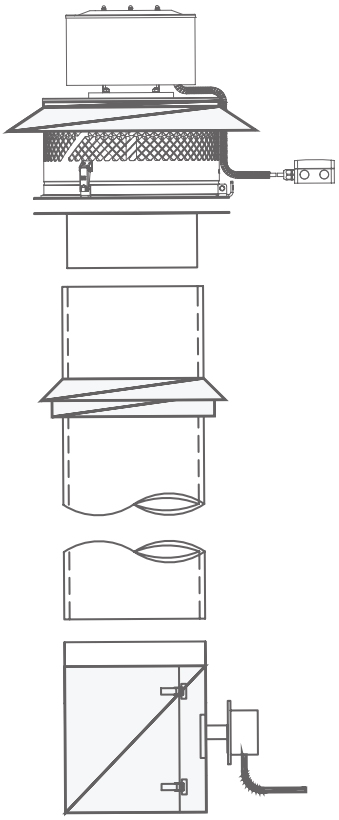
X-VENTS

Executing Quality and Performance in Ventilation

Introducing

X-VENTISO®

by earthcore®



X-VENTISO, by Earthcore Industries, is North America's quietest and most reliable line of mechanical drafting systems. Engineered with German precision and innovative design, it delivers superior performance while streamlining installation.

As the industry's only fully modular system with Molex quick-connect technology, X-VENTISO enables effortless integration of fans, controllers, dampers, supply ventilation, and accessories.

No matter the brand of your appliance, if mechanically assisted venting is required, X-VENTISO offers a flexible, high-performance solution for your project.

North America's Best Solutions For Mechanical Drafting Complexities

No matter how complex your venting needs, X-VENTISO Mechanical Draft Systems deliver the perfect solution for any project.

Designed for seamless installation without compromising the commercial-grade quality you expect, our innovative product line ensures reliability and performance in every application.

When your project demands the very best— it demands X-VENTISO.

What is Ventilation - And Why it Matters

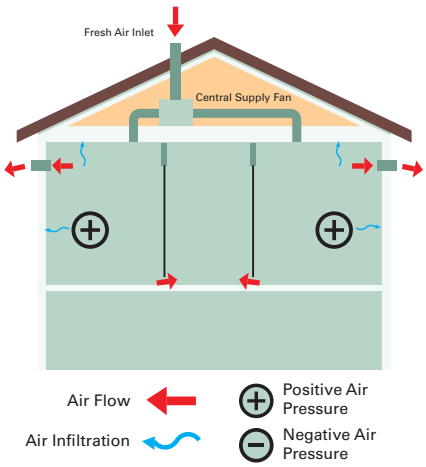
Ventilation is defined by ASHRAE (the American Society of Heating, Refrigerating and Air-Conditioning Engineers) as the process of intentionally allowing air or gases to flow in or out of a building to maintain indoor air quality, remove contaminants, and regulate pressure.

Venting is not only essential for ensuring proper air exchange, but also to help maintain the balance of temperature, humidity, and air quality within a building envelope.

The health of a building's appliances, materials, and most importantly occupants are all heavily dependent upon the proper balance of air flowing in and out of a building. Ventilation, (or air exchange), is sometimes referred to as "breathing" within the HVAC industry.

As Modern Construction has moved to an increased focus on energy efficient materials and methods, the traditional methods of venting through "natural" means, have become increasingly limited in effectiveness, leading to the necessity of true Mechanically Assisted Ventilation systems.

X-VENTISO steps up to solve this issue with industry leading innovation and engineering.



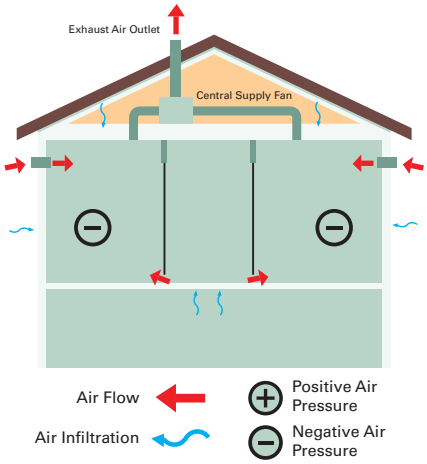
Supply Ventilation:

This method works by mechanically pressurizing a structure. Forcing fresh air into the building envelope allows exhaust air to naturally escape through designed passive vents in structure.

Mechanical Supply Ventilation:

Sufficient for applications where positive airflow is required to provide adequate circulation for normal occupant and appliance usage. Not suitable for ensuring proper hazardous exhaust gases are expelled from interior of building.

Types of Mechanically Assisted Ventilation in Modern Construction

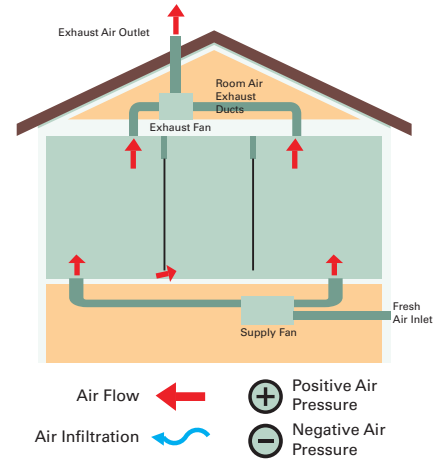


Exhaust Ventilation:

This method works by mechanically depressurizing a structure. Removing stale or potentially hazardous air through mechanical "pull." Fresh air enters building envelope through passive vents.

Exhaust Supply Ventilation:

Necessary when potential for hazardous air quality from combustion / chemical reaction within the building envelope is present. Forcefully "pulls" air from inside the building utilizing natural venting to provide replacement air. Can cause depressurization.



Balanced Ventilation:

Provides true "balance" to the building by utilizing the best of both Exhaust and Supply Mechanical Ventilation to bring air both in and out of the building envelope.

Balanced Mechanical Ventilation:

Provides calculated airflow in and out of the building envelope, ensuring expulsion of hazardous exhaust is removed. Mechanical ventilation provides adequate "makeup" air, virtually eliminating negative pressure occurrence.

Defining Normal Sound Levels and Noise Pollution

To minimize noise pollution in any application, it's essential to first understand the accepted standard for "normal" sound levels when designing a system.

ROOM / SPACE	dB	NR	NC/NCB	RC/RCM2
Theaters, Concert Halls, Recording Studios	25 - 30	20	10 - 20	20
Bedrooms, Libraries, Religious Prayer Rooms	25 - 30	25	20 - 25	25
Living Rooms, Classrooms, Lecture Halls, Conference Rooms	30 - 35	30	30 - 40	30
Offices, Courtrooms, Private Work Rooms	40 - 45	35	30 - 40	35
Corridors, Bathrooms, Toilet Rooms, Reception, Lobbies	45 - 55	40	40 - 40	40
Kitchens, Workshops, Common Spaces, Server Rooms	45 - 55	45	40 - 50	45

Noise Sources from a Mechanical Venting System

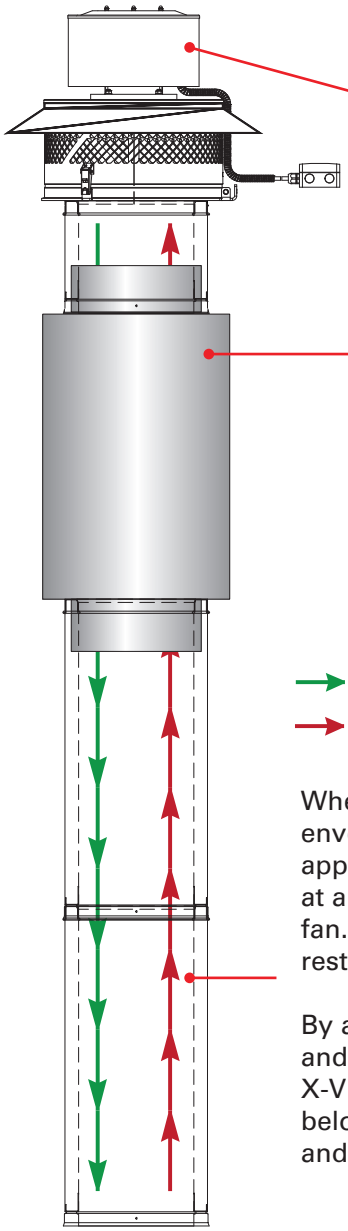
Every mechanical draft system has two primary sources of noise: vibrations traveling up through the chimney and those coming back down. X-VENTISO pinpoints these sources and engineers products that are inherently quiet.

