



CAPTURE JET™ TECHNOLOGY

30–40% lower exhaust airflow with superior capture and containment.
High-Efficiency Commercial Kitchen Ventilation.

Enabling Wellbeing

June 2026 | BR-004

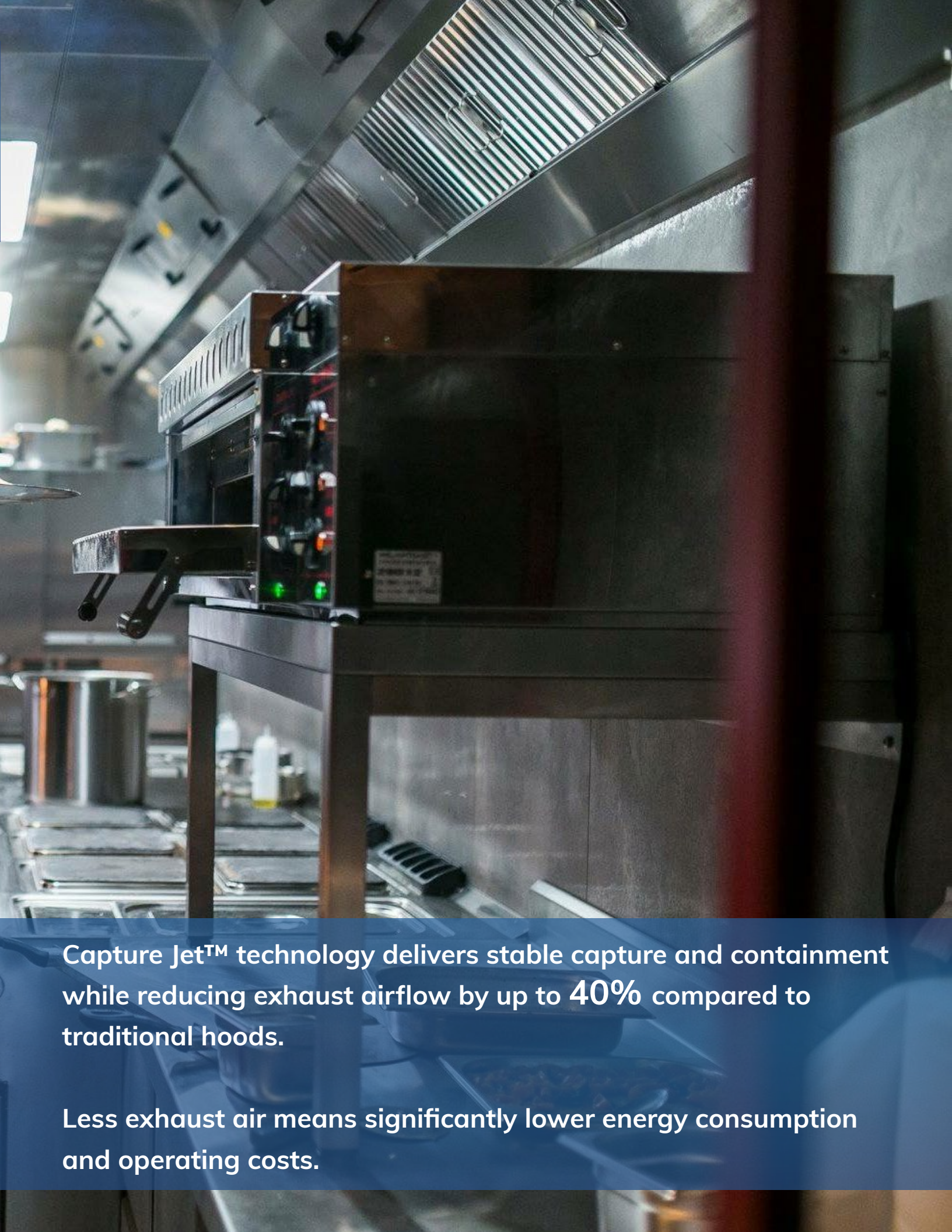
Halton

HIGH PERFORMANCE CAPTURE FOR BUSY COMMERCIAL KITCHENS



Scan to watch how Capture Jet™ works





Capture Jet™ technology delivers stable capture and containment while reducing exhaust airflow by up to **40%** compared to traditional hoods.

