

Optimize Your Venting Designs

# Multistory Fireplace & Exhaust System

From the leaders in venting and fireplace systems  
**ENERVEX** and **Isokern** Fireplaces & Chimney Systems



**ISOKERN**<sup>®</sup>  
Fireplaces and Chimney Systems

**ENERVEX**<sup>®</sup>  
VENTING DESIGN SOLUTIONS

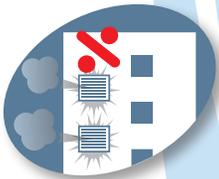


# Build the perfect fire with the perfect draft

The perfect fire in a gas-fired fireplace features a flame that's just the right size – not too high or too low. But to achieve the perfect fire, you need the perfect draft. That's why ENERVEX and ISOKERN – two leaders in the fireplace and venting industries – have teamed up to develop the Multistory Fireplace Exhaust System (MFES). With this innovative technology, a single exhaust system can vent multiple gas-fired fireplaces in a multistory building. This means that up to 25 fireplaces can achieve the optimal draft— regardless of how many fires are burning at the same time.



## The well tested concept with all the benefits



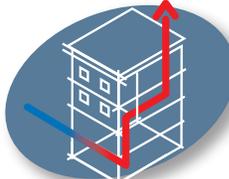
### Aesthetics

MFES enhances the building aesthetics by reducing the number of vents and eliminating unsightly wall terminations.



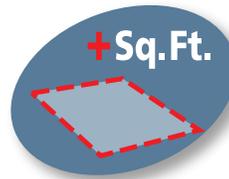
### Economical

Fewer venting configurations mean a more efficient and cost-effective exhaust system.



### Custom Design

The common exhaust system is designed to accommodate the building – not the other way around.



### Space Saving

Compared to individual fireplace venting, the MFES single exhaust system saves a significant amount of space, optimizing the building design.



### Quiet

Regardless of the demand level, the fine-tuned control and motor eliminate noise, making the environment much more peaceful.



### Convenience

With the conveniently-placed ON/OFF button, using the fireplace is as simple as a flip of the switch.



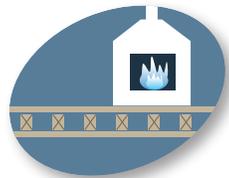
### Energy Saving

The unique control circuit ensures the exhaust level meets the demand, guaranteeing low energy consumption and reducing the need for conditioned air.



### Beauty

MFES features the beauty of a real masonry fireplace while offering the simplicity of an appliance.



### Flexible

Because fireplaces can be installed on a combustible floor, architects have greater design flexibility.