We go beyond noise reduction to design fully integrated systems that deliver a synchronized performance advantage. Our exhaust fans, flue silencers, and controllers work in perfect harmony to provide an unparalleled venting experience.

Quiet Efficiency — How Sound Affects Comfort

Motor and duct vibration are the enemy of a quiet mechanical exhaust system. Understanding the causes of these environmental factors is what drives our approach to creating the best Mechanical Ventilation System Components. X-VENTISO strives to reset the industry standard for peak performance without sacrificing the comfort of low noise pollution.

Utilizing a top down approach, we have identified the highest quality vibration dampening materials and designs, as well as proprietary control devices to produce the undisputed quietest Mechanical Draft Systems in North America.



While electromagnetic motors are quieter than many alternatives, they still generate mechanical noise—vibrations that travel from the exhaust fan through the vent or hearth opening within the building envelope.

With our WhisperDraft Series flue silencers, X-VENTISO precisely tunes the XV Series exhaust fan motor to achieve a 25 dB reduction in vibration noise, ensuring significantly quieter operation.

Mechcanical Noise

Wind Noise

Where ducting opens into the building envelope—whether through a vent, appliance, or hearth—air is drawn in at a speed matching the velocity of the fan. As volume increases, it may be restricted by vent diameter and routing.

By applying precise sizing calculations, and XV Series Controlled Power Units, X-VENTISO systems maintain airflow below 800 FPM, ensuring the quietest and most efficient performance.

Flue Gas Speed — Controlling Air Vibration

Designing a truly efficient and quiet system means understanding the "wind noise" effect of flue gas traveling through ducting and chimney at speed.

A smaller duct cross-section increases airflow restriction, especially when large volumes of gas are forcefully pulled by mechanical exhaust fans. As restriction grows, so does air vibration, generating the noise heard within the ducting.

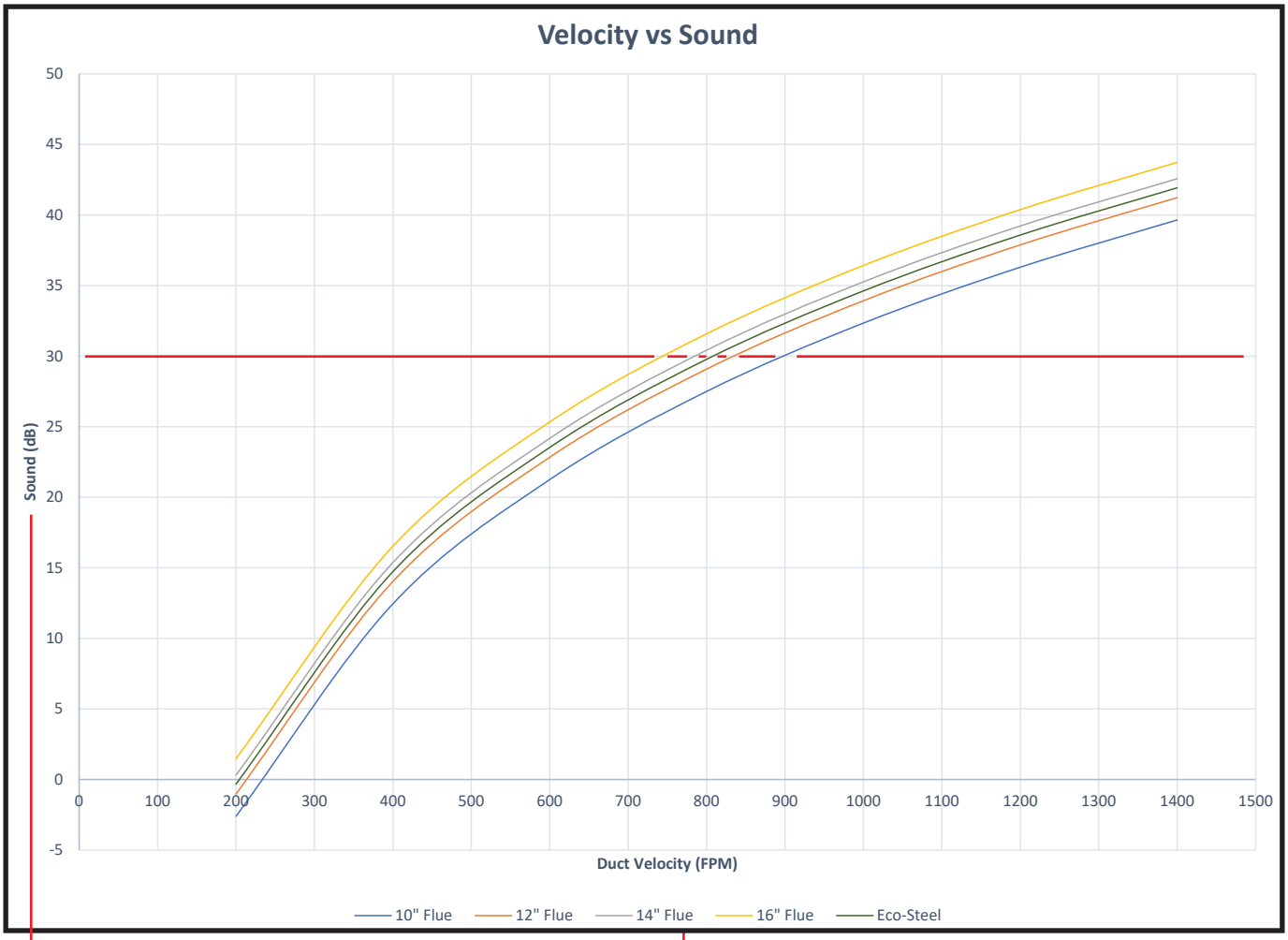
X-VENTISO designs systems for optimal performance while maintaining an uncompromising commitment to minimizing noise pollution.

Flue Gas Speed and Sound Vibration Relationship

Engineered to keep room noise levels at 30 dB or lower, X-VENTISO systems operate with flue gas speeds under 800 FPM— maintaining ambient noise at or below the level of an average living room.

By combining the quietest exhaust fans available with the most advanced control systems in North America, we've redefined what it truly means to be "quiet."

Explore our systems and calculations at: www.X-VENTISO.com.



Sound vibration is measured in Decibels (dB). Utilizing 30 dB or lower as an acceptable noise pollution standard. We design our systems to stay below this level at peak exhaust fan speed.

Duct Velocity is measured by ascertaining the distance an air molecule moves over a minute's time. This movement creates vibrations which are heard by the human ear as "noise".

Complexities of the Residential Building Envelope

Like living organisms, buildings are designed to “breathe” by allowing proper ventilation, ensuring stale air is replaced with fresh air for occupants. However, as residential construction standards increasingly focus on reducing external air infiltration to improve energy efficiency, buildings have become less forgiving when it comes to ventilation calculations.

Determining the right amount of fresh air for a building involves the Air Conditioning Contractors of America (ACCA) Manual J calculation. This method evaluates factors such as building size, window properties, occupancy patterns, and makeup air needs to properly size forced-air HVAC equipment, ensuring efficient BTU (British Thermal Unit) management.

X-VENTISO provides tailored solutions for all pressure conditions, offering a range of exhaust and intake options to optimize ventilation performance