Less exhaust air means significantly lower energy consumption and operating costs.

VISUAL PROOF

CFD RESULTS

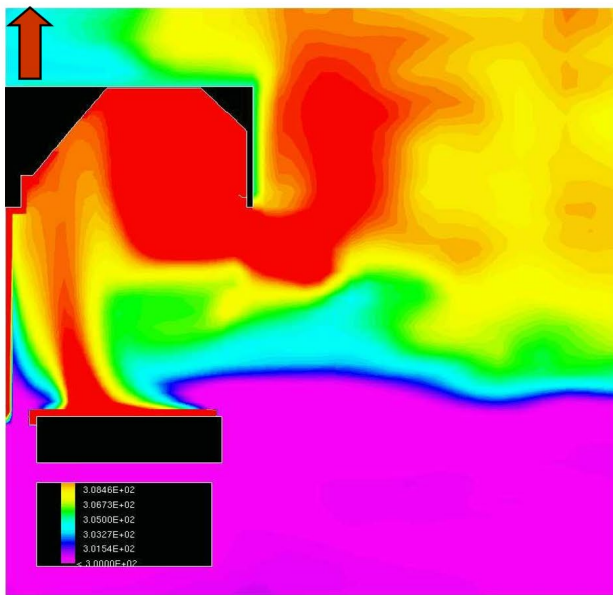
ON VS OFF

Computational Fluid Dynamics (CFD) visualizes airflow and thermal plume behavior under controlled conditions.

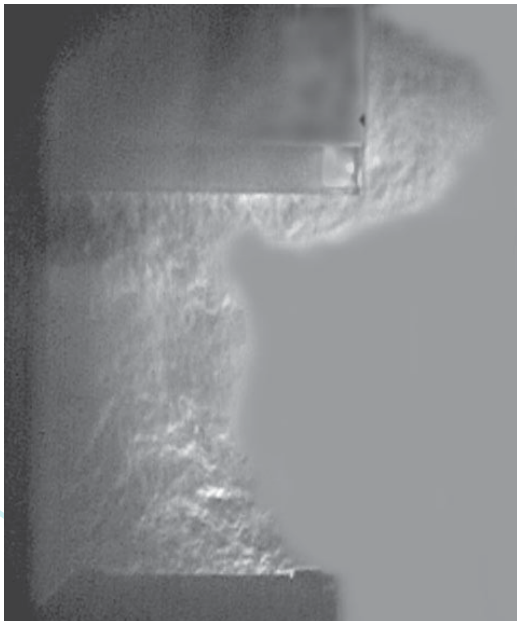
Both results are shown at the same exhaust airflow rate to highlight Capture Jet technology impact on containment.

