system
- Easy integration into a centralized BACNet network
- The ability to monitor and adjust control parameters online
A Control Panel for Each Concession (CC200 CSA-Approved)

This control panel opens up countless possibilities for meeting a commercial kitchen’s exhaust and make-up air needs. It controls local fire management (local system supervision) and equipment shutdown (electric gas valve and magnetic contactor).

Linked to a differential pressure probe inside the hood’s plenum for exhaust management, the CC200 controls exhaust dampers. Remote access is possible for reading data or programming.

The CC200 can provide programmed maintenance reminders and collect your system’s air flow balancing and regulating data.

The intuitive interface will guide you in troubleshooting any problems that occur with your system.

CSA-Approved Sector Controller

- Control panel linking all concessions through connectivity
- Initiates fire mode for the sector
- Sends signals to frequency dimmers for exhaust and power supply engines
- Manages ventilation and slow-flow mode
- Stops and starts ventilation according to an internal or centralized system programmed schedule
- Connects with a BACNet MSTP to send information to the building

D-Tech Option for Predicting Cooking Activity and Adjusting Exhaust Output

- Enables substantial energy cost savings
- All sensors are 100% individually customizable from a single touchscreen
- Designed to make predictions based on actual cooking activity, making it the fastest and most efficient system on the market
- Simple and easy integration of components
- Collects and analyzes hood exhaust demand
- BACNet connection

Concession Fire Protection System

- Based on the type of installed equipment
- Electric and gas equipment shutdown
- Exhaust keeps running
- Manual trigger between 42 and 48 inches from the floor
- Type-K extinguisher located nearby
- Includes gas and electrical cooking equipment shutdown test and verification of connection to the building alarm system
- Compliance certificate provided

Shared Risk

NFPA article 10.3.1* in effect: Hoods installed side-by-side and/or back-to-back, or sharing the same exhaust duct located at a maximum distance of 22.9 meters (75 ft) from the farthest hood, and having one or more cooking units producing grease under one or more of the hoods are considered as a single risk zone.

A simultaneous and automatic fire protection system must be installed in each hood and duct inside the risk zone.

NFPA article 10.3.3* in effect: Simultaneous operations are required when a dry or liquid chemical system is used to protect a common exhaust duct by one of the methods specified in NFPA 17 or NFPA 17A. In short, in the case of an outbreak in a concession:

- Only the affected system and protected duct are activated
- All the cooking equipment’s primary power sources are interrupted
- The entire system must be rebooted to allow all occupants to resume operations

*zFree translation for reference only.

Z10 Control Panel

The Z10 control panel oversees all the fire protection extinguishers for each concession. It must be linked to one or two high-temperature probes (Fenwall). If one of the systems or one of the probes is activated, it sends a 24-V signal to set off all fire protection extinguishers dedicated to the common collector. The activation of the system also triggers the building alarm and cuts off sector fire protection by the hood control system.
Easily Customizable CA Series Professional Hood

Cadexair's CA Series professional hood is easily customizable for all types of installations.

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<th>Double (CA-W)</th>
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| PI (CA-S-PE) | |
|--------------| |
| ![Image](image7.png) | |

**Configurations**
- Wall-type
- Island-type
- Single, double, reverse or back-to-back configuration

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**GEO-VARY High-Efficiency Filter Option**

The GEO-VARY modular degreaser filter is the only filter on the market that offers excellent performance even at low flow.

- Superior fat capture means less duct maintenance
- May be adjusted without affecting performance

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**Biotech Self-Cleaning System Option**

A hood equipped with the Biotech self-cleaning option benefits from a triple-action system that cleans better, works more efficiently and saves you more. It includes a GEO-VARY modular grease filter and a cleaning system that uses cold water and natural agents to dissolve accumulated grease.

The reduction in capital expenditure and operating costs compared to a standard hot water drain hood, combined with unmatched performance, makes the Biotech self-cleaning system the ideal solution for commercial kitchen exhaust hoods.

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**LED 3500K Lighting Option**

- Heat sink located outside the hood
- LED has a longer lifespan and uses less energy
We support our customers in selecting the right commercial kitchen ventilation system. We offer high-quality customer service, including prompt follow-up, rapid turnaround and availability.

Our expertise and experience with kitchen ventilation projects allow us to provide you with the ideal solution suited to your specific situation and actual needs.

Since 1986, Cadexair has specialized in central ventilation systems for projects with multiple kitchens such as food courts, hospitals, penitentiaries, airports and all other complex kitchen projects.

Our automated quote system facilitates the following:
- air flow calculations
- shop drawings
- electrical diagrams
- electromechanical coordination
- premium support

We adapt our expertise to suit your requirements!
- Cadexair products are built according to the highest standards of quality and engineering.
- We manufacture our hoods according to UL and ULC standards.

Contact us for recommended specifications:
- Exhaust fan
- Make-up air unit
- Balancing dampers
- Geo-Vary filters
- Air purification unit
- Control panel
- D-Tech variable flow system
- Fire protection

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