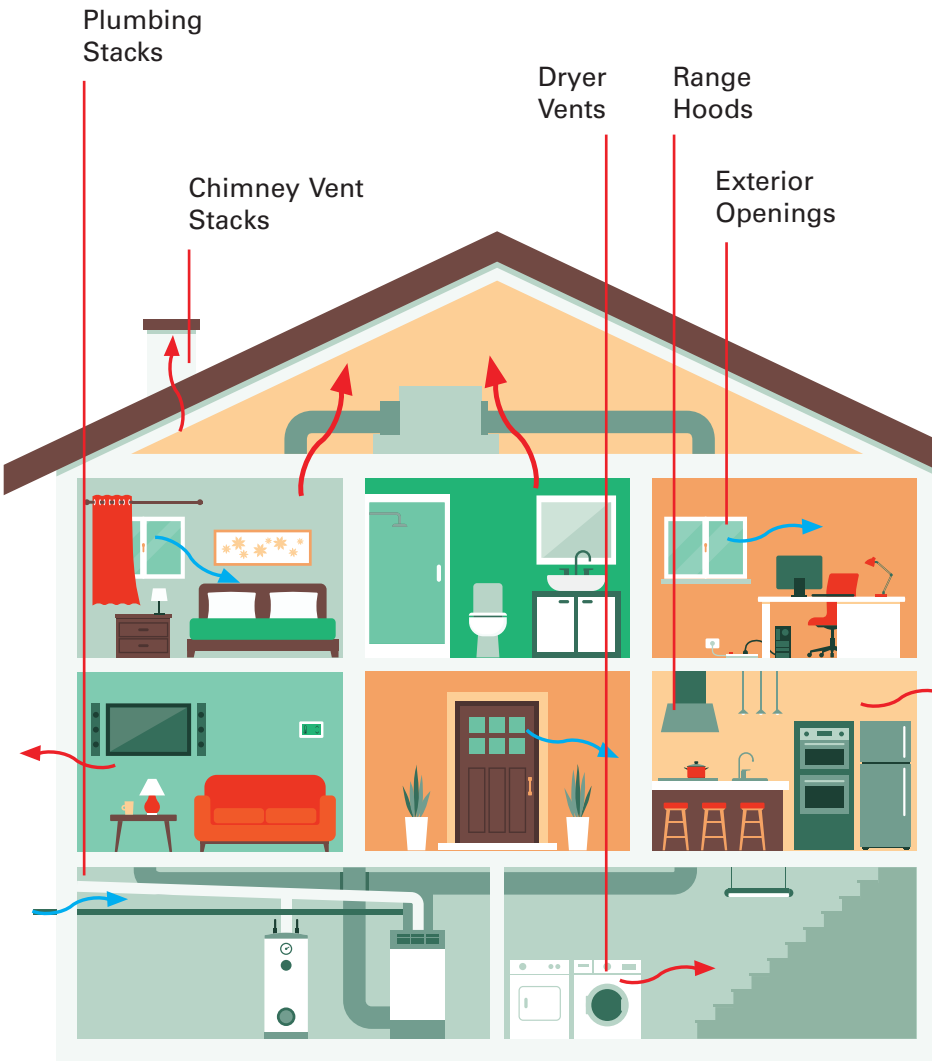
How Energy Efficiency Has Increased HVAC System Complexities

Residential Buildings, both vintage and modern, are designed with multiple points of exit and entry for air flow including the usage of vents, windows, doors, and accessory mechanical fans.

As building codes have evolved to prioritize air containment within living spaces, more advanced and stringent containment methods have been developed. These changes have significantly reduced the influx of fresh air, limiting natural drafting as indoor air exits the building.

Understanding a building’s air supply is essential for effective design. When airdrawing appliances like range hoods, furnaces, bathroom fans, and fireplaces are in use, an inaccurate HVAC load calculation can leave the building deprived of necessary makeup air. This imbalance creates negative air pressure within the structure.

Achieving an accurate HVAC load calculation for residential building design is crucial not only for the longevity of various household systems but, more importantly, for the health and well-being of its occupants.



How Negative Pressure Decreases Efficiency

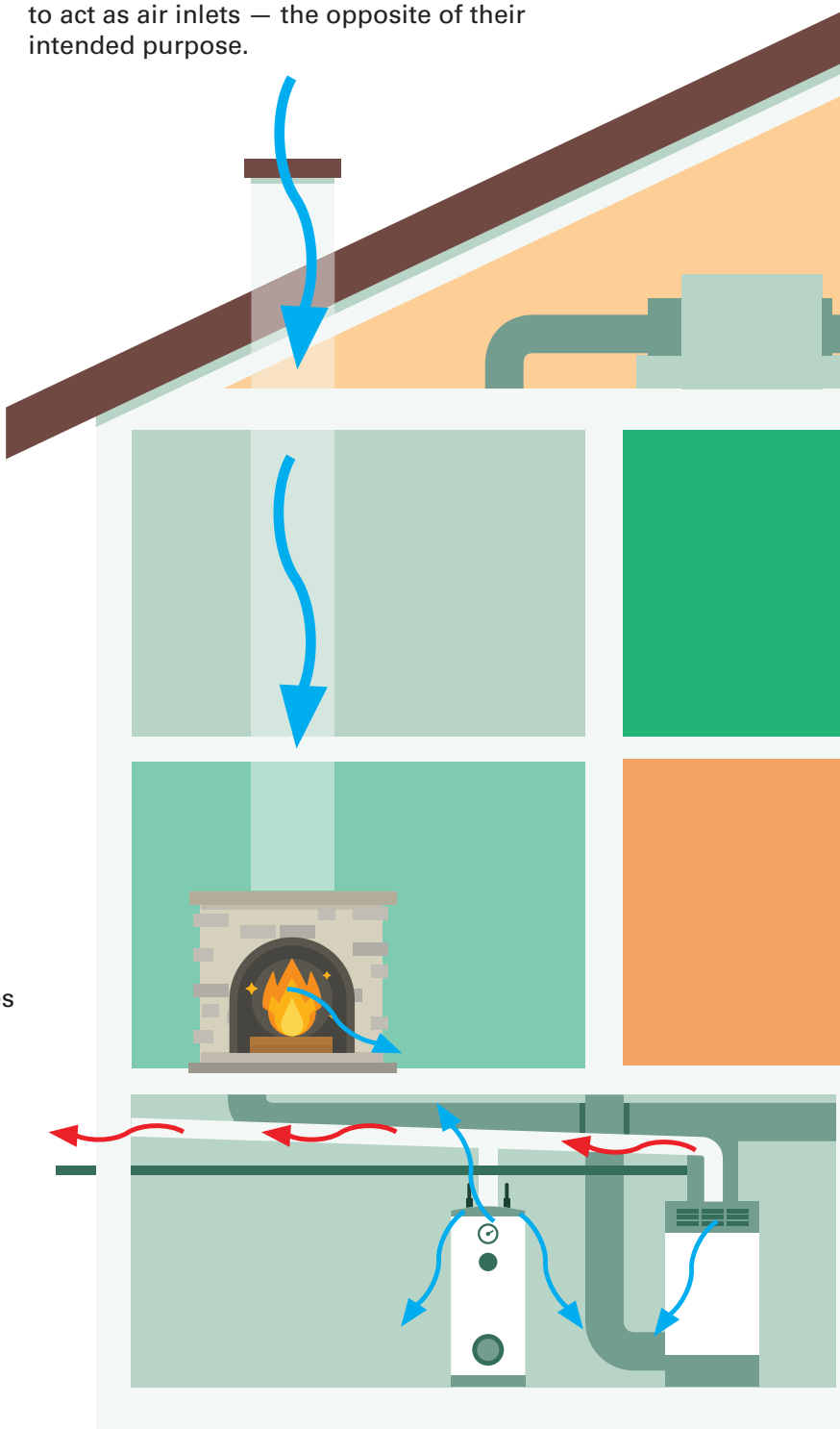
When the volume of air leaving a building—whether through leakage, mechanical fans, or combustion—exceeds the incoming supply or makeup air, negative pressure develops. This imbalance causes vents and chimneys to operate in the opposite direction of their intended design, as the building pulls air back inside to restore equilibrium. This phenomenon is known as "backdrafting."

Back-drafting places unnecessary strain on appliances, furnaces, and fireplaces, but more critically, it poses risks to the building's occupants. If left unaddressed, negative pressure can lead to elevated carbon monoxide levels due to poor air circulation, compromising indoor air quality and safety.

X-VENTISO uses a variety of advanced exhaust and makeup air solutions to resolve pressure imbalances within the building envelope.

Our products ensure optimal building performance when traditional HVAC methods fall short.

As air supply is diminished within the building envelop at a faster rate than new air is introduced, chimneys, and vents begin to act as air inlets — the opposite of their intended purpose.



When vents and chimneys, designed to safely expel carbon monoxide and other harmful gases operate contrary to their purpose and design, these gases risk seeping back into the building.

This negative pressure not only creates hazardous conditions for occupants, but also puts added stress on combustion appliances.