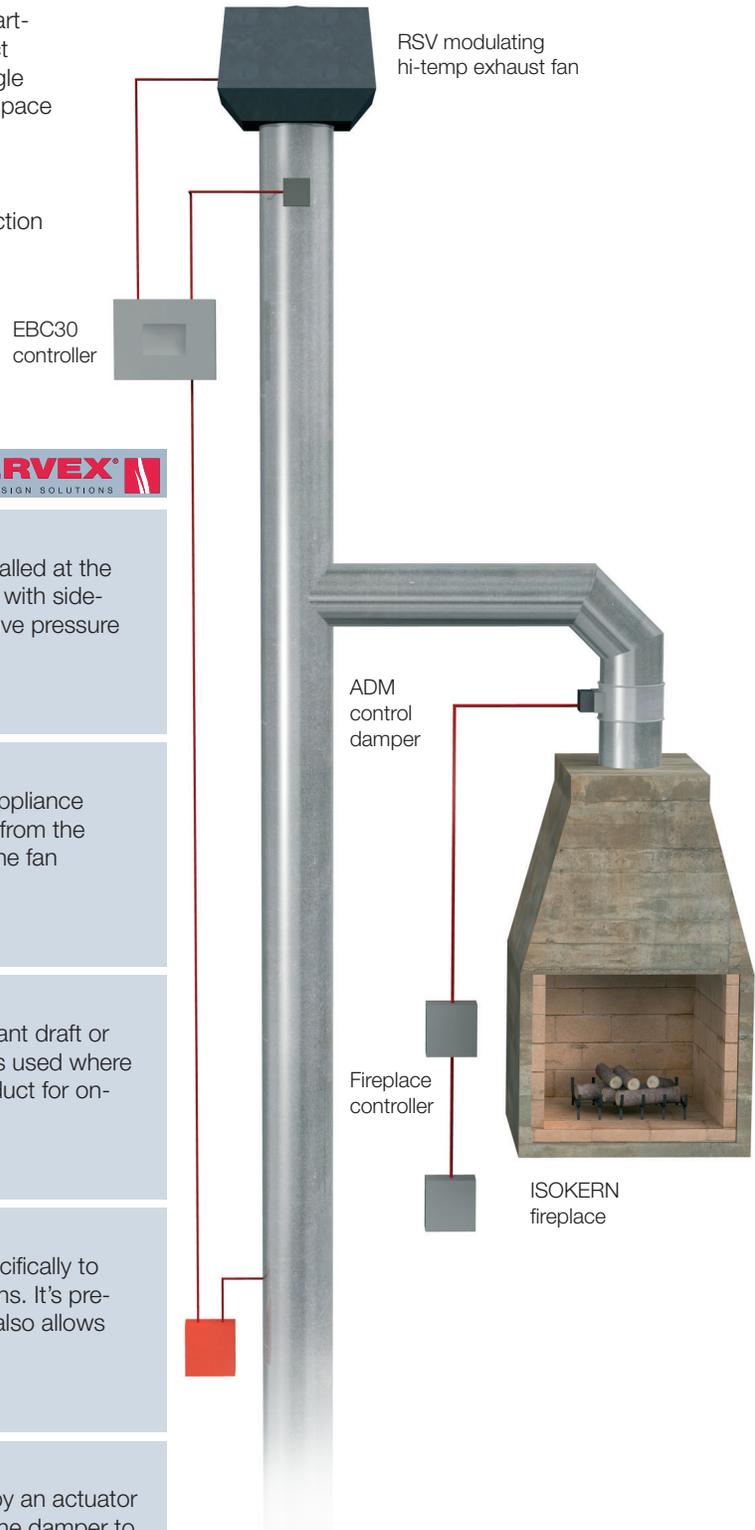
### Authentic-looking

Gas logs offer a warm, cozy environment without the hassle and mess of a wood burning fireplace.

# ENERVEX Venting System Components

Fireplaces are a popular feature in multi-story condominiums and apartments, but they usually require individual chimneys, which can impact space allocation and increase costs. The MFES solution allows a single venting system to accommodate multiple fireplaces, eliminating the space constraint and keeping construction budgets manageable.

In addition to a superior design, the MFES includes ENERVEX's high quality components that feature unique functionality and the construction necessary to stand the test of time.



## ENERVEX MFES products



### RSV

The RSV is a mechanical draft fan that is installed at the chimney termination point, either vertically or with side-wall venting. It is designed to ensure a negative pressure in the entire chimney or stack system.



### XTP

The XTP monitors the draft pressure at the appliance outlet while the control box receives a signal from the XTP, which is used to increase or decrease the fan speed.



### EBC 30

The EBC 30 monitors and maintains a constant draft or pressure by varying the speed of the fans. It's used where constant pressure is needed in the exhaust duct for on-demand control.



### VFD

This variable frequency drive is designed specifically to control and adjust the speed of ENERVEX fans. It's pre-programmed for its specific application, but also allows for adjusting of settings through the keypad.



### ADM

The ADM is a motorized damper controlled by an actuator with adjustable stroke length. This allows the damper to close complete and open to less than a 90 degree position for balancing purposes.