CAPTURE PERFORMANCE WITH REDUCED AIRFLOW

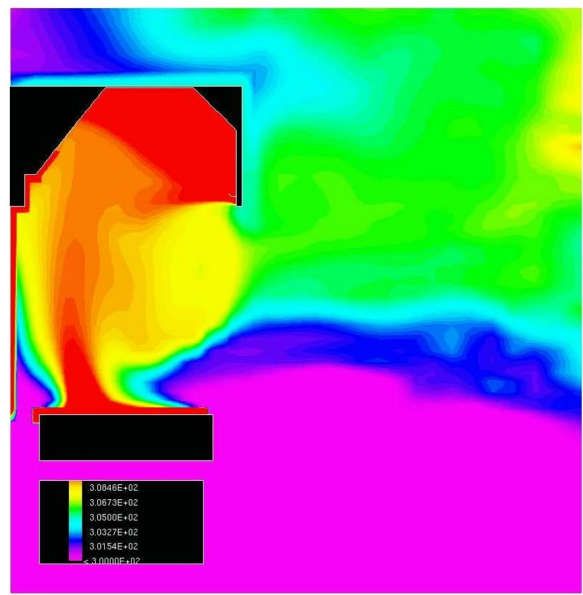
Capture Jet OFF



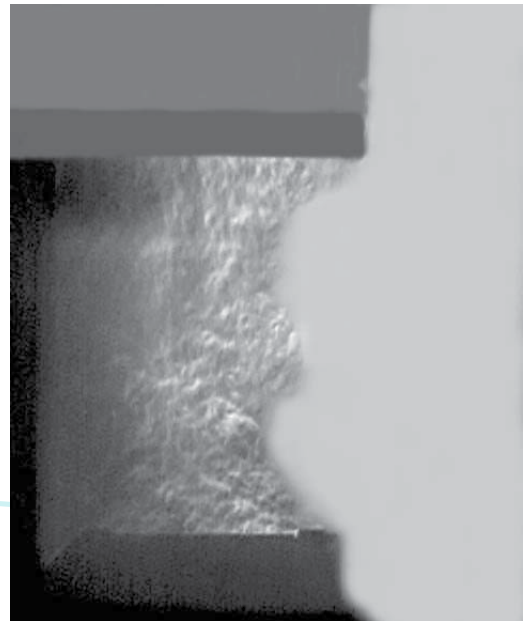
(Surface Temperature : 600°F)



Capture Jet ON



(Surface Temperature : 600°F)



These CFD results show a side by side comparison at the same airflow rate. With Capture Jet ON, the thermal plume remains better contained at the hood face, supporting reduced exhaust airflow requirements without compromising capture performance.



SYSTEM IMPACT, REAL SAVINGS

Capture Jet™ improves capture and containment at the hood face, allowing the required exhaust airflow to be reduced.

This lower exhaust rate reduces the total air volume the entire ventilation system must handle, from rooftop equipment to makeup air.



RESULTS

- Smaller fans and ductwork
- Lower annual energy consumption
- Reduced operating costs over the life of the building
- Lower noise levels during operation



INTEGRATED KITCHEN VENTILATION

A complete system performs best when everything works together. Capture Jet™ reduces exhaust airflow at the hood.

This lower airflow reduces the total air volume the system must move, which in turn lowers makeup air demand and overall energy consumption.

The 5 keys to success:

1. Hood face containment
2. Lower exhaust airflow
3. Reduced total air volume
4. Coordinated supply air and controls
5. Easy verification and serviceability



SYSTEM OPTIONS AND INTEGRATION

Capture Jet™ technology supports stable capture and containment while reducing the required exhaust airflow. This lower airflow reduces total air volume and positively impacts the entire ventilation system.

For best results, the hood, supply air distribution, and controls should be engineered together as one complete system. This coordinated approach delivers superior capture and energy savings without relying on higher airflow rates.

Select the options that best match your project priorities:

1

Supply Air Distribution

Low velocity supply air helps support stable capture conditions.

2

Controls Ready

Supports demand based operation for additional efficiency.

3

Grease Management Options

Supports hygiene goals and reduced downstream buildup.

4

Service and Maintenance Support

Supports routine access and long term performance.





ADVANCED GREASE EXTRACTION AND EMISSION CONTROL

High efficiency mechanical grease extraction helps reduce grease carryover in the exhaust path, supporting cleaner operation and consistent performance over time.

High Efficiency Mechanical Grease Extraction

Up to 95% removal of grease particles at 8 microns and larger, supporting cleaner exhaust paths.

Stable Performance Over Time

Low, stable pressure drop supports predictable airflow control over the life of the system.

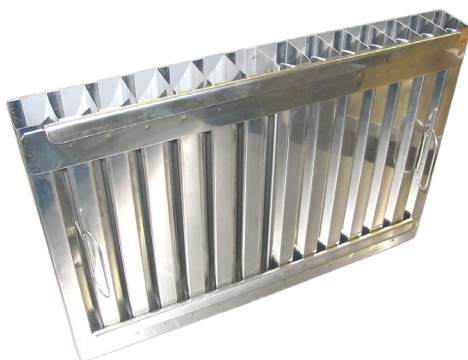
Less Maintenance and Better Hygiene

Reduced grease carryover supports longer intervals between duct and plenum cleanings.