Evolution of Modern Energy Efficiency and Building Codes

1975	The 1973 Energy Crisis and Oil Embargo causes surging energy prices in North America. As a result, The Energy Policy and Conservation Act is passed by the United States Congress in 1975. It directed the FEA (Federal Energy Association) to establish energy standards for consumer products, and schedules for the FEA to review and update Federal Energy Efficiency Standards.
1975	ASHRAE 90-1975 was established as the first national "Model Energy Code" for residential and commercial buildings.
1976	A second version of the EPCA is passed by the United States Congress which begins to financially incentivize Commercial Builders and Developers for producing energy efficient commercial buildings.
1976	The California Energy Commission adopts the Building Energy Efficiency Standards, becoming the first State to regulate new building construction with specific requirements to conserve energy.
1977	The Federal Energy Administration, the Energy Research and Development Administration, the Federal Power Commission are all combined to form the new Department of Energy (DOE). This new regulatory agency is specifically tasked with forming a National Energy Plan, which included a mandate to codify new energy standards for both Residential and Commercial Buildings.
1978	The National Energy Conservation Policy Act (NECPA) is passed which incentives homeowners and homebuilders to audit the energy efficiency of Residential Home designs.
1992	The Energy Policy Act of 1992 is signed into law, which directed the DOE to create new standards for building energy codes, equipment energy efficiency standards and appliance energyefficiency labels. Out of the EPA came the Energy Start Program which began to officially recognize energy efficient products for Residential, Commercial, and Industrial Construction.
1994	The International Code Council (ICC) is established to develop a single set of National Residential and Commercial Building Codes including energy efficiency.
1998	The ICC officially introduces the International Energy Conservation Code (IECC) which standardizes requirements for energy Conservation in new Residential and Commercial Construction.
2000	The first Revision of the IECC is released and is permanently scheduled for revision every three calendar years after.
2009	CALGreen, also known as the California Green Building Standards Code, was first developed and adopted in 2007 by the California Building Standards. This standard began to be adopted in several other states where energy efficiency was priorities in building code.
2009	American Recovery and Reinvestment Act (ARRA) is passed which requires all states to adopt building codes (2009 IECC and ASHRAE 90.1 -2007) prior to receiving stimulus funding through State Energy Program (SEP).
2022	The ICC updates the Building Energy Efficiency Standards Code with most current standard.

Venting Solutions Powered by Performance, Quality, and Technology

X-VENTISO offers a simplified fan portfolio with three models to suit any hearth application or fuel type.

Unlike competitors that demand separate specifications for gas only and solid fuels, we make it easy to size and specify the appropriate fan for your project.

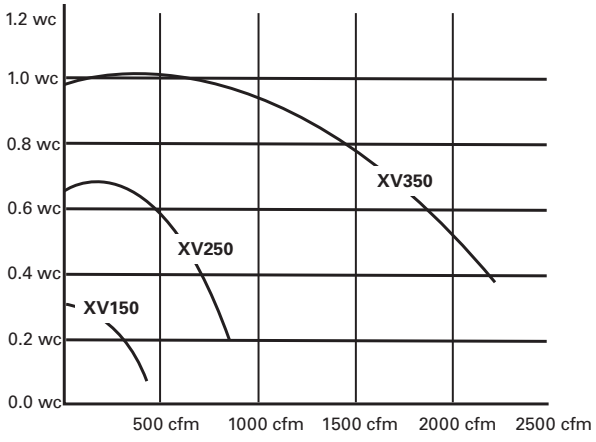
Featuring a 316L stainless steel housing and impeller, our fans minimize vibration during speed modulation, delivering the quietest performance on the market without compromising quality.

Our fans are **UL378 listed and rated for 1000°F continuous, 1400°F abnormal** — prioritizing safety and peace of mind in every design.

Where competitors fall short, we excel. Our XV350 unit delivers up to 2100 CFM, outpacing the industry standard of 1600 CFM.

The X-VENTISO Hearth Application Fan Calculator is available on-line for free!

XV SERIES FANS
WC TO CFM CURVES FOR DRAW



X-V Fan Series

CSA3-B255-M81
UL/ULC 378
UL 705

Offered in Three Standard Sizes for Easy Selection

Whether your project uses gas only, solid fuel, or any other application, X-VENTISO has the perfect unit for you.

Contact your local X-VENTISO distributor for expert assistance in sizing your project.

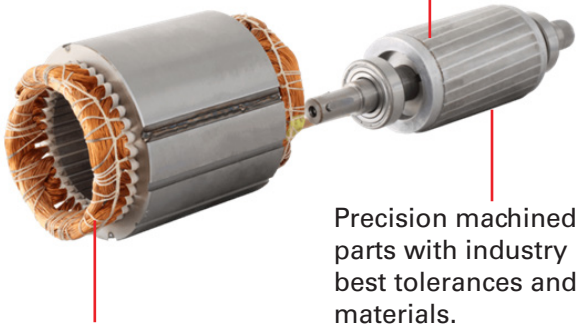
MODEL	Width	Height	Weight	Capacity	Power Supply
XV150	12.5	16	28	450 CFM	120VAC. 1PH, 60Hz
XV250	12.5	16	30	900 CFM	120VAC. 1PH, 60Hz
XV350	16.5	17.5	54	**2100 CFM**	120VAC. 1PH, 60Hz

Superior Motor Construction for Superior Motor Performance

Creating the quietest drafting fans begins with using the most reliable and quietest motors. Our drafting units are equipped with top-tier German-engineered motors, sourced from the leader in electric motor technology, to deliver efficient power at minimal noise levels and exceptional longevity.

Precision die-cast aluminum housings serve as highly effective heat sinks for internal electromagnetic rotation, ensuring optimal performance, minimal vibration, and the coolest possible operation. The result is the quiet operation, which meets the performance standards of even the most complex commercial applications.

Thanks to advanced technology and superior materials, XV Series Fans can endure chimney temperatures exceeding 1400°F, even in an idle state. This allows for safe operation of heated chimney stacks even during power failures, setting us apart in the mechanical drafting industry.



Building the industry's most durable fan begins with the most resilient motor. The XV Series fan features an enhanced diecast aluminum housing for superior heat dissipation and noise reduction. Custom-machined steel impeller shafts and independent motor cooling technology ensure a tested lifespan exceeding 20,000 continuous hours of operation.

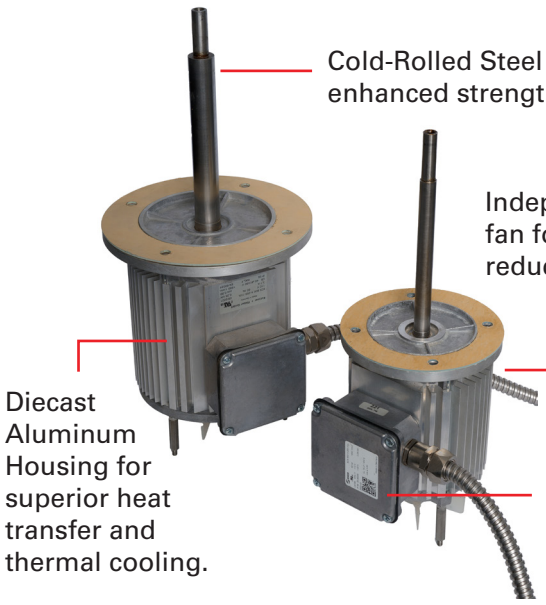
Motor Performance Specifications

	XV150/250	XV350
Voltage	110 V	110 V
Hz	60 Hz	60 Hz
KW	0.09 KW	0.25 KW
CB	16 uF / 450 V	40 uF / 450 V
Amperage	1.60 Amp	3.70 Amp
Rotations	1640 per minute	1680 per minute

Optimized Magnetic Motor Technology

X-Ventiso leverages over 70 years of machining expertise to achieve the tightest tolerances and flawless alignment within our fan motor internals.

Precision engineering ensures exceptional quality and performance while minimizing motor vibration, delivering the low-decibel operation demanded by the mechanical drafting industry.