RSV modulating hi-temp exhaust fan

EBC30 controller

ADM control damper

Fireplace controller

ISOKERN fireplace

# Isokern Firebox Components

Isokern's modular masonry fireplaces are ideal for multistory applications. Isokern systems are manufactured under strict quality assurance and testing guidelines to ensure that each firebox or chimney component produced measures up to the highest of standards for weight, heat transfer, insulation and fire safety. Made from pumice extracted from the Mt. Hekla Volcano in Iceland, Isokern components are lightweight and can be built in a shorter time period and allows for quick and consistent fireplace and chimney system installation.

- modular masonry construction
- lightweight
- superior heat transfer & insulation



## ISOKERN B-Vent Fireplaces (IBV series)



### ISOKERN B-vent (IBV)

The Isokern B-Vent (IBV) is the only field assembled, modular masonry, gas only, top-vented appliance in the market today. It can be installed directly on a combustible floor system while meeting ANSI Z21.50 guidelines.

Size Options: 36" & 46"  
Fuel Options: Natural Gas or Liquid Propane

### Chimney Components

The IBV is tested and listed for B-Vent metal chimneys which are installed directly to the box, lightweight, and can be used in multiple design applications.

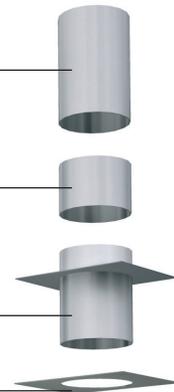


Double wall, gas only B-Vent metal piping

Variable size pipe lengths. Offsets of 45° maximum available.

IBV Anchor plate (with down draft diverter available)

Ceramic Fiber Blanket



### Firebrick

Firebrick is a refractory brick, capable of sustaining intense heat without fusion. Firebrick is not prone to expansion or contraction, helping to minimize cracking while under extreme heating conditions. Options include color and layout (see below).



Red



Beige



Herringbone



Stack bond



Basket weave



Running bond



Open Country ©



### Isoflames Gas Logs

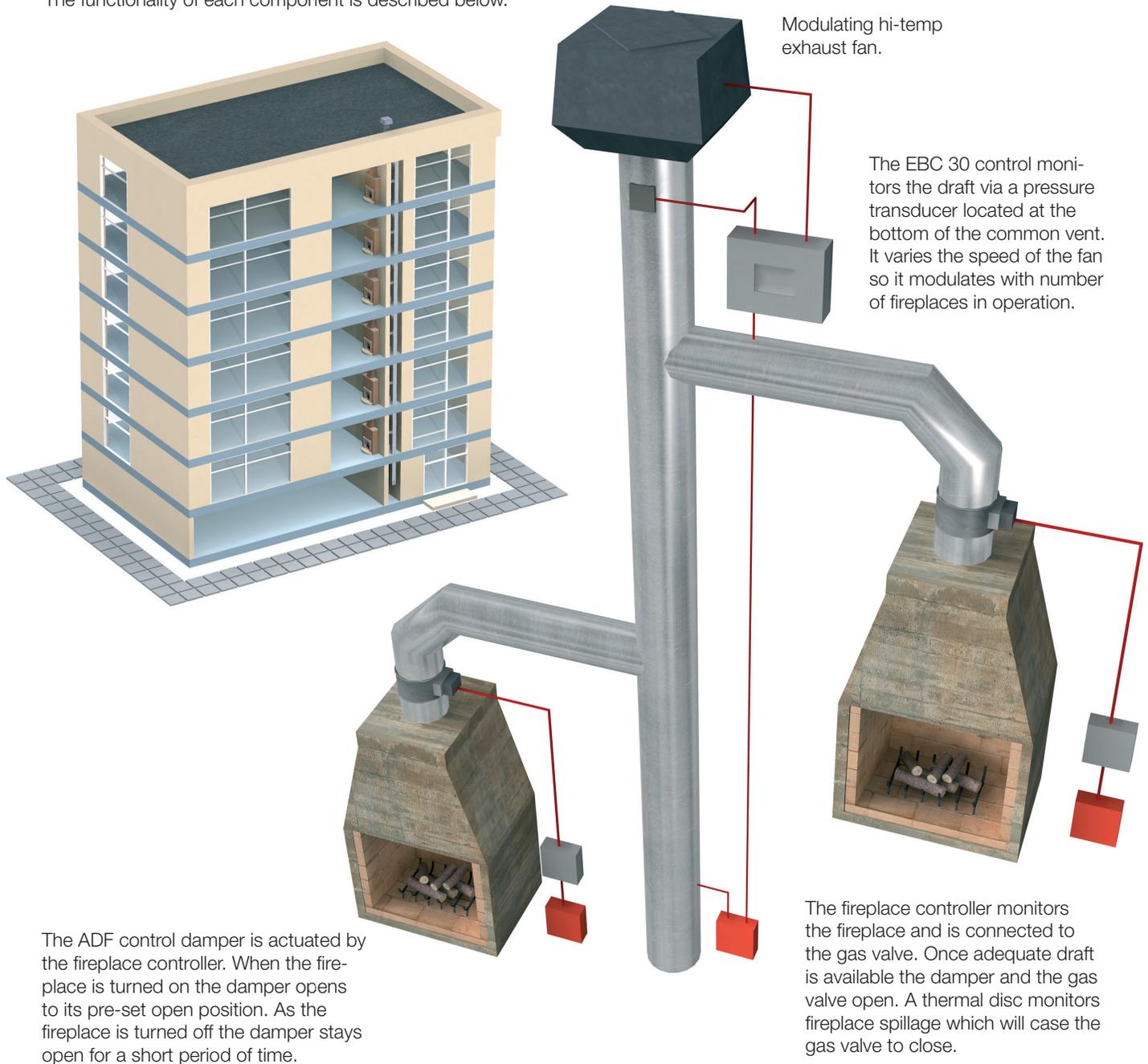
Isoflames Gas Logs Open Country Gas Logs have been tested and are listed for use with the IBV fireplace. The set includes all of the components – gas log burner, and realistic logs that burn cleanly and efficiently for the best gas log on the market.