Fire Safety and Kitchen Comfort

High efficiency filtration helps reduce grease buildup in the exhaust path, and lower fan energy demand can support quieter operation.

UV-C technology is available for projects requiring enhanced emission control.



High efficiency mechanical grease extraction (Halton KSA filter)
Supports longer cleaning intervals and consistent performance.



CAPTURE JET™ HOOD CONFIGURATIONS

Flexible solutions engineered for every commercial kitchen layout

Capture Jet technology is available across a range of hood configurations designed for different kitchen layouts and operating needs. Select the appropriate geometry based on equipment arrangement and ceiling constraints.



**Wall-Mounted Canopy
(KVE / KVC)**

Core cooklines with coordinated supply air and controls.



**Island Canopy
(KVV)**

V-bank filter arrangement for island equipment layouts.



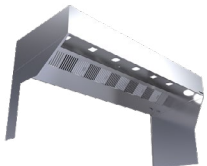
**Close Proximity Hood
(KVL)**

Designed for restricted ceiling height or limited plenum space.



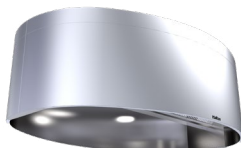
**Condensate Canopy
(KCH)**

Designed for steam equipment. Channels condensation to perimeter gutters.



**Hybrid Canopy
(KVM)**

Reduced height (top to bottom) design for constrained spaces.



**Oval Island Hoods
(KVO)**

Uniform perimeter jet capture for oval island layouts.



**Round Island Hoods
(KVR)**

Symmetrical perimeter jet capture for round island layouts.



SYSTEM ENHANCEMENTS

Modular. Scalable. Fully Coordinated.



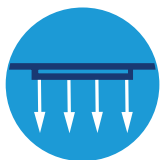
Halton SafeGuard

Integrated platform that connects ventilation control, air quality, and fire safety systems with continuous monitoring and insights.



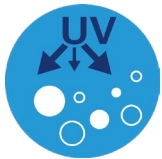
M.A.R.V.E.L.™ Demand Control Systems

Intelligent exhaust and supply air control that adjusts airflow in real time based on cooking activity to support energy savings.



Comfort Jet

Targeted air jets help improve chef working conditions and reduce heat stress near the cooking line.



Capture Ray™ UV-C Technology

Advanced grease destruction technology that reduces downstream accumulation and supports improved hygiene and long-term fire safety.



Water-Wash Systems

Automated hood and plenum cleaning solutions that reduce maintenance effort while helping maintain consistent system performance.



KCD – Kitchen Ceiling Diffusers

High-volume, low-velocity supply air designed to preserve thermal plume stability at the hood face and limit cross-drafts.

Efficient kitchen ventilation requires more than high-performance exhaust.
True efficiency is achieved when exhaust, supply air, and controls operate as a coordinated system.

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WHEN AESTHETICS ARE CRITICAL

Design intent and coordination in one view

Capture Jet™ solutions support open kitchens, clear sight lines, and clean ceiling integration. Early coordination between design intent and system requirements helps avoid redesign later in the project lifecycle.

DESIGN COORDINATION CHECKLIST



Confirm hood geometry based on the kitchen layout and ceiling constraints.



Reserve adequate ceiling and plenum space for coordinated exhaust and supply air.



Supply air should preserve plume stability and limit cross drafts near the hood face.



Align the controls approach with how the kitchen is intended to operate.



Coordinate access needs early to support service and maintenance.

Project Resources

BIM and CAD files are available to support design coordination.

Refer to datasheets for detailed model specifications and configuration options.

Contact Halton for selection guidance and integration support.

ABOUT US

Halton Group is a global leader in advanced indoor air solutions for the most demanding built environments. From professional kitchens and foodservice facilities to commercial, public, and healthcare spaces, Halton creates safe, comfortable, and highly energy-efficient indoor environments.

Founded in Finland in 1969, Halton operates today in over 35 countries worldwide.



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