Directional Air Propulsion

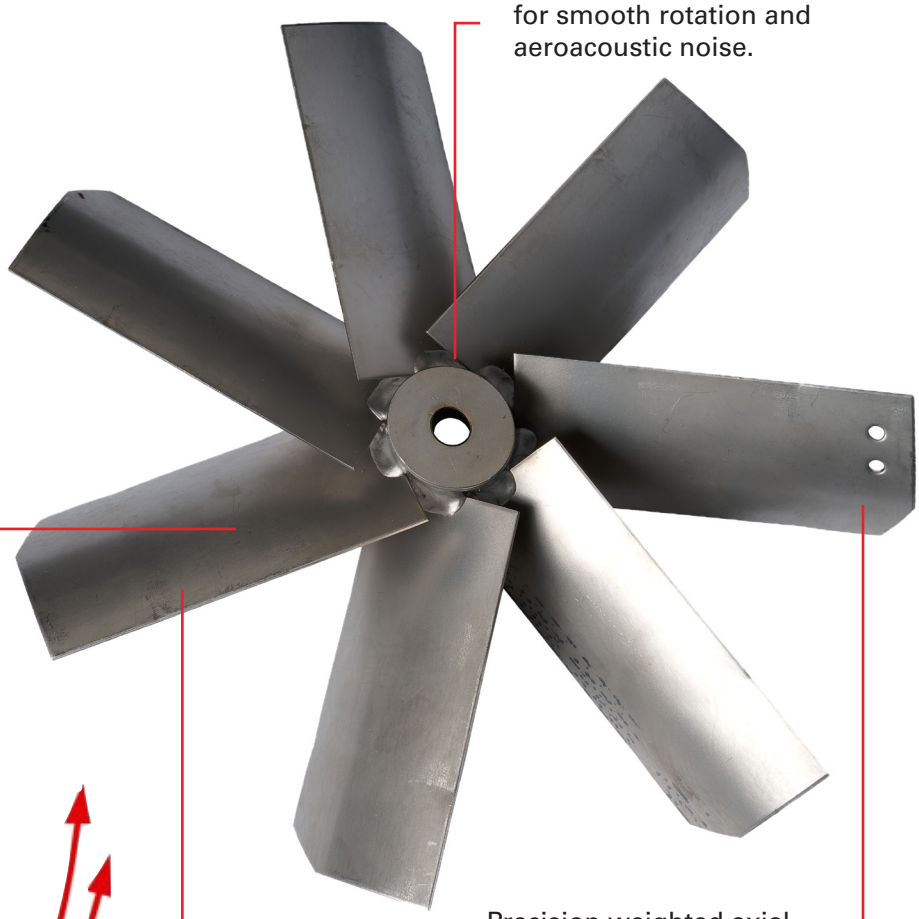
Our XV Series Fans are engineered to efficiently expel exhaust gases and particulates from inside a structure, directing them safely away from the building. As the only fans in North America rated for liquid, gas, and solid fuels, they set the standard for versatility and performance.

Featuring a unique curved blade design, our mechanical fans propel airflow at a wind angle of nearly 45° with velocities ranging from 250 to 1,200 FPM, ensuring exceptional performance and safety for your application.

We achieve what the rest of the industry simply cannot.

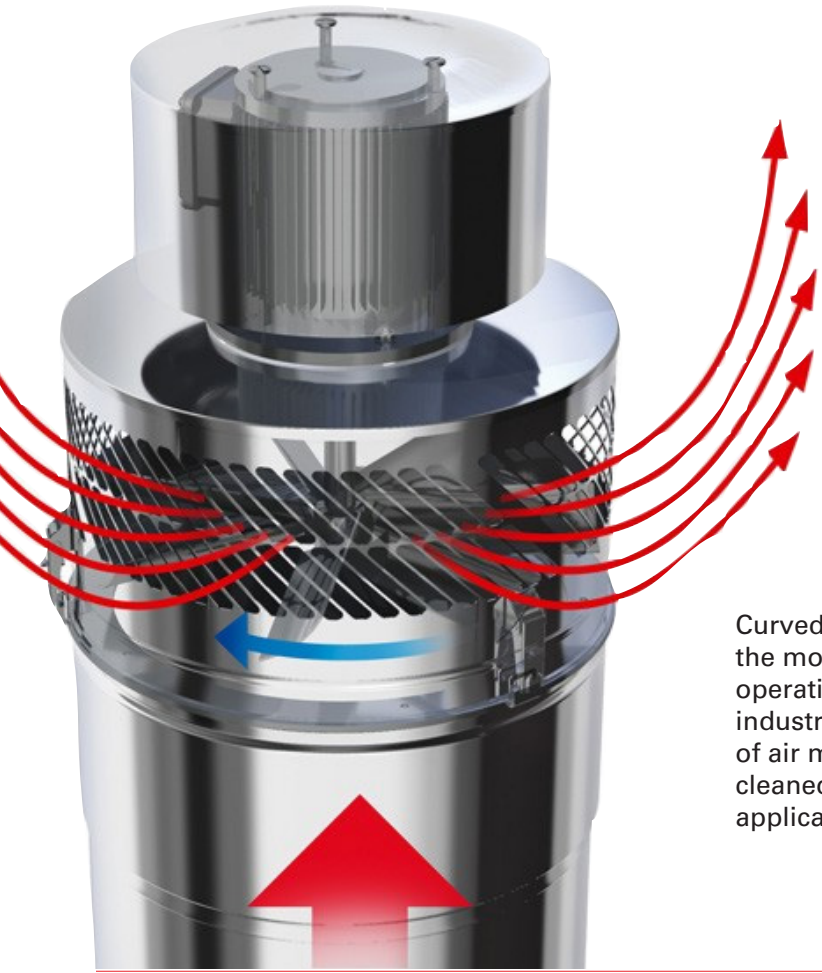
Precision Manufacturing Process for Precision Air Movement

MIG Welded construction for smooth rotation and aeroacoustic noise.



Honed blade surface for lowest friction and resistance during operation providing industry's quietest performance.

Precision weighted axial vane fins for perfect balance and the elimination of eccentricity and noise due to imbalance.



Curved blade design for the most efficient and quiet operation, generating an industry leading 2100 CFM of air movement. Easily cleaned in any solid fuel application.

Featuring The Industry's Most Elegant and Durable Exterior

X-Ventiso isn't just the most reliable and powerful name in mechanical drafting—it's also the most durable and sophisticated. We use only premium materials, ensuring every product delivers exceptional strength while maintaining a sleek visual profile.

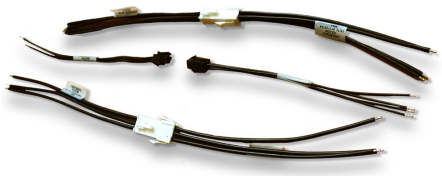
Our XV Series Exhaust Fans combine top-tier performance with precision engineering, featuring a rugged 316L stainless steel exterior, laser-cut vents, integrated locking mechanisms, and secure mounting brackets. We believe that being the best also means looking the best. Don't settle for plastic housings and aluminum construction—choose the finest materials for unmatched long-term performance.

Polished 316L Stainless Steel Motor housing and body for sleek finish and natural corrosion resistance.

Integrated Mounting Clips for a tool free installation and easy access to axial vane for inspection.

Laser Milled Spark Arrestor cut directly into Fan Body for precision airflow control and integrated design.

316L Stainless Integrated Fan Mount for mechanical attachment and ease of maintenance access.



The industry's only standard Molex® installation system for Plug and Play installation.

Ours versus Industry Standard

Features	XV Series Exhaust Fans	Industry Standard
Full Line Fuel Rating	Gas, Solid Fuel, Grease	Specific to Fuel Types
Construction	100% Stainless Steel	Steel & Aluminum
Finish	Polished 316L Stainless Steel	Powder Coated Finish
Max CFM Exhaust	2100 CFM	1600 CFM
Spark Arrestor Design	Integrated	Mechanically Attached
Idle State Resilience at 1000°	Yes	NO
Quick Connect Installation	Yes	NO