Visit us at [www.isoflames.com](http://www.isoflames.com) for more information.



# The MFES System — a Unique Concept

The MFES is unique in that it monitors the operation of multiple fireplaces in multistory buildings. Individual fireplaces can be started or stopped by just turning a switch on or off. A safety system is an integrated part of the MFES, which makes it even safer than individual fireplace installations. The functionality of each component is described below.



# About ENERVEX and ISOKERN

## The Process

At ENERVEX and Isokern we don't build one-size-fits-all fireplace and venting solutions. We understand that each project is unique and our three-step process allows us to design a complete system that meets the specific requirements of a given job.

1. **Pre-sales analysis.** This phase allows us to gather requirements and create a customized sizing report.
2. **System design.** Using our FanCalc software, our engineers design a system that takes into consideration proper vent type application, operating temperatures, pressure losses and the risk of condensation. It also provides specific wiring diagrams.
3. **Engineering and installation support.** Every system comes complete with job-specific AutoCAD installation instructions and wiring diagrams. Our engineering support teams have access to these files and are available to answer any questions that come up during installation.

## The FanCalc Difference

One of the many things that set us apart is our proprietary design software, FanCalc. FanCalc allows our engineers to quickly and accurately design a venting system because it contains extensive equipment data, such as operating and exhaust requirements, exhaust temperatures, efficiency, ducts with k-values, resistance factors, insulation factors and more. Instead of spending days or weeks analyzing data, our engineers can enter the information into FanCalc and receive a report that provides the appropriate sizing information, code violation warnings and even design alternatives.

## The Performance Guarantees

Because we design the entire fireplace and venting system, we take full responsibility for its operation. Contact us for more detailed information.



All calculations and system recommendations provided are performed in accordance with approved engineering methods. They present an appropriate "Approved Method" of vent design and sizing as defined in national standards, such as the National Fuel Gas Code ANSI Z223.1, NFPA 54, IFGC and others.

## Support

Our engineering and technical support department is available Monday through Friday from 6:00 am to 7:00 pm.

**ENERVEX®**   
VENTING DESIGN SOLUTIONS

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