

# Supreme Air LV Fume Hood Features

The Supreme Air LV fume hood, a new generation of fume hood design, combines safe, energy efficient design with a multitude of user-friendly features. The LV fume hood is a high performance, low constant volume design building on the features of Kewaunee's proven Supreme Air fume hood line. Its updated aesthetic design incorporates reduced air volume technologies with more efficient air flow containment to provide unsurpassed safety and barrier-free use.

Based on proven constant volume technology, the Kewaunee Supreme Air LV fume hood avoids the requirements of expensive, high maintenance alternatives. It has been tested using the ANSI/ASHRAE 110-1995 procedures to verify compliance with ANSI/AIHA Z9.5-2003. In addition, the LV hood has been tested using severe dynamic challenges (including the walk-by simulation apparatus of EN 14175) to confirm its superior containment capability.

**Patented Dynamic Barrier Bypass** provides safe flow of clean air between experiment and user.

**Removable Rear Baffles** for easy cleaning and hood maintenance.

**Energy Saving Lighting** using single bulb, low profile T-5 fluorescent light fixture.

**Triangular Shaped Access Panels** with staggered service outlets for easy set-up and maintenance.

**Unique Interstitial, Vertical Slot Baffles** for exceptional turbulence free airflow and minimal upper vortex roll.

**Spoiler Shaped Sash Handle** directs air away from user.

**Flush Sill Airfoil** allows obstruction free access to fume hood.

**Self-closing Sash to 18"** for less exhaust volume and maximum protection. (patent pending)



**Notched Nylon Sash Belt** Stainless steel cable reinforced, notched nylon belt and aluminum sprocket sash counterweight system for level, smooth, quiet sash operation.

**35½" High Safety Glass Sash** for optimal unobstructed sight into fume hood.

**28" Sash Opening** with automatic hold-open latch for easy loading and unloading of hood.

**Unique Rear Outleted Anti-splash Cupsink** mounts at front of hood worksurface without interfering with cabinet storage below. (Order separately with work top)

**Notched Sash Handle** for neat and easy cord and hose management.

**Air Alert 600 Airflow Alarm** with digital readout, visual and audible alarms, and onboard data logging.  
**Recommended Option**

# Supreme Air Fume Hood Construction

The design is based on rigid frame construction that assures a solid installation and low vibration and sound levels. Access panels are easily removable to access service lines and fittings. Radius corner posts and airfoils, plus, easy operator control of interior baffle settings assure a high level of comfort, safety and efficiency. Given the variety of models available and the comprehensive option packages to be selected, this

new generation of fume hoods can be tailored to the application needs of your modern laboratory. Aesthetically pleasing curved airfoils, vision sash panels, contemporary controls and devices, designer colors and combinations make a hard-working laboratory safety device into an attractive part of the total laboratory environment.

## **Excellent interior lighting with exterior relamping**

- *Optional special purpose lighting*

## **KMER modified epoxy resin liner**

- *1/4" thick — solid — light neutral colored liner*
- *Class A fire rating*
- *Task specific liner options*
- *Low profile, self-gasketing, interior access panel — removable without tools*

## **Customizable accessory offering**

- *A full array of service fittings and electrical fixtures*
- *Monitoring and safety alarms*
- *Pre-piping and pre-wiring*
- *UL listed when pre-wired per UL 61010A-1*

## **Low profile PVC sash tracks**

- *Smooth sash operation*
- *Reduced air turbulence*
- *Seals the interior side panel*

## **Easy operating full vision sash with:**

- *Full length painted aluminum handle for neat, clean appearance and streamline air features*
- *Available in stainless steel (painted aluminum shown)*
- *Exclusive sash leveling and alignment features*

## **Top front panel available as:**

- *Solid panel with integral louvers*
- *Vision panel with integral louvers (shown)*
- *Solid panel with Sight-tight Chevron by-pass grille*
- *Vision panel with Sight-tight Chevron by-pass grille*



## **Independent frame construction**

- *Rigid structural frame*
- *Allows liner panel replacement*
- *Stainless steel fasteners concealed with corrosion resistant caps*

## **Narrow-radiused corner posts**

- *Enhances aerodynamic air flow*
- *4" width creates more interior work space*

## **Radiused air foil**

- *Streamline air flow — low turbulence*
- *Heavy gauge steel for durability*
- *Available painted or in stainless steel*

## **Exclusive Kemresin work tops**

- *Dished worksurface available in black or white*
- *Many other options, including stainless steel*

# Dynamic Barrier Fume Hood Features

The Dynamic Barrier fume hood requires over 70 percent less exhaust air volume than a traditional by-pass fume hood. The design conserves natural resources while saving thousands of dollars per fume hood on initial HVAC system requirements and on annual energy consumption.

The Dynamic Barrier fume hood is an ultra low constant volume design based on Kewaunee's Supreme Air fume hood line. Its basic size, shape, and construction is the same as the standard Supreme Air design; but, it incorporates new and innovative features that reduce

exhaust air usage while increasing the ease of use and maintaining unsurpassed containment.

Based on proven constant volume technology, the Kewaunee Supreme Air Dynamic Barrier fume hood avoids the requirements of expensive, high maintenance alternatives. It has been vigorously tested to ANSI/ASHRAE 110-1995 guidelines. In addition, the Dynamic Barrier fume hood has been subjected to stringent dynamic testing including walk-bys, cross-drafts, and multiple breathing zone challenges, while maintaining unsurpassed containment.

**Double vertical sash design** allows 37" opening height for apparatus setup while projecting only 9" above the hood.

**Frameless upper sash** for unobstructed view.

**Low profile sash frame** offers easy access through horizontal panels.

**Six-panel combination lower sash** provides multiple protective working configurations.

**Sash stop at 10" high** provides full width work opening while maximizing splatter and fume barrier for user protection.

**Aerodynamically shaped lower sash handle** provides smooth airflow through vertical opening.



**Dynamic Barrier by-pass** bathes area behind sash with uncontaminated air maximizing user protection.

**Static pressure averaging mechanism** provides accurate face velocity readings regardless of sash positioning.

**Air Alert 600 Fume Hood Monitor** provides a visual one-hour timeline of fume hood performance.

**Service ports** provide convenient, safe passage of wires and tubes for equipment connections.

**Flush sill** for unobstructed access through vertical opening.