X-V Controlled Power

Solutions for all Fuel Types and Applications

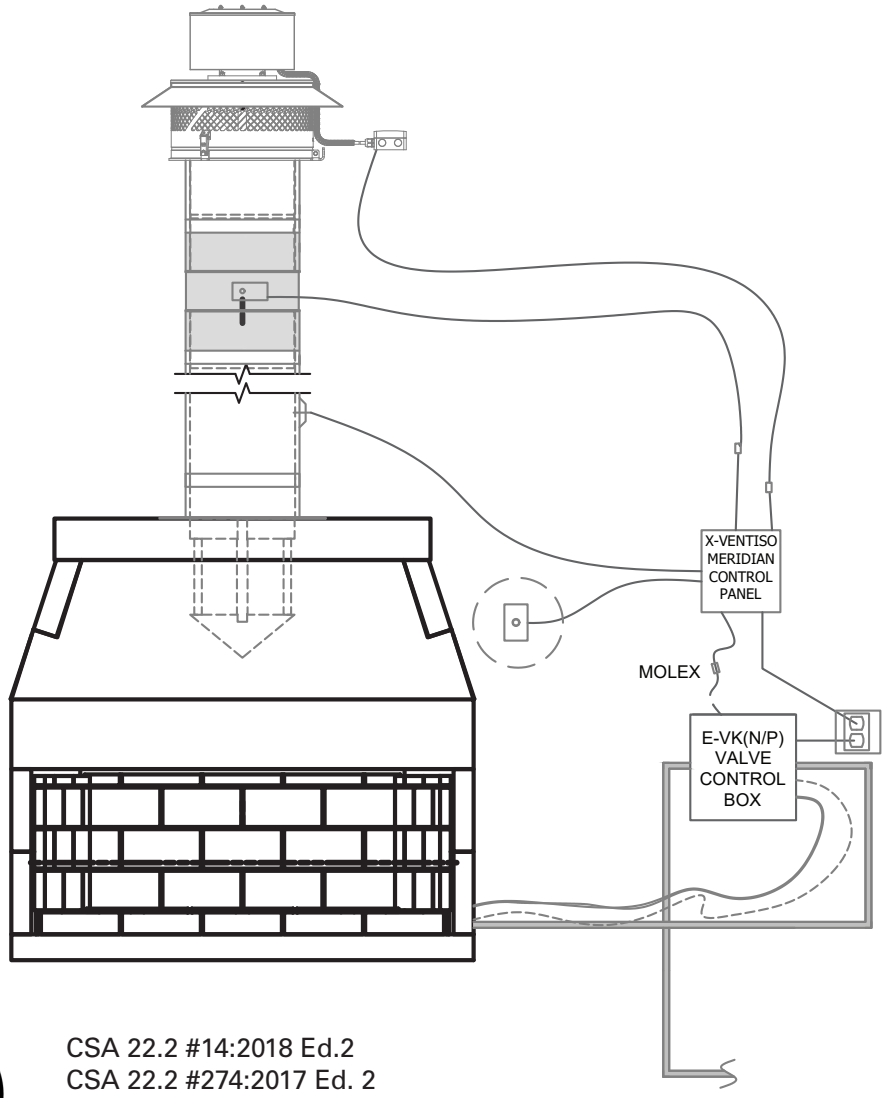
At the heart of every mechanical drafting system lies the Flow Control Device. While some brands rely on basic rheostat technology to regulate fan power and speed, we've redefined industry standards with our fully electronic line of Draft Control systems.

Powered by our proprietary technology, we streamline your entire engineered system from a single point—eliminating the need for complex high-voltage wiring.

With our full range of plug-and-play controllers, simply connect to a standard 110/120V outlet and experience the superior performance of X-VENTISO Mechanical Draft Systems.

Compatible with any fuel type, our comprehensive selection of set draft and pressure modulation controllers delivers unmatched performance with the quietest operation levels in the industry.

We set the standard because you expect nothing less.



CSA 22.2 #14:2018 Ed.2
CSA 22.2 #274:2017 Ed. 2
UL61800-5-1: 2022 Ed. 2
UL378

Paired with our Triple Rated XV Series Fans, the XV Controlled Power units provide modular solutions for every fuel type and application. X-VENTISO offers both standardized and fully custom Control Units, ensuring reliable performance and code-compliant installation for any project.

From hearth applications to coffee roasters, pizza ovens, and boilers, X-VENTISO delivers the simplest installation while meeting the highest engineering standards.

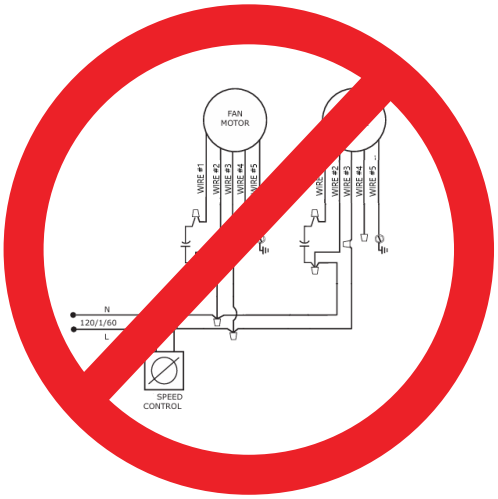
With XV Controlled Power Units, simplicity meets unmatched performance.

Being the Best Means Mastering Elegant Simplicity

To deliver the quietest and most durable mechanically vented solutions on the market, we set out to create a line of Exhaust and Supply Controllers to exceed expectations. We believe true excellence lies in simplicity, so we designed the XV Controlled Power units to be 100% true plug-and-play—**the industry's first and only system featuring a Molex® Quick Connect** and an integrated 110/120V Type B power plug.

X-VENTISO offers both static set-point single fan controllers for solid, liquid, and gas fuel applications and a full range of self-modulating controllers that power entire engineered mechanical exhaust systems without extensive electrical wiring. Proudly designed and built in the United States, our Controlled Power Units are tailored for the North American market, delivering the reliability and performance you expect.

All XV Series Controllers are fully compliant with NFPA 211 and NFPA 54 for hearth applications and feature audio and visual alarms—so you can trust X-VENTISO meets every code requirement with ease.



X-VENTISO exclusively uses true Plug and Play technology with Molex® connectors. Never use a wiring diagram again!

Integrated Wiring Systems

For 40+ years, wiring diagrams and screw terminals were the norm.

X-VENTISO changed the game with Molex® quick-connects on every Controlled Power unit, ensuring true plug-and-play installation.

While others claim the same terminology, only X-VENTISO delivers a genuine quickconnect system—setting a new industry standard for efficiency and reliability.

Available multi-unit control devices with DUO technology.

Sealed Controlled Power Units with NEMA 1 Rated enclosures, protecting and containing circuits and sensors—all backed by full replacement guarantee.

Standardized Type B 110/120V plug in connections for electrician free installation and initialization.

Unique Molex® connectors for hassle free connections and error free installation with X-VENTISO units.

Meridian Series Modulation — the Future of Ventilation

Introducing the Meridian Self-Modulating Controller Series—designed to allow hassle free installation and operation utilizing commercial grade pressure sensing technology.

For the ultimate hands off approach to mechanical venting, the Meridian Series reads stack and ambient pressures in tandem to adjust airflow from XV Series Exhaust fans and VMASS units without the need for any manual interaction. Remove the need for static pressure set points and rest easy knowing that your system will work to the precise needs of the building envelope, no matter what barometric changes might occur.

When you need ultimate performance, choose a Meridian Self-Modulating Controller and have confidence that no matter what air flow requirements your project requires, we have the answer.

Simplified Operation for Superior Performance

For applications demanding precise pressure measurement in exhaust and/or supply ventilation, modulating pressurization technology is the ultimate solution.

The X-VENTISO Meridian Series continuously monitors both ambient pressure (room, stairwell, or building) and the internal pressure of the exhaust or supply duct network, ensuring consistent airflow that aligns with the project set point.

Backed by expertise and a commitment to performance and quality, our X-VENTISO engineering team is ready to deliver your Meridian Solution today.

LED Screen for digital readouts.

Dual Pressure transducer ports for ambient and stack / flue pressure readings.

The Most Advanced Technology Producing — Unmatched Results

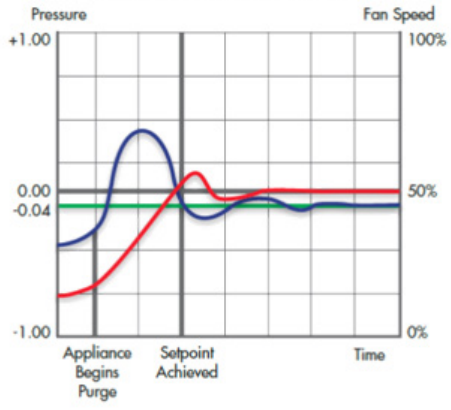
Utilizing proprietary algorithms and hardware simulation, X-VENTISO improves upon industry standard PID (Proportional, Integral, Derivative) Technology to modulate and control pressures within ventilation runs.

With proven algorithms and software, our units achieve automatic set-point levels on a dynamic scale, moving faster and with greater efficiency than industry competition.

Utilizing our enhanced flow recognition capabilities, XV Flux ensures the smoothest performance during steady state operation.

Designed to operate with Variable Frequency Drives (VFD), Brushless Direct Current Motors (BLDC), and Damper Actuators. Our Meridian Self-Modulating Controller Series provides the optimal system for "set and forget" operations needing minimal oversight, but the highest performance.

XV Flux Technology



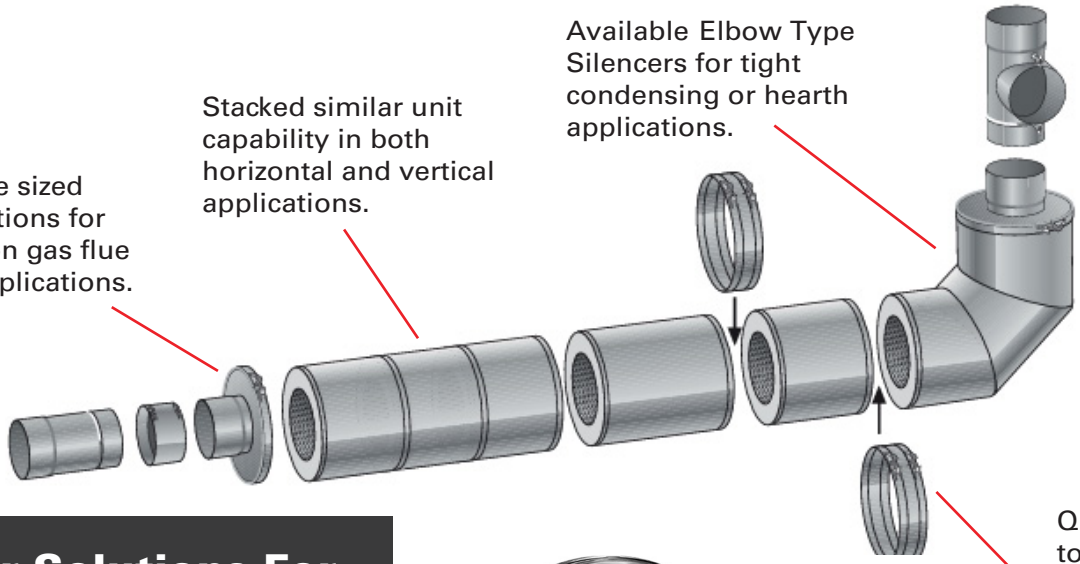
WhisperDraft Flue Silencers: The Future of Mechanical Noise Cancellation

When even the quietest mechanical draft fan in the industry isn't quiet enough, X-VENTISO delivers a breakthrough solution—proprietary Mechanical Noise Cancellation technology, designed for nearly any flue stack or condensing application.

Engineered for **25dB noise reduction**, specifically tuned to XV Series Fans and **tested to rigorous ISO 7235:2003 standards**, our technology eliminates pervasive sound issues with precision and reliability.

Through advanced sound harmonization research, our flue silencers are perfectly matched to our fan motors, virtually eliminating mechanical noise transfer. From the chimney top to the heating or condensing appliance, we're redefining "quiet" for gas-fueled applications.

Built with premium materials for durability and performance, WhisperDraft Flue Silencers ensure true mechanical drafting without the industry's long-accepted noise complaints.

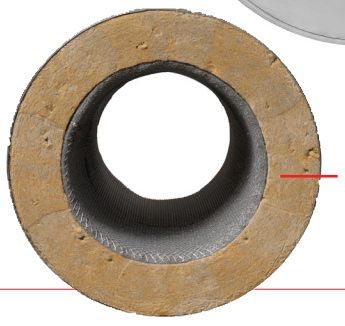


Modular Solutions For Any Application — No Matter the Complexity

X-VENTISO WhisperDraft Technology offers a solution for any application where mechanical noise is a concern.

With a full range of options tailored to meet your project's engineered standards, we deliver customized solutions for optimal sound reduction. Designed in a fully modular format and equipped with optional condensing drains, WhisperDraft represents the future of quiet, harmonized drafting.

Available in standard gas type flue sizes from 8" to 13."



Mechanical Gas Flue Dampers with Automatic Airflow Control

X-VENTISO recognizes the complexities of gas applications in the drafting industry. That's why we offer both inline and topmount dampers, designed for seamless integration into a full range of gas flue venting projects—all while maintaining strict compliance with NFPA-54 standards.

Leveraging German engineering, our dampers set the benchmark for quality and safety, using only the finest materials and actuators in their construction. Each damper is paired with a Siemens® actuator, ensuring durability and reliability for the demanding duty cycles of both residential and commercial applications.

Like all X-VENTISO products, dampers are equipped with proprietary Molex® Quick Connect adapters for effortless integration with our XV Controlled Power Units.

Dampers Designed for Your Application

In order to meet your custom needs, X-VENTISO offers a comprehensive range of gas flue dampers with Molex® connectors for our XV Controlled Power Units.

Available integrated fan adapters, for vertical or horizontal attachment to XV Series Fans for termination applications.

Siemens® Actuators, tested to over 50,000 cycles and built to provide the most consistent and reliable toggling between open and closed airflow through venting zones.

Damper Size	Part Number	Configuration
XV150 Series Dampers		
4″	XV-GFD150-4	Top / Inline
6″	XV-GFD150-6	Top / Inline
XV250 Series Dampers		
8″	XV-GFD250-8	Top / Inline
10″	XV-GFD250-10	Top / Inline
12″	XV-GFD250-12	Top / Inline
14″	XV-GFD250-14	Top / Inline
XV350 Series Dampers		
12″	XV-GFD350-12	Top / Inline
14″	XV-GFD350-14	Top / Inline
16″	XV-GFD350-16	Top / Inline

Available in-line configurations for applications where end of stack installation is not required / necessary.

VMASS — X-VENTISO Variable Makeup Air Supply System

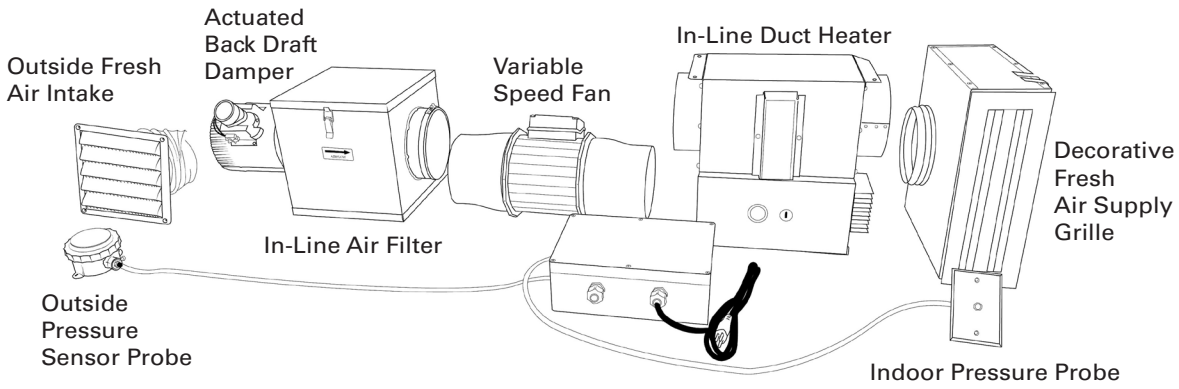
In today's world of ultra efficient building designs, achieving the perfect air balance ratio has become increasingly difficult in many applications.

X-VENTISO offers an unmatched solution for providing the appropriate rate of airflow into the building envelope specific to your combustion-type appliance, hearth application or even range hood / ventilation device.

Our solutions are fully customizable for your specific requirements assuring that your designs can be achieved no matter the demands. With full integration to any of the XV Series Controlled Power Units , these VMASS units work in concert with our Mechanical Drafting Units to pull a perfect ration of air in and out of any room, or independently as a true stand alone "makeup" air unit.

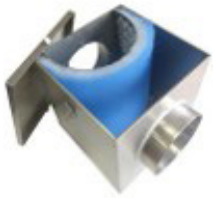
As with all X-VENTISO solutions, our units are 110V true "Plug and Play" and comes standard with Type B Power Plug for ease of installation with no electrician or required.

Pressure Based System Controller



Grounded 110/120 V Plug Configuration.

Molex Connections for effortless installation.



HEPA Particulate Filtration for 99.97% efficiency at 0.3 microns

The Answer to Negative Pressure

According to ASHRAE Standard 62.2 (Ventilation and Acceptable Indoor Air Quality in Residential Buildings), residential ventilation systems are designed to bring in fresh air to maintain healthy air quality. The amount of "makeup air" recommended depends on the size of the home and the number of occupants.

Ventilation rates specified by ASHRAE typically range from 15 to 30 CFM (cubic feet per minute) of outdoor air per person, with additional airflow required based on the home's square footage.

When additional CFM are required for a building envelope due to high volume combustion or ventilation appliances, standard ERV/ HRV systems are often not capable of offering the required "makeup air" needed for a neutral pressure environment. This is when X-VENTISO steps in to provide the solution.

Our state-of-the-art VMASS units provide a wide range of variable airflow into the envelope for both conditioned and unconditioned solution needs. From 200 CFM to 1200 CFM, our units provide on demand air supply conserving energy by only running when the competing appliance is. Simplified plug and play technology, coupled with advanced speed control ensures a comfortable and quiet solution to any residential make-up air requirement in your project.

Modulated Supplemental Air Supply—Balance in Action

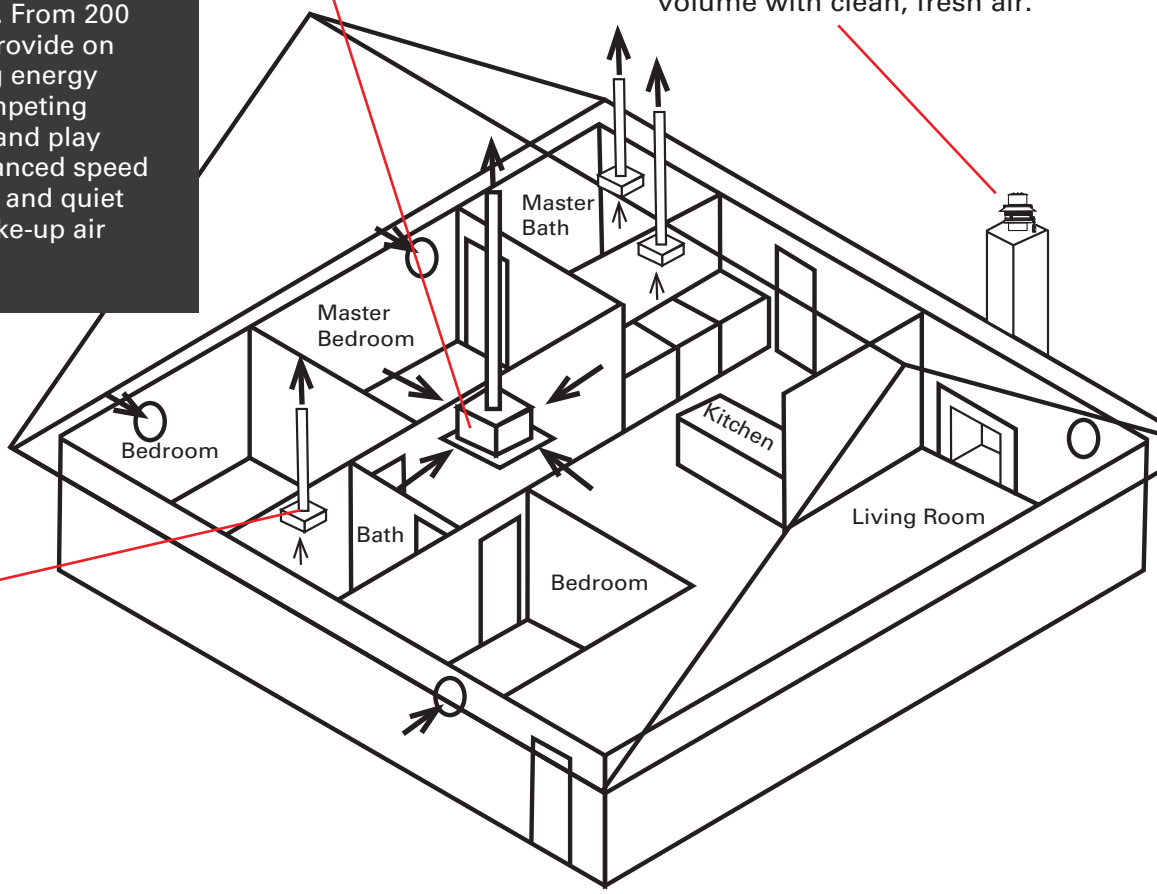
Modulated VMASS by X-VENTISO utilizes our proprietary XV Flux Technology to provide precise airflow into your building envelope, even when the conditions are imprecise.

With dual atmospheric sensors, the Modulated VMASS units instantaneously measure the balance between the interior pressure of your structure and the ambient exterior pressure of the fresh air supply, providing consistent and quantitative measurements to provide a guaranteed positive or neutral state.

With simplicity in mind, our Modulated VMASS units are all equipped with Molex® connections to provide the industries quickest installation and configuration.

Attic mounted VMASS system hidden from line of sight provides calculated "makeup" air for high volume appliances.

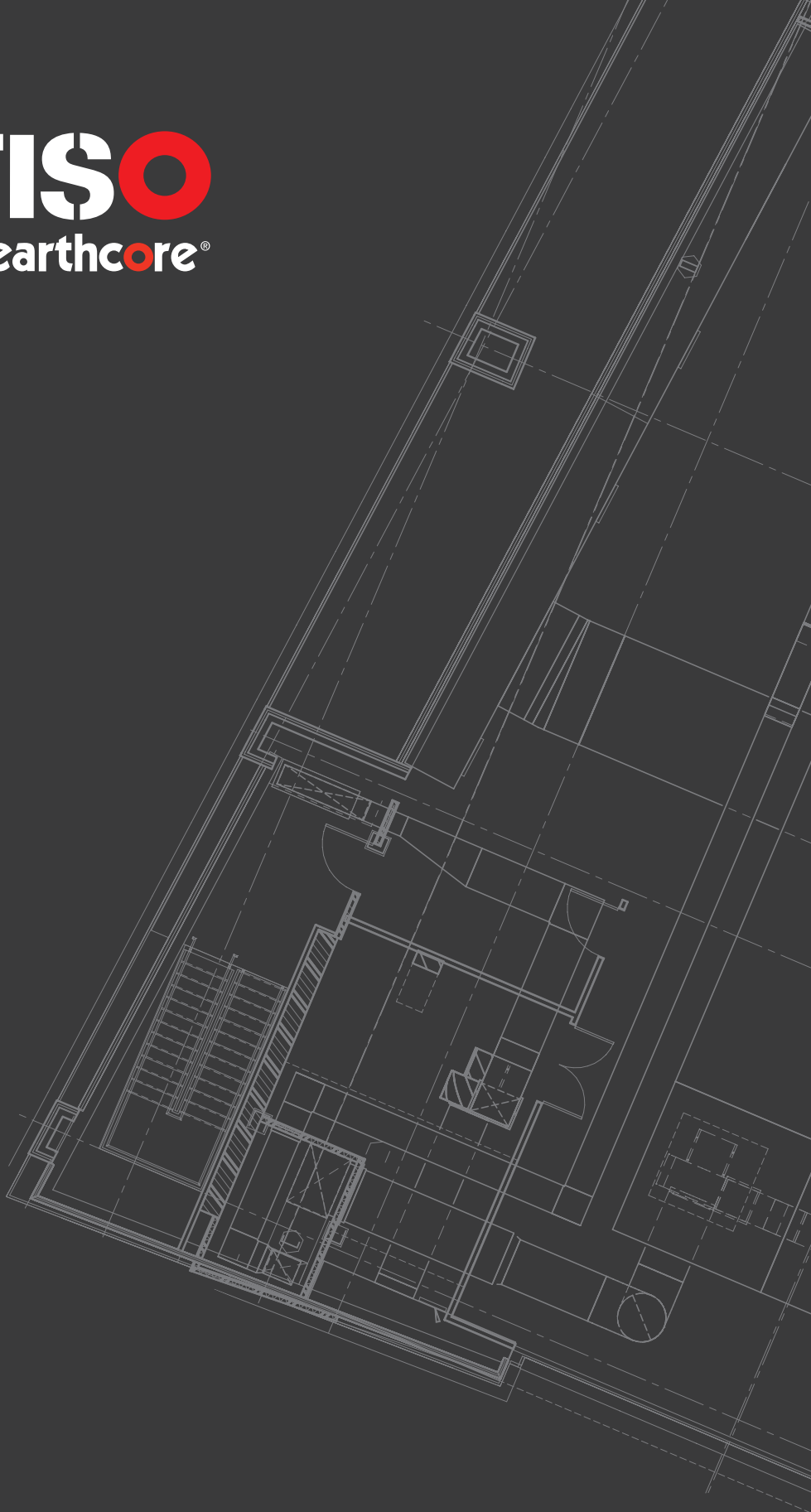
XV Series Fans work in concert with VMASS units to provide perfect outflow of exhaust gases while precisely replacing air volume with clean, fresh air.



Bathroom Fans and Kitchen Ranges draw high volumes of air out of the building envelope and standard HVAC ERV / HRV systems are not able to replenish in a balanced system.

X-VENTISO

by earthcore®



FREE Hearth
and Exhaust
Fan Calculator
Link Here!

www.X-VENTISO.com